# Covid-19-Triggered Online Learning Implementation:

# Pre-Service English Teachers' Beliefs

Adaninggar Septi Subekti
Universitas Kristen Duta Wacana
Jl. Dr. Wahidin Sudirohusodo No.5-25, Kotabaru, Kec.
Gondokusuman, Kota Yogyakarta, Daerah Istimewa
Yogyakarta 55224, Indonesia
adaninggar@staff.ukdw.ac.id*
*corresponding author

**Abstract**

The study investigated beliefs of nine pre-service English teachers on the implementation of online learning due to the Covid-19 pandemic in their English Language Education Department. The study used secondary data in the forms of the participants' written reflections on the implementation of online learning they experienced through their viewpoints both as students and as English teacher candidates. Qualitative document analysis in the form of Thematic Analysis was used to further analyse the data. The study found three factors hampering effective online learning, which were inadequate supporting infrastructures or resources, teachers' limited pedagogical skills in effectively managing online learning, and the lack of teacher-student and student-student social connections during the learning process. The study also found two perceived good practices, the combination of synchronous and asynchronous modes, which could ease learners' burden and boost learning effectiveness, and teachers' understanding of learners' struggle manifested in their facilitating actions. The study contributes in providing a picture of early-pandemic online instruction experiences as the stepping stone and momentum, for the improvement of online instruction during and post the pandemic.

**Keywords:** Online learning, pre-service teachers' beliefs, Covid-19 pandemic

## Introduction

Covid-19 or coronavirus disease, first appearing in Wuhan, China, by the end of 2019, has been bringing drastic changes in people's lives worldwide. As of October 2020, the disease has infected more than 35 million people, resulting in more than one million deaths worldwide. Governments implemented closures of offices, schools, and universities to prevent further spread of the virus infection. Due to this pandemic, it is estimated that more than a billion students cannot receive lessons from onsite their schools or universities (Mondol & Mohiuddin, 2020). It is

232

estimated that 80% of learners worldwide are kept from their schools and universities, continuing their learning online (Mondol & Mohiuddin, 2020), keeping the wheel of education rolling despite the pandemic. Specific to higher education or university level, the implementation of online learning at universities in this time of pandemic was on the scale never seen before in which there was a shift from on-site instruction to online conducted by universities globally (Czerniewicz, 2020).

Online learning, despite its sudden popularity due to the pandemic nowadays, is not at all a new concept. It is defined as learning conducted from a distance and assisted with such electronic devices as laptops or smartphones requiring an internet connection (Gonzalez & Louis, 2018). Hence, it allows learners to continue receiving class instructions from their homes without having to physically come to their campuses. Classes with online features can normally be characterised along a continuum: web-facilitated where online learning platforms are used to enhance face-to-face instruction, hybrid or blended where instruction is delivered both offline and online in approximately equal proportion, and fully online where all instructions are conducted online (Plaisance, 2018), the third type being the case at the time of the Covid-19 pandemic.

Online learning is delivered synchronously or asynchronously (Plaisance, 2018) through synchronous-based applications and asynchronous-based ones. Synchronous classes allow teachers and students to interact with each other in real-time, for example, through a teleconference (Plaisance, 2018). *Zoom, Skype,* and *Google Meet* are the examples of the applications. Asynchronous classes, in comparison, allow learners to complete tasks from anywhere with access to the internet within a flexible time parameter, for example within a week (Plaisance, 2018). Learning Management System applications (LMSs) such as *Moodle, Schoology*, and *Google Classroom* are commonly used to conduct asynchronous online classes. It is further argued that a balanced and careful combination of synchronous and asynchronous activities in an online class is appealing for learners as it capitalises on the flexibility of online learning (Plaisance, 2018). Moorhouse's (2020) recent study in Hong Kong found that their university participants preferred the blend between synchronous and asynchronous modes of online learning when a face-to-face meeting was not possible due to the Covid-19 pandemic.

It is posited that online learning activities should be arranged in such a way that they gain students' interest and motivation (Gonzalez & Louis, 2018). It may especially be the case when the students are adults because the "strong perceptions of what works for them and how they want to learn it" can be a powerful filter (Slaouti et al., 2013, p. 73). Regarding this, for teachers, moving their classes from face-to-face to fully online can be challenging. Challenges include dealing with technical problems related to technology, designing appropriate activities, relating pedagogies with technology, and gaining learners' support (Son, 2018).

