EFL TEACHERS’ VOICE ON THEIR PREFERRED STRATEGIES IN TEACHING EFL WRITING DURING THE PANDEMIC: INVESTIGATING THE ROLE OF TECHNOLOGY

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ABSTRACT
This study endeavored to gain insights into English as a Foreign Language (EFL) preferred strategies in teaching EFL writing during the pandemic, particularly dealing with technology use. Six writing teachers from various universities in East Java, Indonesia, participated in this study. They were asked to respond to interview questions that were based on Lee's (2017) five categories of technology use in a writing class and Chi’s (2009) Interactive-Constructive-Active-Passive (ICAP) taxonomy levels. Thematic analysis of the interview data revealed that five teachers managed to use technological tools in all five categories of technology usage, with the self- and peer-evaluation categories being the most frequently used. They were also able to conduct activities in all of the ICAP taxonomy levels, although some technical issues and students’ factors hindered the students from being fully engaged in the lessons. Lastly, the experience of integrating technology in the online writing class during the pandemic resulted in a moderately optimistic view by the teachers on technological integration in future onsite classes. It is recommended that the government and educational institutions provide support in terms of infrastructure, facilities, and professional development training in technology usage for teachers, especially for those who teach in remote regions.

Keywords: COVID-19 pandemic, ICAP framework, strategies, technology usage, writing.
INTRODUCTION

It is an understatement to say that the COVID-19 pandemic has utterly altered the education paradigm. One of the silver linings of the outbreak is that teachers became suddenly, willingly or not, conversant to some extent with technology in the virtual classroom. This phenomenon holds true for the English as a Foreign Language (EFL) teaching milieu, specifically in writing courses. Online EFL writing teaching poses its challenges for teachers due to its inherent structural difficulties and the language expertise required to complete writing. The pandemic, and the resulting online education, have made it much more challenging. Motivating students, keeping online lectures engaging, and preserving the efficacy of online classes are some of the difficult issues that EFL teachers face at that time (Selvarasu et al., 2021). This online learning phenomenon is undoubtedly challenging for EFL language learners, and Indonesian students are no exception. Unlike other communicative skills, writing is more difficult to teach online due to its intricate intersectionality.

According to Westwood (2008), writing is mostly paper-based and uses other types of substantial media, such as multimedia platforms. On the other hand, students require actual direction and feedback from teachers to improve their writing process. Furthermore, failing to satisfy the technological demands of online education can make students feel disconnected from their friends and lecturers, as well as experience disappointment (Bush, 2021) students can receive oral feedback in conjunction with written corrective feedback. Forty-four freshman students from an advanced writing class in the ELT department of a small private university in Istanbul participated in the study. During the semester, three high stakes essay assignments were given. For the first essay only written corrective feedback was given, but for the subsequent two essays students received a combination of written and oral feedback through screencasting. Screencasting was originally used because it was purported to be more efficient than written corrective feedback. While it wasn’t found to be more efficient for the teacher, it was enthusiastically embraced by the students. To gauge the students’ perceptions, a survey was given at the same time as the final exam. The survey included a section for demographics, four open-ended questions, and 28 Likert scale-type questions. The Likert-type questions represented nine categories of inquiry including both practical and affective factors. The results indicated overwhelmingly that the students perceive screencast feedback as more pleasant and more effective than written corrective feedback alone. The technique is appropriate to the twenty-first century classroom and the learning styles of modern students. It is recommended that this technique be adopted in academic writing classes.

As a result, it is critical to use excellent online writing tools to bridge the gap between learners and teachers by creating an interactive, engaging, and effective learning environment in which students receive thorough input. Thus, teachers who initially struggled to integrate technology into EFL writing have been compelled, much more so during the pandemic, to develop their digital literacy in order to teach writing effectively (Williams & Beam, 2019). The ways teachers use technology in their writing classes have been reported in several studies (Aldaghi & Oraif, 2022; Chen, 2016; Fithriani & Alharbi, 2021; Fitria, 2021; Jeong, 2016; Reynolds et al., 2020; Shang, 2017). Teachers have used technology to the extent that they understand and are able to use it to improve students’ writing ability (Al-Wasy, 2020; Regan et al., 2019; Williams & Beam, 2019). As mentioned by Al-Wasy (2020) in his meta-analysis, most studies focused on experimentation with technology. Other studies included a guiding framework to integrate technology in writing classes (Ammade et al., 2020; Aniq et al., 2021; Ching et al., 2016; Tai et al., 2015). However, these research studies tend to focus on Technological Pedagogical Content Knowledge (TPACK) rather than on how teachers might engage students in active and interactive learning through technology in writing classes. Besides, teachers’ perception or belief in the affordances of technology is still rather unstructured (Aniq et al., 2021; Regan et al., 2019). Therefore, further studies are needed to derive lessons learned from pieces of evidence to establish a clear framework for teachers in selecting technology for learning (Li & Storch, 2017). To fill the void, this study intends to report how teachers engaged students in active, collaborative, and constructive behaviors while minimizing...
passiveness in online EFL writing during the pandemic by integrating appropriate teaching technology. The unravelling of EFL teachers’ preferences in the use of technology to enhance the online writing classroom during the pandemic will provide insights into future classes in the post-pandemic. Accordingly, categories of technology usage in a writing class, frameworks for technological integration, and a review of recent related research are presented.

**Teaching Strategies Involving Technology Usage in the EFL Writing Class**

The teaching of EFL writing has employed various strategies to ensure that students can be engaged well and that their writing skills can be improved. However, the strategies systematically employing technology usage have been known widely only recently. Williams and Beam (2019) carried out a review of 29 empirical articles from 2002 to 2017. As demonstrated by the findings, in educational contexts, computers and a variety of digital technologies, programs, applications, and web-based learning environments have been utilized to teach writing. According to the review, as a result of technology-mediated writing instruction, students’ composition processes, writing abilities, and awareness of new literacies have also improved. Technology usage has become more intense in the era of the COVID-19 pandemic since teaching has been conducted online. Although teachers had obstacles when integrating technology into their writing classes, students’ participation in writing assignments was boosted by the use of technology, which facilitated social interaction and peer collaboration (Alsmari, 2019; Jeong, 2016). Williams and Beam (2019) also revealed that technology-mediated writing instruction and the development of students’ 21st-century literacy abilities necessitate immediate, high-quality professional development for teachers.