Though online learning is often seen as possessing advantages for learning, it also inherently has unique challenges, some of which are quite problematic for English learners. In online classes, teachers' ability to check learners' comprehension through visual indicators is quite limited (Plaisance, 2018). For example, even in a synchronous, teleconference session, some students may prefer to attend classes without video, making teachers unable to see their facial

expressions, let alone asynchronous session in which learners do tasks in an LMS. Ironically, the temporal and spatial freedom that learners may consider a benefit of online learning can at the same time be a hindrance (Plaisance, 2018). Hence, unless skilfully executed, online learning may cause disengagement and learners may be at risk of disconnection (Plaisance, 2018). To avoid learners' feelings of disconnection, social presence, the degree to which learners and teachers feel connected to each other should be enhanced (Plaisance, 2018; Ratliff, 2018). It could be through sufficient challenges, clear guidelines for interaction and expected goals, clear feedback, as well as lively discussions through thought-provoking questions (Green, 2016).

In an early yet still relevant study, Ertmer (1999) classified two categories of technology integration barriers, first- and second-order barriers. First-order barriers include factors external to teachers, such as resources (Ertmer, 1999). In the case of online learning, internet access can be a paramount resource. Mondol's and Mohiuddin's (2020) study in Bangladesh, for example, found that their participants suffered from weak internet network, hampering the success of online learning. The network issue may relate to the economy. Though not in language learning literature, Lancker and Parolin (2020) warned that pandemic-triggered online learning could widen the gap between learners of low-income and higher-income families. As online learning requires a reliable internet connection, coming at a price, some learners could struggle to perform optimally due to precarious family economic situations (Lancker & Parolin, 2020). Furthermore, the second-order barriers proposed by Ertmer (1999)  are intrinsic to teachers and they include attitudes, beliefs, and skills. These two types of barriers should be addressed together rather than separately as they are inseparably linked (An & Reigeluth, 2011).

To minimise the barriers of online learning, investigating the practice of online education due to Covid-19 at Peking University, China, Bao (2020) posited five high impact principles of online learning. The first is the relevance between instruction and learning. Second is the effective delivery of instruction. The third is adequate support from teachers to students. Fourth is the high-quality participation of learners to boost learning quality (Bao, 2020). Concerning the third and fourth principles, Fu (2013) noted that the effectiveness of online instruction largely depends on learners' active learning, and thus teachers should use various methods to modify learners' tasks moderately to foster active learning outside class. Additionally, Messer (2020) stated that academic and social growth happens when learners have a voice about their learning, suggesting that learners need a degree of independence in their learning process. The last is the availability of alternative plans in cases of unexpected incidents or problems related to online learning (Bao, 2020). From this, it could be seen that the effectiveness of online learning is heavily influenced by teachers' capability in using technology for the success of instruction.

Concerning the paramount role of teachers for the success of online learning, what teachers do in their classes, including their uses of technology, is heavily influenced by their beliefs (Ertmer, 2005; Galvis, 2012). In an early yet still relevant study, Kagan (1992) defined teacher beliefs as "tacit, often unconsciously held assumptions about students, classrooms, and the academic material to be taught"

(p. 65). Richards et al. (2001) stated that teachers' experiences as learners observing their teachers contribute to the development of their beliefs as teachers. These beliefs could manifest in attitudes, leading to intentions. These intentions will in turn manifest in decisions, and ultimately, actions and behaviours in how teachers conduct instruction (Subekti, 2019a), including how and to what extent they are willing to use instructional technology (Sadaf et al., 2012). Hence, there have been numerous studies investigating teachers' beliefs on the integration of technology in their classes (e.g.: Galvis, 2012; Hsu, 2016; Kim et al., 2013; Prestridge, 2012). Pre-service teachers' beliefs in the field were also investigated (e.g.: Incecay, 2011; Sadaf et al., 2012), suggesting the importance of the beliefs held by pre-service teachers.