To raise the degree of engagement and interactions in the classroom, teachers could apply the strategies in integrating technology in the EFL online writing class. For example, Li (2018) drew five principles for integrating technology in wider EFL classroom contexts. These principles address the advantages and functions of technology, support the needs of students, incorporate the technology rather than add it to education, consider the teacher’s role, and enhance the authenticity of both the language used and the task itself. Lee (2017) categorized technology integration in teaching and assessing writing into four types: writing platforms, technology-enhanced writing tasks, technology and teacher evaluation of student writing, and technology in self- and peer evaluation. Many studies also include social media as a writing tool in writing classes (Fithriani & Alharbi, 2021; Prasetyawati & Ardi, 2020). Therefore, this study intends to adopt Lee’s (2017) categories of technology integration and adapt them by adding the social media category, as shown in Table 1.

<table>
<thead>
<tr>
<th>No</th>
<th>Writing tool categories</th>
<th>Tools</th>
<th>Functions</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Writing platforms</td>
<td>Blogs, Google docs, Jambord, Storybird, Wikis, and platforms developed by institutions</td>
<td>Writing collaboratively</td>
<td>Students work together on a collaborative writing project</td>
</tr>
<tr>
<td>2</td>
<td>Technology-enhanced tasks for classroom writing</td>
<td>Blog-based writing, digital story-telling, email collaborative writing, writing for Wikis</td>
<td>Providing engaging writing tasks</td>
<td>Students work in groups or individually to produce a digital project with writing tasks, digital images, and digital videos.</td>
</tr>
<tr>
<td>3</td>
<td>Technology and teacher evaluation of student writing</td>
<td>Automated writing evaluation, screencast</td>
<td>Digital recording software, bringing teacher’s presence in the feedback</td>
<td>Providing communicative feedback</td>
</tr>
<tr>
<td>4</td>
<td>Technology in self- and peer evaluation</td>
<td>Grammarly, concordancing, prowriting aids, Microsoft word tools for spelling, structure, and vocabulary</td>
<td>Helping students edit and review their own or peers’ writing</td>
<td>Students utilize a thesaurus to find synonyms or antonyms</td>
</tr>
<tr>
<td>5</td>
<td>Social media</td>
<td>Edmodo, Instagram, Facebook</td>
<td>Online forum writing for public</td>
<td>Students produce written work to communicate and participate in a discussion.</td>
</tr>
</tbody>
</table>
Despite all the sophisticated tools, teachers should consider how the tasks could truly engage students. Instead of serving as an ‘add-on’ to current teaching methods, technological tools should be integrated into education as a whole. As a result, teachers need to be mindful of their underlying assumptions about teaching and learning when incorporating technology into the writing classroom (Li, 2018); they must consider the drawbacks of the instruments employed (Boudjadar, 2015), and students must have similar ideas in using technology in the writing class (Gleason, 2014).

Principles for Technological Integration: The ICAP Framework

Studies on the choices teachers make when using technologies for their online classrooms are commonly framed by designs and models underpinning such choices. Frameworks such as the Community of Inquiry (Garrison et al., 2000), TPACK (Technological Pedagogical Content Knowledge) (Mishra & Koehler, 2006), and SAMR (Substitution, Augmentation, Modification, and Redefinition) (Puente, 2006) have been extensively used by a plethora of studies investigating teachers’ technological integration capability.

More recently, the Interactive-Constructive-Active-Passive (ICAP) Framework (Chi, 2009) and its taxonomy levels seem to have garnered mounting interest among researchers and educators. In postulating the framework, Chi (2009) began by defining the term ‘interactive’, ‘constructive’, and ‘active’ in terms of learners’ overt behavior and the cognitive process underlying each activity. The resulting taxonomy was then extrapolated into a hypothesis, in which she posited an ascending hierarchy from the Passive type of activities up to the Interactive ones. Therefore, Interactive activities, for example, constitute the superior cognitive processing in the learners as compared to the Constructive ones, and are therefore predictors of the greatest learning success (Chi, 2009). A posterior work by Chi and Wylie (2014) refined the constructs into modes of engagement. Thus, the ‘passive’ mode is categorized as receiving information without doing other observable learning activities. It is then characterized as a ‘receiving’ type of activity. The ‘active’ mode describes a certain motoric or physical movement accompanying a covert cognitive process, such as taking notes while listening to a lecture. It is also defined as a ‘manipulating’ activity. Learners engage in ‘constructive’ mode if, while learning, they produce outputs or products distinct from the learning materials provided, and hence described also as ‘generative’. Sample activities include self-examining and drawing a diagram from a text. Lastly, in the ‘interactive’ or ‘dialoguing’ activities, learners engage in constructive discourse with peers, teachers, or even a computer program. Chi and Wylie (2014) further emphasized that the interaction should be constructive in nature, with a sufficient extent of turn-taking occurring. Therefore, learners explaining to one another, criticizing others’ stand, or defending one’s position is seen as constructively interactive. A table depicting each ICAP construct and its corresponding examples of learning activities is given in Table 2. It can be seen here that the attractiveness of this framework derives from its contribution to operationalizing the concept of ‘active learning’ (Chi & Wylie, 2014), in ascending order from the ‘passive’ mode to ‘interactive’.

Table 2. The ICAP framework depicting activities by modes of engagement (adapted from Chi & Wylie, 2014, p. 221).

<table>
<thead>
<tr>
<th>Passive/Receiving</th>
<th>Active/Manipulating</th>
<th>Constructive/Generating</th>
<th>Interactive/Dialouging</th>
</tr>
</thead>
<tbody>
<tr>
<td>LISTENING to a lecture</td>
<td>Listening only</td>
<td>Listening while copying or taking notes</td>
<td>Reflecting, drawing concept map, asking questions</td>
</tr>
<tr>
<td>READING a text</td>
<td>Reading aloud or silently</td>
<td>Reading while underlining, highlighting, summarizing</td>
<td>Self-examining, integrating across texts, taking notes in one’s own words</td>
</tr>
<tr>
<td>OBSERVING a video</td>
<td>Watching only</td>
<td>Watching and pausing, playing, doing fast-forward or rewind</td>
<td>Explaining concepts in the video, comparing and contrasting with other materials</td>
</tr>
</tbody>
</table>
The framework has been used by other studies in the field of education, hailing from various disciplines. It has been utilized, for example, to provide empirical evidence to the taxonomy levels to evaluate the design and implementation of language arts lessons (Roscoe et al., 2014), examine the types of dialogue patterns in group dyads that promote learning (Chi & Menekse, 2015), and conduct a large-scale, long-term project beginning with teacher training of the ICAP framework, implementation in the classrooms, and measurement of students’ learning gain (Chi et al., 2018). In a recent publication, Chi (2021) advanced the ICAP model as the solution to bridge the widening gap between the theory of learning and teaching practice.

Not surprisingly, several recent studies employed the ICAP framework in technology-mediated learning. Empirical studies in this respect include an investigation of the use of an online annotation tool hypothes.is in a reading class (Marissa, 2021), the impact of a generative activity, namely writing an explanation during pauses, in a multimedia lesson (Lawson & Mayer, 2021), the effect of technology support (e.g., PowerPoint, YouTube, WhatsApp) on students’ learning outcome (Wekerle et al., 2020), and the deployment of augmented reality in collaborative activities among young learners (Wen, 2020). All of these studies evidenced the success, to some extent, of engaging students with technological affordances. Other studies informed by ICAP principles involved preservice teachers’ training programs and in-service teachers’ professional development activities, aimed at either mapping the teachers’ technological integration practice (Trevisan & Smits, 2021), their selection of learning activities (Du et al., 2020), or their cognitive engagement when taking part in an online professional development program (Atapattu et al., 2019). Among the three studies, it was interesting to note that the preservice teachers who were the participants in Du et al. (2020) preferred to engage in the Passive mode of instruction, as it was perceived to guarantee better grades. In terms of pedagogy, Henderson (2019) provided empirical evidence that students exposed to peer instruction when learning physics achieved greater learning gains than those who were not. Finally, Deepika et al. (2021) aligned technology and pedagogy by mapping the various pedagogy into the ICAP framework, illustrating each ICAP construct with the corresponding technological tool for online engineering class.

Thus, it can be seen that, in recent times, scholars have turned their attention to the ICAP framework as a valuable conceptual underpinning for integrating technology in online lessons in ways that promote engagement, active learning, and collaboration among students. Hence, in alignment with the purpose of this study, the ICAP framework is used as the scheme to guide the mapping of EFL teachers’ strategies in teaching writing online during the pandemic.

**EFL Online Writing Classes during the Pandemic**

Several studies on EFL online writing during the COVID-19 pandemic reveal positive evidence and challenges in integrating technology into the teaching and learning activities and assessment processes. Svyrydjuk et al. (2021) classified online second language writing development activities into educational interactive activities that enhance students’ engagement to use English and controlling interactive activities that cover testing and assessing writing performance. Related to the educational interactive activities, the learning tools proven to be effective in online writing classes include videos (Copeland & Franzese, 2021; Maru & Nur, 2020), Automated Writing Evaluation/ AWE (Barrot, 2021), Google Classroom (Rosyada & Sundari, 2021; Shelvam & Bahari, 2021), Google Doc (Yee & Yunus, 2021), Pixton (a comic scripts maker) (Cabrera-Solano et al., 2021), Instagram (Bestari, 2020), and Padriseup, an online collaborative writing tool (Dal et al., 2021). In addition, Tarihoran et al. (2022) suggested Facebook to boost writing achievement, but this tool could only engage students with a positive attitude towards CALL utilization. Also, Al-Jarf (2022) proposed class blogging as a complement to EFL writing instruction, where students practiced writing on a specific topic assigned by the teacher, and could give or receive comments simultaneously.

Online assessment for writing classes can be a great challenge for both teachers and students. For online self-assessment, students can access available corpora and apply data-driven learning (DDL), which has been reported to be beneficial in helping students correct their errors in writing (Zhu, 2021). For teachers, online assessment, especially formative assessment, may either be advantageous or troublesome depending on teachers’ backgrounds and experience with the application of ICT (Zou et al., 2021). Zou et al. (2021) found three types of teachers’ views on the utilization of ICT for online formative assessment. The first type
is teachers who are hesitant due to inadequate knowledge of the integration of technology to assess writing and lack support from the institution, and who consider online assessment as a disturbance. Meanwhile, teachers who believe in the benefit of online assessment and gain institutional support even though they may have insufficient ability in ICT integration regard this kind of assessment as assistance. This kind of teacher would make an effort and choose the simplest integration. The last type is teachers with sufficient knowledge and experience in ICT integration, and they utilize ICT as an integral part of online assessment confidently.

Other challenges, more than technical problems and an internet connection, for online writing classes during the pandemic, include students’ low motivation (Bui, 2022), plagiarism (Kurtianti et al., 2021; Setyowati et al., 2021; Sheerah et al., 2022), and interaction (Tusino et al., 2021). Nevertheless, Stewart’s (2021) investigation on one part of the community of inquiry framework related to interaction called social presence concluded that even though the interaction in the writing class was virtual and not physical, the students considered their teacher and classmates as real persons having real interactions by expressing their sense of humor and sharing emojis.

From what has been presented, the challenges and opportunities presented to EFL writing teachers, especially when teaching writing online during emergency remote learning, necessitate a systematic investigation of the strategies teachers use in making online writing class an engaging and enjoyable learning experience, particularly in light of the writing tools’ category and an active learning framework such as the ICAP. The outcome of this study can then shed light on the future strategies of writing teachers in incorporating technology into the classroom in any teaching mode: onsite, online, or hybrid. In this way, this study also addresses a contextual gap in the ICAP literature, which has yet to explore the ICAP framework’s application in a writing class. In this regard, the present study is aimed to answer the following research questions (RQs):

1. What are the EFL writing teachers’ preferred strategies for using technology in online classes during the pandemic in Indonesia, in line with the five categories of writing tools?
2. How are those strategies mapped into the ICAP framework in relation to engaging students in active learning? How did the writing teachers perceive their students’ engagement in those activities?
3. What were the experiences of EFL writing teachers in using technology during the pandemic, and what were their expectations in using technology for future teaching practice?

METHOD

Research Design

This study is primarily designed with a qualitative approach, in line with the aim of this research, namely to gain direct information from the participants about their actions and motivation within a certain context (Creswell & Creswell, 2017), which in this case is the teaching of EFL writing during the pandemic. In particular, this study adopted a multiple, descriptive case study design (Yin, 2018). In this research, the “cases” are the Indonesian EFL writing teachers at the undergraduate level. The cases are also bound geographically (Indonesia) as well as chronologically (during the pandemic). Hence, the phenomenon under study in this case is the teachers’ preferred strategy in teaching EFL writing, in order to elucidate the role of technology in such strategy.