. At this time of the Covid-19 pandemic, however, whilst many educational researchers worldwide focus their attention on how in-service teachers should manage their online learning (e.g.: Basilaia & Kvavadze, 2020 in Georgia; Doghonadze et al., 2020 in several countries in Europe; Eko et al., 2020; Gunawan et al., 2020 in Indonesia; Moorhouse, 2020 in Hong Kong; Pace et al., 2020 in Georgia; Zhang et al., 2020; Zhou et al., 2020 in China), very little attention has been given to how future teachers see the online learning they are experiencing now and what they believe about it. The field of pre-service teachers' beliefs, if further investigated, offers benefits. It enables more understanding of the pre-conceptions they have on the use of technology that would likely be manifested when they embark on their journey as English teachers. Besides, as beliefs on advanced learners are said to be more stable than those of novice ones, the beliefs of pre-service teachers, novices in teaching, may still be developing whilst they are in the teacher education programmes (Incecay, 2011). Hence, the results could contribute to the improvement of English language education programmes on what has been good and what can still be improved during and post this pandemic.

Considering the mentioned rationales, the present study seeks to find the answers to two research questions. First, how are pre-service teachers' beliefs about possible challenges in implementing online learning? Second, how are their beliefs about good practices in implementing online learning?

## Method
### Research design
To answer the research questions, the present study used a qualitative method of analysing secondary documents in the forms of English Language Education Department's students' reflections in the Technology for Language Learning class they were taking. The reflections were written in English and were about their experiences as students undergoing online learning in their department for two months due to the Covid-19 pandemic. They were to reflect on the viewpoints of students and teacher candidates at the same time. In total, there were nine student reflections, each of which was 500-800 words in length. As the secondary data were not originally collected for the study's purposes, sufficient information to answer research questions may not extensively available (Walliman, 2011). Hence, these data were evaluated for adequacy and suitability first (Walliman, 2011). It was a means of triangulation to maintain the validity of the secondary data used.

The uses of secondary data, on the contrary, could avoid reflexivity, in which participants change behaviours when observed or giving "favourable" responses when interviewed (Bowen, 2009). Besides, the participants wrote their reflections weeks before the study was conducted, and so what they wrote was not in any way influenced by the present study. Therefore, the information obtained from the secondary documents, student reflections, in this case, offered reliability.

The data were analysed using Thematic Analysis in which the data were coded and reoccurring themes concerning the research questions across the dataset were reported (Braun & Clarke, 2006). Verbatim quotes from the participants were used instead of indirect quotes to best describe the depth and uniqueness of each participant's experiences, which is one key characteristic and advantage of qualitative research (Gray, 2014).

### *Research participants and ethical considerations*
The participants were nine pre-service English teachers taking Technology for Language Learning class in the English Language Education Department of a university in Indonesia. They were, at the time of the data gathering, in the sixth semester of their study in the even semester of the 2019/2020 academic year. Of these nine participants, seven were females whilst two were males. Permission to use the participants' reflections were obtained directly from the participants through instant messaging, thus voluntary participation was ensured (Gray, 2014). They were told that their participation would not affect their grade in the class in any way, thus assuring the principle of non-maleficence (Creswell, 2014). The participants' real names were all anonymised in the report to protect their confidentiality (Oliver, 2003).

### Findings and discussion
To facilitate reference-tracing, codes were used after each participant's verbatim quotes. For example, "[Elyas/M]" means the quotes were from Elyas (pseudonym), a male student, whilst "[Kania/F]" means the quotes were from Kania (pseudonym), a female student. The other seven participants were Ratna/F, Lois/M, Sylvia/F, Nita/F, Puri/F, Nina/F, and Mira/F (pseudonyms). The emerging themes of the two research questions could be observed in Table 1.