Participants and Context

The participants in this study were selected using the criteria of information-oriented selection (Brinkmann, 2013), in which the aim is to achieve maximum variation among the interviewees in order to obtain rich data. This principle, together with the researchers’ extent of networking, brought together six EFL faculty members who have taught or are teaching a writing course. They constitute a purposeful selection of a mix of gender, educational qualifications, teaching experience, and teaching locations. Thus, two participants hail from the capital city of the province (Surabaya City – urban area), two are from a smaller city (Kediri City – rural area), and the two others are from an even smaller city (Tulungagung Regency – rural area). There are four female participants and two male participants. They have various lengths of teaching experience, and all of them have finished their Master degrees. The participants’ demographic data are shown in Table 3.
Table 3. The demographic data of the participants.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Gender</th>
<th>Age</th>
<th>Educational Qualification</th>
<th>Teaching experience (Years)</th>
<th>Location type</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Female</td>
<td>24</td>
<td>Masters</td>
<td>1 year</td>
<td>Urban area</td>
</tr>
<tr>
<td>P2</td>
<td>Male</td>
<td>39</td>
<td>Masters</td>
<td>12 years</td>
<td>Urban area</td>
</tr>
<tr>
<td>P3</td>
<td>Female</td>
<td>38</td>
<td>Doctorate</td>
<td>14 Years</td>
<td>Rural area</td>
</tr>
<tr>
<td>P4</td>
<td>Female</td>
<td>33</td>
<td>Masters</td>
<td>7 Years</td>
<td>Rural area</td>
</tr>
<tr>
<td>P5</td>
<td>Female</td>
<td>40</td>
<td>Masters</td>
<td>10 Years</td>
<td>Rural area</td>
</tr>
<tr>
<td>P6</td>
<td>Male</td>
<td>43</td>
<td>Doctorate</td>
<td>14 Years</td>
<td>Rural area</td>
</tr>
</tbody>
</table>

Related to the context of this study, the participants were lecturers of online writing courses from three different universities, as indicated in the location stated in Table 3. All of the participants were teaching English department students of various semesters, and the time allocation for the courses was approximately 100 to 200 minutes per week. The courses were held both synchronously and asynchronously, depending on the regulations of the university. For P1 and P2, the university provided Zoom Pro account for the lecturers. Thus, they had to hold synchronous classes, whereas for other participants, synchronous classes were optional since they had to provide Zoom or other applications by themselves. In practice, P3, P4, and P5 had both synchronous and asynchronous meetings, while P6 only held asynchronous classes using WhatsApp.

**Instruments**

The sole instrument used in this study is a set of qualitative interview questions. Qualitative interview was deemed to be the appropriate instrument due to its ability to harness data on “how” the lived experience of certain individuals are (Brinkmann, 2013), in accordance with the general aim of this research, i.e., to reveal EFL teachers’ strategy and instructional practice during the pandemic. The interview questions were developed by the researchers themselves, being guided closely by the research questions. After some deliberations, it was decided to formulate six questions, two for each research question. The complete list of the interview protocol is attached as Appendix 1. In order to validate the questions, one of the participants was interviewed by three of the researchers, with two of them acting as observers. At the end of this first interview, some of the questions’ formulations were adjusted for clarity, and the amended questions were used for subsequent interviews.

**Data Collection**

The data were collected through semi-structured interviews, using mainly the questions shown in Appendix 1 and adding more questions or clarifications during the actual interview as the need arose. Before conducting the interview, a consent form was sent to the participants, and they were asked to read and sign the form to indicate their agreement to be interviewed. The consent form also mentioned the voluntary nature of their participation, the commitment to safeguard confidentiality, and that their involvement in the research should not entail a known, substantial risk.

After the interviewees returned the consent forms, the interview dates and modes were arranged with them, depending on their availability and preference. Of the six interviewees, two were interviewed through Zoom video conference, one participant was personally interviewed face-to-face, and the rest used asynchronous, written interviews. The interview was conducted in English, although some participants preferred to provide extended responses in the local language. At the beginning of the interview, the researchers discussed the interview’s goal and specific aspects, like the ICAP framework, for example, with each of the participants, in order to align the understanding of both parties. Each face-to-face interview lasted around 30-60 minutes.
Data Analysis

For the recorded interview, the audio files were first transcribed, the local language was translated to English, and the transcription was sent back to the participants to be checked and confirmed by them as part of the member-checking procedure to ensure the validity and accuracy of the data. The final transcripts were then analysed based on Miles et al.'s (2014) interactive model, which includes data condensation, data display, and conclusion drawing or verification. In the data condensation, the responses of all participants pertaining to each research question were grouped together to facilitate data visualization. Then, in the data display, some keywords and phrases were coded in accordance with the research questions (RQs), specifically employing the concept-driven coding method which made use of pre-determined codes (Brinkmann, 2013), or what Saldana (2021) termed as Structural Coding. An example of a code for RQ1 was “writing platform”, and so words such as “Google Docs” and “Canva” were highlighted. Another sample of a code for RQ2 was taken from the ICAP framework like “Passive”, and so phrases such as “listening to my lecture” or “watched a video” were singled out. Lastly, the codes for RQ3 were “past challenge”, “past benefit”, and “future hope”. Finally, in the conclusion and verification, the data analysis included the ‘back-and-forth’ interaction with the data to locate relevant quotes or further evidence (Miles et al., 2014). During the initial coding phase, three of the authors worked independently on the interview transcripts, each focusing on one RQ. Upon completing the first round of coding, the three authors presented the coding result to each other, somewhat akin to the peer debriefing (Lincoln & Guba, 1985) procedure intended to increase the coding credibility. This process resulted in further discussion on code interpretation, such as whether Mendeley should be coded as “teacher assessment” or “self-assessment”. The discussion continued until a satisfactory qualitative code agreement was achieved.

FINDINGS

The EFL Teachers’ Preferred Strategies in Using Technology in Online Classes during the Pandemic

With the potentially limited interaction and direct communication related to the teaching and learning process between teachers and students, supporting writing teaching technology is needed to facilitate the online learning process well. Related to the first research question, five of the six participants used both synchronous and asynchronous meetings as the teaching modes, while one teacher used full asynchronous sessions although the university required the use of the two modes. Moreover, in relation to the five categories of technology integration in teaching writing, the findings reveal that they utilized various kinds of technological tools based on the need of the course and their digital literacy in teaching writing tools, as summarized in Table 4.