## Table 1. Emerging Themes Concerning Research Questions

| Research question 1 | |
|---|---|
| Theme 1. | Inadequate supporting infrastructures or resources hinder learning. |
| Theme 2. | Teachers are not fully ready pedagogically to switch to online learning. |
| Theme 3. | Lack of teacher-student and student-student social connections hinders learning. |
| **Research question 2** | |
| Theme 1. | A combination of synchronous and asynchronous modes eases learners' burdens and boosts learning effectiveness. |
| Theme 2. | Teachers should be considerate of learners' diverse needs in conducting online learning. |

*Research question 1. How are pre-service teachers' beliefs about possible challenges in implementing online learning?*

**Theme 1. Inadequate supporting infrastructures or resources hinder learning.**
Poor internet connection, unsupportive gadgets, and lack of monetary resources were reported as challenges these learners faced during the implementation of online learning. Elyas and Sylvia, for example, reported the poor internet connection and gadgets, such as smartphones and laptops, which may not meet the demand for online learning designed by their teachers. Regarding this, Elyas and Sylvia reported:

> ... Instability of internet connection ... and insufficient supporting gadget. [Elyas/M]
> ... Bad internet connection ... the students or the class cannot start because of the bad internet connection ... [Sylvia/F]

Nita added that having healthy gadgets with a good internet connection was very crucial for her and her friends because at times they had to have teleconference sessions with long durations or consecutively one class after another. She also mentioned the inevitable need to spend more money to afford a better connection. She reported:

> Since the e-learning also requires a "healthy" gadgets, it is sad to know that sometimes some of my friends and I have to struggle with that. Sometimes, we are also joking about how hot our phone is that we can use it to iron our shirts [due to long teleconference sessions]. Moreover, I also need a stable internet connection that I have to spend my money even more. [Nita/F]

Interestingly, the internet connection issue was not only experienced by learners but also by their teachers. Kania, for instance, reported that when their teachers'

237

internet connection was poor, it hampered the effectiveness of learning of the whole class. Regarding this, she stated:

> ... One of the things that are challenging is when the lecturer's connection is not good so that the shared screen cannot be displayed then the discussion of the results of the *menti* or *padlet* cannot be done. Finally, it will make teaching and learning activities boring for students ... learning not to run smoothly. [Kania/F]

Regarding this, several points could be further commented. First, resource barriers could be considered classic in the field of online learning (Ertmer, 1999). The finding that learners suffered due to poor internet connection was the same as that of Mondol's and Mohiuddin's (2020) study in Bangladesh. Their learner participants also struggled to sustain learning optimally because of poor internet network. To afford a better internet connection, as Nita commented, came with a price, and not everyone could do that due to different family economic situations (see Lancker & Parolin, 2020). Other than needing a better network, the participants also reported unsupportive gadgets. Their gadgets may be old and could not optimally perform under the online learning environment in which learners should attend consecutive online classes in teleconference modes. To afford newer, more supportive gadgets may not at the moment be an option due to the economic difficulty. Though perhaps the issue experienced by the participants in this study was not as major as that in Bangladesh reported by Mondol's and Mohiuddin's (2020), these two studies' relatively same findings could indicate that learners in some developing countries did experience difficulties during online learning at the time of the pandemic due to poor infrastructure and resources. Additionally, this present study reported that teachers, who could typically afford better internet providers with more expensive cost, were also at times experiencing poor internet network. This could suggest that in general, the internet connectivity in Indonesia needs improvement shall the online learning due to this pandemic be continued more successfully for longer duration. However, this area may well beyond the control of teachers and students.

**Theme 2. Teachers are not fully ready pedagogically to switch to online learning.**
Several learners reported that learning was not optimal because their teachers seemed to be ill-equipped to switch their instruction online. Ratna, for example, reported that some of her teachers still treated their classes the same way, without any changes and adjustment in the syllabus, even after they were moved fully online. She stated:

> ... The teacher needs to be creative in designing the new lesson plan
> (from class-based one to online-based one due to the pandemic).
> They probably need to re-adjust the syllabus like what has happened
> to several classes that require students to teach.  [Ratna/F]

238

Echoing Ratna, Nita also argued that learning activities that were not suitable to be conducted in an online learning environment should be modified to make them more doable in such an environment. Unfortunately, it seemed not to always be the case. Regarding this, she reported:

> Teachers are supposed to adjust some materials and the activities that will be doable in e-learning. That is why I guess it will be important for the teachers to check the whole syllabus again and adjust it right away. [Nita/F]

Sylvia even reported that one of her teachers did not even explain what to do when giving homework in online learning, making her difficult to do it her best. She stated:

> My least favourite activity is making homework given by the teacher who does not explain, [not giving] clear instruction about the homework ... it is confusing ... I do not know what I should do. [Sylvia/F]