<table>
<thead>
<tr>
<th>Writing tool types</th>
<th>Participants</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Writing platforms</td>
<td>P1</td>
<td>Canva</td>
</tr>
<tr>
<td></td>
<td>P2</td>
<td>Microsoft Office and Google Docs</td>
</tr>
<tr>
<td></td>
<td>P4</td>
<td>Google Docs</td>
</tr>
<tr>
<td>2 Technology-enhanced tasks for</td>
<td>P1, P2, P3, P4</td>
<td>Google Classroom, LMS from university</td>
</tr>
<tr>
<td>writing classroom</td>
<td>P2</td>
<td>Mind map online Bubbl.us</td>
</tr>
<tr>
<td></td>
<td>P1, P4</td>
<td>Nearpod, Google Docs</td>
</tr>
<tr>
<td>3 Technology and teacher evaluation</td>
<td>P2</td>
<td>Mendeley</td>
</tr>
<tr>
<td>of students’ writing</td>
<td>P4</td>
<td>Turnitin</td>
</tr>
<tr>
<td>4 Technology in self- and peer</td>
<td>P1, P2</td>
<td>Microsoft Office, MS Word, Smallseotool</td>
</tr>
<tr>
<td>evaluation</td>
<td>P2, P4, P5</td>
<td>Grammarly</td>
</tr>
<tr>
<td></td>
<td>P5</td>
<td>Paraphrase-tool.com, Quillbot.com</td>
</tr>
<tr>
<td>5 Social Media</td>
<td>P1, P2, P4</td>
<td>Instagramw</td>
</tr>
<tr>
<td></td>
<td>P2</td>
<td>Edmodo</td>
</tr>
<tr>
<td></td>
<td>P4, P6</td>
<td>WhatsApp</td>
</tr>
</tbody>
</table>

Table 4. Teachers’ use of technology integration in teaching writing.
The results of the interview also show that the participants have succeeded in utilizing various technological tools according to the initial function of the tools. In the Writing Platform category, P1 has made use of Canva which can increase creativity and interest in writing recount texts. P1 said:

“In the first meeting, I used Canva as visual aid ‘cos I believe they can be [attracted] by the slides. They can go to their slide and write about anything, a random topic, for five minutes.”

In the second category, P2 and P4 succeeded in utilizing technology-enhanced tasks in writing class, such as Google Docs as a platform for collaborative writing. As stated by P4:

“Then I made Google Documents for each student that could be accessed within the group. One group had one folder, consisting of 3 files of Google Docs.”

P1 added that some of the tools are technology-enhanced tasks since they could provide a place where students could write collaboratively, like Google Docs and Nearpod. P1 said:

“So Nearpod can be used as collaborative writing and brainstorming tool.”

In this point, P2 utilized an appropriate tool when he used Bubbl.us in helping the students develop their ideas in writing; P2 said:

“I used Bubbl.us. It helps them to make some kind of mind mapping using that application. It trains students to develop their ideas into mind maps or spider webs.”

However, some participants misinterpreted this second category. Technology-enhanced task is inaccurately interpreted as a place to give assignments. In fact, this category is more about how teachers can use technology to make their tasks more varied. For example, P3 thought that using Google Classroom falls under technology-enhanced tasks. P3 said:

“Yes, I used the technology-enhanced task in the form of Google Classroom. Through it, I asked them to do peer and self-assessment by giving them guidance…”

In relation to the third and fourth categories, two teachers used tools under the technology and teacher evaluation category, such as Turnitin by P4 and Mendeley by P2. These tools help them in evaluating the students’ ways of writing references and checking the issue of plagiarism. Under the fourth category, technology for self and peer evaluation is the most frequently used all participants, such as P1, P2, P4, and P5. P2, in particular, was very much concerned with plagiarism, so he said:

“I also introduce them to simple grammar-checking and also paraphrasing tools. The name is Smallseotool. That is free as well. So, they can check in terms of their similarity, and they can also use it for paraphrasing.”

However, P3 chose to implement this method manually by offering writing guidance to students in order to review their own and peer work. Regarding the fifth category, social media, only P1 and P2 used social media (Instagram and Edmodo) in teaching writing, but did not use it throughout the course.

The EFL Writing Teachers Preferred Strategies Mapped to the ICAP Framework

The second research question seeks to map the strategies that the six writing teachers used, particularly in terms of technological deployment, into the ICAP framework (Chi, 2009), as well as to gain the teachers’ insight on the impact of such strategies on the students’ engagement.

In general, it could be seen that all of the teachers enacted the Passive mode mainly by getting students to watch videos (P2, P5), listen to lectures in synchronous sessions (P1), and read texts uploaded to Google Classroom or sent via WhatsApp (P5, P6). Although it was not explicit in this part of the interview, it could be inferred from their responses elsewhere that P3 also assigned the students to read the handouts uploaded to Google Classroom independently, while P4 made use of videos that she sent to the WhatsApp group to explain the materials.

For the Active mode, the responses of the participants greatly varied. P1, for example, instructed the students to identify the structure and language features of the texts, while P2, in addition to structure identification, required the students to browse the websites of indexed journals in order to read and cite from there. P3 considered the “doing the exercises” as the Active part of her lesson, and P4 categorized the peer-correction
activities in Google Docs as Active. P5 mentioned that her students at times took notes from the videos they watched, and lastly, P6 asked his students to highlight the texts in order to summarize them.

While not explicitly mentioned in the interview, the responses of the participants in other parts of the questions can be inferred as activities belonging to the Active category. For example, P1 mentioned that she asked her students to check for grammatical mistakes in Microsoft Word. Similarly, P2 made use of Grammarly for grammar check and smallseotools.com for plagiarism detection. P3 gave a rubric for her students to do self-assessment as well as peer correction. Like P2, P5 introduced her students to Grammarly, thesaurus.com, paraphrasing-tool.com, and quillbot.com for the students to improve their writing independently.

Since the subject matter is Writing, all of the teachers interviewed considered the writing tasks as Constructive. Hence, P1, P3, P4, and P5 mentioned the individual tasks of writing an outline, a paragraph, a text, an abstract, or an essay, as the Constructive part of their teaching. In addition, P2, and indirectly, P4, included their online mind-mapping activity as Constructive. Interestingly, P6 required his students to write a summary of the text in Bahasa Indonesia (the participants' first language) to ensure that the students truly comprehend the content. P2's use of Mendeley for students to write proper citations, and the smallseotools.com website for paraphrasing, can also be considered Constructive. Lastly, P3 regularly instructed her students to make presentations about a certain topic, as well as making explanatory videos, all of which can be considered as Constructive. She required her students to upload the videos in YouTube and submit the link in Google Classroom.

Finally, almost all of the teachers carried out a form of discussion and brainstorming in their writing classes, which they then categorized as Interactive. The discussion could be mediated through Canva or Google Docs for collaborative writing or peer feedback (P1, P2, P3, P4, P5), as well as synchronously via Zoom breakout room features or WhatsApp groups (P1, P4). P3 regularly asked her students to form groups to make PowerPoint presentations or video explanations. She often discussed the result of peer correction together, so the students could directly justify their works or their correction. P6 did not explicitly carry out any activity related to discussion among students since he admitted that his lesson was conducted exclusively through WhatsApp.

A summary of the activities and the technology used is tabulated against the ICAP framework and presented in Table 5.