The abrupt shift in university instruction from on-site instruction to online due to the pandemic (Czerniewicz, 2020) carried the consequence that some teachers may be ill-equipped to conduct effective instruction online (Son, 2018). This may be the case as seen in the mentioned excerpts in this theme. Some factors could also come into play. First, before the pandemic, some teachers may at best use web-facilitated classes in which the use of technology was only to supplement face-to-face instruction (Plaisance, 2018). Then, all of a sudden, they needed to switch their instruction to fully online due to university closures. Hence, they may not have sufficient time to modify their syllabus as the semester was already running. Secondly, as Plaisance (2018) also noted, teaching online requires teachers to change their paradigm about instruction as online teaching and face-to-face ones have different inherent characteristics. In this case, such a short time may not be enough for teachers to change their paradigm about teaching. For example, teachers who were accustomed to having full control of learning in a face-to-face mode may struggle in shifting to online learning where they had less control over learners' learning in online mode (Fu, 2013). In general, due to the abrupt and perhaps unprepared shift to online instruction, teachers seemed to struggle in modifying their instruction from face-to-face to online mode (see Son, 2018).

### Theme 3. Lack of teacher-student and student-student social connections hinders learning.

The next challenge of online learning reported was on learners' feelings of social disconnection during the learning process. Nita, for instance, reported that the online learning environment created a vicious cycle in which learners were reluctant to ask questions and teachers had difficulty to monitor learners' progress and understanding. She stated:

239

> The possible challenge... is how to fully understand the students' needs. Since the teacher cannot directly observe and check the students' progress and most of the students are also reluctant to ask, I think it is hard for teachers to understand and help students with what they need. [Nita/F]

In a similar vein, Mira also reported that her teachers only provided material such as videos or a reading passage and asked learners to do certain tasks based on the materials without giving further explanation. She stated:

> ... when the teachers only ask the students to watch videos from YouTube or read something about the topic for a meeting and then the teachers give tasks based on the video without any explanation ... I think it is not effective because not all students can learn independently. Some students need an explanation from teachers to make them understand. [Mira/F]

Nita's and Mira's excerpts indicated that the online learning they were experiencing so far made them deprived of the connections they had with their teachers in the face-to-face mode. In face-to-face mode, teachers had the duration of full credit hours in a class where they could explain materials and tasks and learners could directly ask questions. In the implementation of online learning in the present study, however, teachers' support and learners' active learning, as seen in the excerpts, were not optimal. This finding was, of course, contrary to what literature has reiterated related to the benefits of online learning such as borderless connectivity (Plaisance, 2018) and active learning (Fu, 2013). Related to the connectivity issue, Ratliff (2018) mentioned that in online learning, teachers and learners should feel connected to each other. This could be achieved through sufficient challenges, clear guidelines, and expected goals, clear feedback, and discussions through thought-provoking questions (Green, 2016). This was what may be missing in the present study's findings. As seen in the excerpts, teachers did not provide clear guidelines for completing a task, and the tasks given were largely teacher-centred with little room for further discussions, thus the feeling of disconnection from learners' viewpoints. Another finding that may be interesting was Mira's view that not all students could learn independently without teachers' clear guidelines. As Fu (2013) noted that the success of online instruction largely depends on learners' active learning, Mira's report could be seen as a reminder that learners' habit of active learning in online instruction also needed time and process to form. Hence, teachers' task was to facilitate learners to gradually form this active learning habit through sufficient, step-by-step challenges manifested in instruction (see Bao, 2020; Fu, 2013).

Furthermore, learners also reported some kind of social disconnection among themselves. Ratna, for example, lamented her teacher's choice of assigning learners to make videos of their teaching demonstration, mentioning her preference to do a teaching demo via teleconference where she could have a real audience. She reported:

240

> I [prefer] to practice teaching online via apps (*Google Meet, Microsoft Team,* and *Zoom*) rather than making videos [of teaching demo]. The reason is that the students will have the real participants (can be their peers/classmates or the other students) when they conduct their online class and will have the 'real' responses from the participants (students). [Ratna/F]

In a similar tone, Sylvia also reported she preferred virtual meetings through which learners could discuss materials together to just teacher assigning homework. In her view, virtual meetings allowed learners to construct knowledge together. She stated:

> As a teacher, instead of giving homework, I will make a virtual meeting where I can let my students discuss the materials together. This activity can help my students to build their knowledge and also improve their social skills. The students can share their thoughts or their findings with other students and help each other grow. [Sylvia/F]

The excerpts from Ratna and Sylvia seemed to converge that teleconference sessions helped improve learners' feelings of connection with their classes, which could be understandable since teleconference allows learners to meet their classmates and teachers and communicate with them real-time (Plaisance, 2018). However, this finding should also be treated with caution because, in Theme 1, this study also found that teleconference sessions were not preferred by several learners due to resource issues such as poor internet connection and a high price to afford better connection and unsupportive gadgets. Hence, the implementation of teleconference sessions may need to be adjusted to accommodate these two findings, on the potential of teleconferences to enhance class social connection and on the drawbacks of having teleconference related to resource issues. This could be in line with Bao's (2020) recommendation that high-quality participation of learners during the learning process should be enhanced for the success of online learning.

***Research question 2. How are pre-service teachers' beliefs about good practices in implementing online learning?***

**Theme 1. A combination of synchronous and asynchronous modes eases learners' burdens and boosts learning effectiveness.**
Learners reported that a combination of synchronous sessions using teleconference applications and asynchronous sessions using LMSs during a semester would ease learners' academic burden and boost the effectiveness of online learning. Kania reported that the combination allowed a win-win solution for both teachers and learners. Learners could ease their burden and teachers could still periodically monitor learners' progress. She stated:

> Besides using *Zoom* or *Google Meet*, I would use *Schoology* as an alternative. The reason, they [*Zoom*, and *Google Meet*] are

241

teleconference learning media that can display faces and sounds so that we can communicate ... virtually. [But] both of these media have a large capacity so for someone who does not have a good internet network, it will be difficult ... What I think is using *Schoology* ... the media will be more accessible and lighter but teachers will still be in contact with students without having to meet virtually. [Kania/F]

In a similar tone, Lois mentioned that the use of LMSs in combination with teleconferences was more preferable as it allowed more variations of activities, enhancing learners' interest. He stated:

The teacher could make teaching videos like *Ruang Guru* made, where it is more flexible and the students could watch it anytime and anywhere. Moreover, it could also be a variation of e-learning so the students could not feel bored with only one type of activity [teleconferences]. Another type of activity ... is having an asynchronous discussion on text, video, or others already provided in a platform like LMS or others. [Lois/M]

The finding that learners preferred the combination of synchronous and asynchronous learning sessions was the same as the finding of Moorhouse's (2020) recent study in Hong Kong. In that study, the university participants also preferred the blend between synchronous and asynchronous modes of online learning. The similarity may not only be due to the similar characteristics between Moorhouse's (2020) study's participants and the present study's, both being Asians but may also be due to the merits such combination offered. On one hand, real-time meetings allowed learners to meet their classmates and lecturers, allowing a sense of social connection, teachers' support, and more direct question and answer sessions in case learners face difficulties. On the other hand, doing so too frequently could be costly for learners. Thus, the use of LMSs where a teacher could post tasks, guidelines, and discussion forum, and learners could finish the tasks within flexible time parameter (Plaisance, 2018) could be seen as some kind of 'sanctuary' where learners could 'slow down' and yet continue learning. Besides, as Lois reported, monotonous online learning activity could lessen learners' interest. Concerning this, as adult learners, the participants may have developed a very strong perspective on what worked and what did not for them and how they wanted to learn (Slaouti et al., 2013), and concerning online learning, this could be a powerful filter (Slaouti et al., 2013). Thus, as Gonzalez and Louis (2018) argued, students' interest and motivation should always be maintained, and combining real-time sessions and LMSs-based sessions could be a way to do so.