Table 5. Instructional activities and the technological tools used by the participants mapped onto the ICAP Framework.

<table>
<thead>
<tr>
<th>Passive</th>
<th>Active</th>
<th>Constructive</th>
<th>Interactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watching videos (P2, P4, P5) - YouTube</td>
<td>Text and error analysis (P1, P2, P3, P4, P6) – Google Docs, Grammarly, smallseotools</td>
<td>Writing outline, paragraph, texts, essays, portfolios (P1, P3, P4, P5) - Canva</td>
<td>Discussion or brainstorming (P1, P3, P4, P5) – Zoom or WhatsApp video call</td>
</tr>
<tr>
<td>Listening to lectures (P1) – Zoom</td>
<td>Paraphrasing (P2, P5) – smallseotools, quillbot.com, paraphrasing-tool.com</td>
<td>Mind-mapping (P2, P4) – bubbl.us</td>
<td>Collaboration (P1, P2, P4) – Google Docs</td>
</tr>
<tr>
<td>Reading materials (P3, P5, P6) – Google Classroom, WhatsApp</td>
<td>Browse for materials and citing (P2) – indexed journal websites, Mendeley</td>
<td>Summarizing in Bahasa Indonesia (P6)</td>
<td>Group project (P3)</td>
</tr>
<tr>
<td>Doing exercises (P3)</td>
<td>Making a presentation on ppt or in video form (P3) – uploaded to YouTube</td>
<td>None – P6</td>
<td></td>
</tr>
<tr>
<td>Note-taking (P5)</td>
<td>Text-highlighting (P6)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In sum, even without explicit, formal knowledge of the ICAP principles, almost all of the teachers had enacted activities that were geared to engage students in active learning during online lessons. The comment of P1 represents this sentiment:
“Probably without me realizing I have already undergone several stages; like at first, the students got the Passive when they listened to my lecture about the text, and they could actively identify the structure and language feature from the example. Probably they go with the Interactive part first because they discussed with their group members about the identification of the text as well as the framework construction, and they try to produce into one text or two texts. So maybe the Constructive stage went last.”

When asked whether those activities they mentioned contributed to observable engagement behaviour in the students, 4 (four) respondents replied that some students were perceived to be active, while some were not. However, the reasons for the supposed inactivity were diverse. P1 mentioned that, due to the heterogeneous grouping she created, the lower-proficiency students were leaving all the works to the higher-proficiency ones. P2 and P5 cited similar reasons for his students’ apparent lack of engagement, namely unfamiliarity with the use of technology, insufficient understanding of the materials, and demotivation due to the absence of face-to-face meetings. Here is an excerpt of P2’s comment in this regard:

“I find several students are active and some are not active. There are several problems. It can be because … they are not used to using the technology, and some others do not really understand the materials, and probably less motivated to discuss. It’s more complicated when using technology because they cannot do the activity freely like in face-to-face activity.”

P3 alleged that her students seemed inactive due to poor internet connection, and she tried to call the students’ names over Google Meet to check if they were really present. Interestingly, P4 was confident that all her students generally displayed active behaviour. Lastly, P6 claimed that, since he solely used WhatsApp as the communication medium, he was unable to gauge the level of his students’ engagement; he only noticed that not all students responded to his WhatsApp messages. However, with the series of tasks that he assigned, he expected his students to be actively doing the works.

The Experience of EFL Writing Teachers during the Pandemic and Expectations in Using Technology for Future Teaching Practice

Related to the experience in integrating technology during the pandemic, the EFL writing teachers reported both positive opportunities and various challenges. Furthermore, the experience of having remote teaching for writing skills allowed teachers to plan for their future writing classes and to state their expectations. The summary of both opportunities and challenges, as well as teachers’ expectations based on the interviews with the six participants, can be seen in Table 6.

Table 6. Benefits, challenges, expectations, and future plans on using technology for Writing classes.

<table>
<thead>
<tr>
<th>Past Experiences</th>
<th>Future Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teachers’ perception of technological integration’s impact to students</strong></td>
<td><strong>Challenges</strong></td>
</tr>
<tr>
<td>Students were interested (P1), could work easily, could participate actively and creatively, could have direct interaction (P3)</td>
<td>Students experienced technical problems (P1), did plagiarism (P2), had low digital literacy (P1, P2, P5), had bad internet connection (P3, P4), participated less actively (P3, P5)</td>
</tr>
<tr>
<td><strong>Teachers’ perception of technological integration’s impact to themselves</strong></td>
<td>They found it easier to collect students' work (P3), could work faster (P5)</td>
</tr>
</tbody>
</table>
As shown in Table 6, based on their experiences, the teachers perceived that the use of technologies afforded various benefits to the students. For example, technology could positively boost students’ interest in the lesson (P1), give students a chance to get exposed to digital literacy (P2), and increase students’ active and creative participation during the learning process (P3). In addition, with the assistance of technology, students were able to finish the task easily and directly, as confirmed by (P3), who stated:

“Students can work easily, and they could directly confirm their understanding or ask questions to the teacher and their friends…”

Meanwhile, technological tools were seen to benefit the teachers themselves. Hence, the use of Google Classroom helped the teachers to easily collect students’ works (P3) and made teachers’ work easier, too (P5). P3 said:

“When we use Google Classroom, it makes it easier for the lecturer in collecting the work…."

Besides the benefits of integrating technology into writing classes, both teachers and students also face some difficulties. The teachers observed, firstly, that the students experienced technical difficulty in operating the technology (P1), which reduced the time for other class activities. Secondly, there was an issue of plagiarism as students might copy others’ works, as reported by P2:

“When I gave them assignments to write an essay or an article, most of them probably copy and paste from the internet. Therefore, one of my biggest problems is to get them to be aware of plagiarism issue…”

Third, teachers suspected that the students possessed low digital literacy (P2, P5). Fourth, they were beset with a bad internet connection (P3, P4), and lastly, not all students participated actively during the lesson (P3, P5).

There are two challenges from the teachers’ points of view. The first is the limitation to interact with students in online teaching (P2). The second is the failure to find the appropriate technology (P6) so P6 only used social media (WhatsApp) to teach writing. P6 stated:

“Due to my personal drawbacks, I do not find a platform which meets and fits the teaching and learning needs I plan for my course.”

In terms of expectations and future plans, some of the participants of this study mentioned what they expected their students to do in the future and what they planned for integrating technological tools into their next writing class based on the challenges they had experienced earlier. The students were expected to actively explore the technology by themselves outside the class (P3) and able to publish their writing later (P4). The teachers also wanted the students to have high motivation in participating during the writing lesson as expected by P5:

“Students are expected to get involved and engaged in the class of writing with high motivation assisted by writing tools.”