**Theme 2. Teachers should be considerate of learners' diverse needs.**
Teleconference sessions seemed to have various effects on learners' learning. Lois, for example, reported that he was more comfortable and more relaxed consulting

242

his research proposal via teleconference than consulting it face-to-face with his teacher in office. He stated:

> Individual consultation through video conference is the activity that I like ... the atmosphere of the consultation itself. Honestly, I feel quite nervous when I need to see my lecturer in person ... Yet, through video conferences, I feel more comfortable since I do consultation from my place and it could decrease my anxiety level than consulting in the lecturer's office. [Lois/M]

Lois' remark was a complete opposite from that of Nina. Nina stated that in teleconferences, she tended to feel afraid to ask questions because the class was usually very quiet with the teachers dominating the session with lectures or explanations. She stated:

> I feel a little bit afraid to ask. The reason why ... I am worried ... my questions sound ridiculous ... In asking question session, the students will feel more scared when the class becomes silent; some students are not brave enough to ask questions. [Nina/F]

It could be seen from Lois' and Nina's excerpts that whilst individual teleconferenced eased learners' anxiety, whole-class teleconferences instilled anxiety, a phenomenon which also happened in Moorhouse's (2020) study in Hong Kong. Though not specifically in educational technology literature, the effects of an audience on learners' anxiety and willingness to communicate have been extensively studied in educational psychology field in which learners tend to be more anxious to talk when they feel they are in the centre of their classmates' attention or are afraid of making mistakes in front of their peers (Subekti, 2018, 2019b). Regarding this, teachers could design the teleconference session allowing small group discussion using the feature of *Breakout Room* in *Zoom*. Through this feature, learners could discuss the materials in small groups and teachers could monitor them by 'coming' to the small groups in turn. In small groups, learners may be braver to ask questions if they face difficulty (Subekti, 2020).

To compensate learners' relatively low participation in teleconference sessions, perhaps despite their difficulty or struggle in understanding the materials, teachers recorded the sessions and sent the link to the class for review at learners' convenience. This was a practice that learners appreciated. Puri and Nina, for example, commented:

> Sometimes not all students can take online classes because of the internet network that is sometimes less supportive and to overcome them ... to record the learning process and share it with all students. [Puri/F]

> I also like it when the teacher records our meeting ... because of that, I can review it again if I feel uncertain about the materials. [Nina/F]

243

This theme was particularly interesting because whilst it captured the same phenomenon on diverse needs of learners that should be attended to, this theme also indicated that learners' needs could be so diverse that one-size-fits-all class policy could not always be possible. For example, one student reported teleconference eased his anxiety, whilst another reported she was very anxious to ask questions in teleconferences. However, there was a converging idea that teachers to a certain extent had shown an understanding of their struggle and had done something to remedy that, for example by recording the teleconferences. This was in line with some authors' idea that at such difficult time as the Covid-19 pandemic affecting learners' various aspects of life, teachers should show their support (Bao, 2020), understanding their struggles, whilst at the same time maintaining the quality of learning or at least keeping the impact of the pandemic on learning to the very minimum.

In general, the findings of this study provided reflections for both the pre-service teacher participants and their teachers. For the participants' teachers, the findings on challenges in the implementation of online learning demonstrated the voices of their students, who would likely be future teachers, in critiquing classroom practices for betterment. For the participants, their voices on challenges could serve as reflections of learners' viewpoints about instructional practices needing improvement when they eventually became teachers. This could potentially form the participants' sympathetic understanding towards learners' struggles when they became teachers. As for the findings on good practices in conducting online learning, these had shown the participants' certain degree of understanding on the implementation of online learning both as learners seeing the classroom practices of their teachers, and as pre-service teachers. It could be seen from their perspectives largely conforming to the ideas of previous several studies on ideal uses of instructional technology. This degree of understanding may also be attributed to their ongoing teacher education which might have taught them several theories on the uses of instructional technology. It could be the embryo of their future beliefs as teachers, in line with Richards et al.'s (2001) idea that students' observing teachers who taught them became the basis of their beliefs as teachers.

**Conclusion**

The present study offers contributions. First, the study voiced pre-service teachers' perspectives on their first-hand experiences in online learning during the Covid-19 pandemic, which was quite under-researched despite the potential role they could have in the future as teachers in the post-pandemic era. Whilst educational researchers' attention may heavily focus on in-service teachers at this time of the pandemic, bringing forward unique experiences of teachers' candidates offered a different angle of seeing the issue of online learning. Secondly, the findings on challenges and perceived good practices of online learning were found to be intertwined with one another, and thus educational practitioners should address them with holistic understanding to improve the quality of online instruction.