The future plans made by the teachers for themselves varied. Three teachers (P1, P4, and P6) planned to search for new technological tools, as stated by P4:

“I hope there will be a writing application/website that can be used easily and effectively. It should have Peer Editing tools so that students can help each other improve their writing skills.”

On the contrary, one teacher (P2) wanted to use the same tool for his future class. In addition, one teacher (P3) did not want to have more online writing classes, while P5 stated that she needed to prepare for blended or hybrid writing lessons in the future.

**DISCUSSIONS**

The present study attempted to address three research questions: 1) What are the EFL writing teachers’ preferred strategies for using technology in online classes during the pandemic in Indonesia, in line with five categories of writing tools? 2) How are those strategies mapped into the ICAP framework in relation to engaging students in active learning? How did the writing teachers perceive their students’ engagement in those activities? and 3) What were the experiences of EFL writing teachers in using technology during the pandemic, and what were their expectations in using technology for future teaching practice?
Concerning the first Research Question, the results indicated that, in general, the teachers attempted to make the students engaged in the learning process by employing both synchronous and asynchronous teaching strategies, as well as making use of all the five-writing tool categories. The second category of technology-enhanced tasks for the writing classroom and the fourth category of technology in self-and peer evaluation gained the most attention from the participants. Google Classroom as the learning management system is the most frequently used by the participants (P1, P2, P3, P4, and P5). This finding shares similarities with the former studies focusing on the use of Google Classroom (Rosyada & Sundari, 2021; Shelvam & Bahari, 2021).

For the fourth category, technology in self-and peer evaluation emphasized the use of automated writing evaluation (AWE). However, according to Lee (2017), the choice of appropriate online tools is essential in L2 environments when learners have low proficiency skills. As a result, careful attention must be given to the usage of AWE in connection to the students’ writing proficiency, whether it has a positive or negative effect on them. It is essential for teachers to give not only guidance but also training and practice to the students so that they can use the online resources confidently and appropriately. P3 mentioned that the tools were unsuitable for beginners since the tools gave automated correction and contributed less to the students’ writing proficiency, specifically in process writing pedagogy. However, no conclusive results have been found in the AWE study comparing machine and teacher feedback. AWE only contributed moderately to students’ writing quality upon revision (Lee, 2017), while teacher’s feedback is generally shown to improve the quality of students’ revision rather than their overall writing proficiency (Stevenson & Phakiti, 2014).

This finding suggests immediate professional development for writing teaching. As Williams and Beam (2019) revealed, technology-mediated writing instruction and the development of students’ 21st-century literacy abilities necessitate immediate, high-quality professional development for teachers. Teachers’ technology-enhanced pedagogy has to be strengthened so that they are more confident in allowing students to take charge of their own learning and participate actively. A teacher’s pedagogy, technology, and context expertise is required for this purpose. Accepting that technology integration does not mean just “adding” more technology is necessary for teaching today. This realization necessitates that teachers have a thorough understanding of the function of technology in education, as well as the means by which they might integrate technological advantages into their lesson plans.

In terms of mapping the teachers’ preferred strategies in teaching English online classes during the pandemic into the ICAP Framework, the findings revealed that all but one teacher, even without any knowledge of the ICAP principles, applied all of the four ICAP modes of engagement in continuous succession, in a way that the lower modes scaffold the successive ones, as recommended by Roscoe et al. (2014). As mentioned by P1, she started with the Passive activity (students listened to her lecture), followed by Active (they identified the structure of the text), then Interactive (students discussed a text outline), and lastly, Constructive (students wrote the full-text outline). However, as can also be seen from P1’s response, most teachers regarded the Constructive mode as the culminating activity, perhaps due to the nature of writing being seen as a productive skill. In this sense, the ICAP Framework is useful not only to ensure that teachers enact activities under all ICAP categories to engage students in active learning but also serves to sequence the activities from the Passive to the Interactive (Roscoe et al., 2014), while at the same time adapting the activities’ order to suit the course requirement.

Since Interactive activities are postulated to result in the greatest cognitive processing and, therefore, superior learning outcomes (Chi, 2009), it is natural that teachers should carry out more of such activities. The teachers in this study reported conducting some Interactive activities leveraging technological tools. However, Chi et al. (2018) pronounced some caveats in this respect. Their studies revealed that teachers experienced the greatest difficulty in designing Interactive activities, which might be caused by the erroneous focus on the external form of collaboration (how many students per group, the groups’ composition, etc.) rather than on the type of dialogues taking place. They cautioned the students by telling them that working together does not necessarily constitute an Interactive activity that results in effective knowledge generation (Chi et al., 2018). Chi and Meneske (2015) noted that the ideal Interactive activity is one that occurs in pairs with a substantial number of turn-taking, in which both partners contribute with “constructive” comments.
Hence, in relation to the findings of this study, writing teachers should not be complacent in thinking
that activities such as “collaborating via Google Docs” truly embody engaging interaction. Besides perhaps
limiting the number of group members to two, this type of online collaboration will need to be in tandem
with synchronous discussion and close monitoring by the teachers so that it does not degenerate into online
typing by the more proficient students. In addition, like what was done by P1, the group should ideally
be homogenous to prevent an imbalance between the contribution of the higher-proficiency students over
the lower ones. Overall, conducting Interactive activities online remains the biggest challenge for higher
education teachers (Du et al., 2020; Wekerle et al., 2020).

Despite the efforts put in by the writing teachers to engage their students during online learning, it is
apparent that other factors came into play, as shown by the replies of the teachers to the question of whether
or not their students displayed overt active behavior in responding to the activities classified as Active,
Constructive, and Interactive. Four of the six teachers reported mixed results; some students were observed
as engaged, and others were not quite. While only one teacher cited technical difficulty, namely internet
connection, the others pointed to various students’ factors, such as demotivation, lack of digital literacy,
and lower cognitive proficiency. It is also plausible that the seemingly passive students experienced a certain
degree of insecurity towards active learning pedagogy, preferring the comfort of passive learning mode (Du
et al., 2020). Hence, there is an urgent need for teachers to provide more explicit instructions, especially in
online classes, as well as psychological and cognitive scaffolding for the students (Chi et al., 2018). Further
study is needed, by way of a triangulation, to garner the students’ perspective on whether the deployment of
the various technological tools by the writing teachers was able to engage them cognitively, as what was done
by several other studies (Du et al., 2020; Marissa, 2021; Wekerle et al., 2020).

In sum, the findings provided insight into the role of technology in promoting active learning during online
writing classes. In line with Deepika et al. (2021), who mapped the pedagogical strategies of Engineering
faculty members when using the Canvas LMS onto the ICAP Framework, this study also depicted the
various types of technological tools at the service of teachers in the four stages of the ICAP taxonomy. Thus,
this study reiterated the conclusions of Deepika et al. (2021), who affirmed the possibility of implementing
any type of pedagogy in an online setting, and that of Wekerle et al. (2020), who promoted the use of
technology for enhancing students’ engagement which resulted in a positive gain of their learning outcome.
Thus, technological affordances should continue to be leveraged even in future onsite or hybrid learning.
When perceiving that not all students displayed overtly active behavior as expected, some teachers adjusted
their pedagogical approaches and expectations. Indeed, teachers’ manifold problems in implementing a
planned pedagogical strategy, such as active learning in a real-time classroom scenario, remain unresolved
(Chi et al., 2018).

Lastly, concerning Research Question 3, it was revealed that teachers’ strategies in using technology for their
next writing classes in the post-pandemic, either online, offline, or hybrid ones, had been planned based
on teachers’ experiences regarding the opportunities and challenges they encountered earlier. As for the
advantages of using technology as perceived by the teachers, this study confirms Alsmari’s (2019) and Jeong’s
(2016) findings that technology usage can enhance students’ active participation. Furthermore, while the
previous studies concluded that the use of technology such as Google Classroom benefited students’ writing
performance (Rosyada & Sundari, 2021; Shelvam & Bahari, 2021), the findings of this research proved
that the teachers also considered this platform effective and efficient to help them work faster and easier,
and that makes it the most popular tool as has been previously mentioned. In terms of the challenges faced
by the participants of this study, they observed that technical problems and the poor internet connection
of their students still occurred. In addition, in line with Bui’s study (2022), students’ motivation needs to
be increased, especially those with low ability in digital literacy (Tarihoran et al., 2022). Another similar
challenge is about plagiarism (Kurtianti et al., 2021; Setyowati et al., 2021; Sheerah et al., 2022) which
encourages the participants of this study to introduce thesaurus and various paraphrasing tools to minimize
this issue.

Furthermore, even though teachers should have understood the what and why before integrating the
technology into their writing class (Li, 2018), after experiencing online teaching during the pandemic, they
should have a better awareness of what they need to improve for their future teaching. Regardless of the
participants’ background and experience in the use of technology, which may influence their technology

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usage in the class (Zou et al., 2021), five out of six teachers in this study had planned how to integrate the technology into their future classes. One teacher planned to integrate similar technology, whereas others expected to explore and find other technological tools which they believed would be more beneficial for their next classes. Lie et al. (2020) called this kind of expectation ‘a renewed sense of commitment’ (p. 208). Teachers in other countries also expressed a certain degree of enthusiasm for future, post-pandemic technological integration (Altiparmak & Cebecioglu, 2022; Karakaya et al., 2021). In addition, the support from teachers’ institutions should be able to motivate them to satisfy their expectations.

CONCLUSION

This study has investigated the strategies and technological tools used by EFL writing teachers when conducting online classes during the COVID-19 pandemic. In particular, the strategies and the technological tools were mapped onto the five categories of writing tools and the ICAP Framework. In addition, their future plans for integrating technology in a post-pandemic setting were also probed into.

The qualitative data analysis from the semi-structured interview revealed that, overall, the six participants had made use of all the writing tools in the five categories, with peer- and self-editing tools (e.g., Automated Writing Evaluation tools) and the technology-enhanced task (e.g., Google Docs) receiving the greatest attention. An incidental finding demonstrated that teachers from remote areas and higher educational backgrounds tend to use less and simpler technological tools, thus suggesting the need for governmental and institutional support in terms of infrastructure, facilities, and professional development training. The participants have conducted all learning activities under the four ICAP categories in a technology-mediated environment, with the Active category being the most varied. However, teachers should make more attempts to orchestrate activities under the Interactive category due to its potential for promoting maximum learning gain. Teachers may also need to adjust the active learning pedagogy in response to various obstacles, such as technical issues or students’ psychological and cognitive factors. Lastly, the teachers had reflected on their experiences in teaching writing online during the pandemic and identified several benefits and challenges concerning the use of technology. This experience, in turn, generated a modest optimism in the future use of technological tools; while some were committed to maintaining the utilization of technology or even exploring more, others planned to use less technology in an offline setting. This phenomenon might be due to the teachers’ belief and literacy in the affordances of technology, as well as other contextual factors, such as the lack of institutional support, which can be the subject of future research.

The results of this study raised several implications and recommendations for various educational stakeholders. As mentioned earlier, governmental and institutional support might be needed to bridge the literacy gap that might exist between teachers in urban and rural areas. Perhaps the low self-confidence in the use of technology or negative perception of it can be overcome by providing infrastructural support such as institution-wide LMS or video-conferencing tools, technological integration policy, and monitoring, as well as continuous professional development training. EFL teachers, in particular those who teach writing, can also explore the various tools in all of the writing tool categories and the ICAP framework in order to promote student-centered learning and engagement, even in future hybrid or face-to-face meetings. For future research, this study can be further validated by obtaining the students’ perspective on the teachers’ usage of the technological tools. A longitudinal study can also be conducted in the future by interviewing the same participants to assess their practice and commitment to the use of technology.

This study is limited in several ways. For participants who preferred to do a written interview, there was a lack of meaning negotiation between the interviewee and interviewer. Besides, relying on self-reports always encompasses the danger that the accounts may be inaccurate or contain post-hoc justifications that blur actual practices. Nonetheless, the results of this study might give insights into the use of technology in mediating EFL writing teaching and learning during the pandemic and in the post-pandemic.
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REFERENCES


APPENDIX

The Interview Questions

Did you use any of the following types of technology in your online writing class during the pandemic, namely writing platform, technology-enhanced task, teacher and technology evaluation, peer- and self-assessment, and social media?

1. Please describe more at length your answers to no.1 above, in terms of the types of tools that you used, their functions, as well as the corresponding class activities.

2. According to an active learning theory, learning activities can be categorized as passive (students watching a video, etc.), active (students take notes or highlight a text), constructive (students generate additional output like a text summary, an outline, etc), and interactive (dialoguing in peer feedback, etc). How would you classify the learning activities you mentioned previously in terms of being passive, active, constructive, and interactive?

3. For the activities that you classified as active, constructive, and interactive in your previous answers, did your students display active learning behaviour as you expected? If they didn’t, could you explain why?

4. Overall, how has your experience (challenges and benefits) been in teaching writing online during the pandemic, especially in relation to the use of technology?

5. What are your expectations and future plans with regards to using technology in the future face-to-face or hybrid writing class?