Despite its contributions, the present study has inherent limitations. This study relied solely on the English Education students' reflections on their 2-month online

244

learning experiences. Hence, the findings, whilst could offer some insightful perspectives, may be unique to its context of participants. Replications, however, could still be possible in other contexts having similar characteristics such as Indonesian university contexts.

Future studies could be suggested in light of the present study's contributions and limitations. The findings suggesting the implementation of online learning still needed improvements both from learners' and teachers' aspects and resource aspects, future studies on the quality of online learning are worthwhile. At this time of the pandemic, there may be no time to fully maintain quality assurance of online instruction as the main goal was to save the learning process by continuing it in any possible format (Basilaia & Kvavadze, 2020). However, in post-pandemic, universities especially teacher education programmes, should level up, using the during-pandemic online instruction experiences as the stepping stone and momentum, to better equip pre-service teachers to have necessary skills, knowledge, and ethics to conduct successfully instruction online. For this reason, future studies on a more dynamic and flexible during-pandemic and post-pandemic teacher education programmes can be very worthwhile.

## Acknowledgement

## References

An, Y.-J., & Reigeluth, C. (2011). Creating technology-enhanced, learner-centered classrooms. *Journal of Digital Learning in Teacher Education*, *28*(2), 54–62. https://doi.org/10.1080/21532974.2011.10784681

Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Hum Behav & Emerg Tech*, *2020*, 1–3. https://doi.org/10.1002/hbe2.191

Basilaia, G., & Kvavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia. *Pedagogical Research*, *5*(4), 1–9.

Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, *9*(2), 27–40.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approach*. Sage Publications, Inc.

Czerniewicz, L. (2020). *What we learnt from "going online" during university shutdowns in South Africa*. PhilOnEdTech. https://philonedtech.com/what-we- learnt-from-going-online-during-university-shutdowns-in-south-africa/

Doghonadze, N., Aliyev, A., Halawachy, H., Knodel, L., & Aledoyin, A. S. (2020). The degree of readiness to total distance learning in the face of COVID-19 - Teachers views. *Journal of Education in Black Sea Region*, *5*(2), 2–41. https://doi.org/10.31578/jebs.v5i2.197

Eko, A., Atmojo, P., & Nugroho, A. (2020). EFL classes must go online! Teaching

245

activities and challenges during COVID-19 pandemic in Indonesia. *Register Journal*, *13*(1), 49–76.

Ertmer, P. A. (1999). Addressing first-and second-order barriers to change: Strategies for technology integration. *Educational Technology Research and Development*, *47*(4), 47–61.

Ertmer, P. A. (2005). Teacher pedagogical beliefs: The final frontier in our quest for technology integration? *Educational Technology Research and Development*, *53*(4), 25–39.

Fu, J. S. (2013). ICT in education: A critical literature review and its implications. *International Journal of Education and Development Using Information and Communication Technology (IJEDICT)*, *9*(1), 112–125.

Galvis, H. A. (2012). Understanding beliefs, teachers' beliefs, and their impact on the use of computer technology. *PROFILE*, *14*(2), 95–112.

Gonzalez, D., & Louis, R. St. (2018). Online learning. In J. I. Liontas (Ed.), *The TESOL encyclopedia of English language teaching* (First Edit). https://doi.org/https://doi.org/10.1002/9781118784235.eelt0423

Gray, D. E. (2014). *Doing research in the real world* (3rd Editio). Sage Publications, Ltd.

Green, P. (2016). How to succeed with online learning. In D. N. Rushby & W. Surry (Eds.), *The Wiley handbook of learning technology* (First Edit, pp. 261–286). https://doi.org/https://doi.org/10.1002/9781118736494.ch15

Gunawan, G., Suranti, N. M. Y., & Fathoroni, F. (2020). Variations of models and learning platforms for prospective teachers during the COVID-19 pandemic period. *Indonesian Journal of Teacher Education*, *1*(2), 61–70.

Hsu, P.-S. (2016). Examining current beliefs, practices, and barriers about technology integration: A case study. *TechTrends*, *60*(3), 30–40. https://doi.org/10.1007/s11528-015-0014-3

Incecay, G. (2011). Pre-service teachers' language learning beliefs and effects of these beliefs on their practice teaching. *Procedia - Social and Behavioral Sciences*, *15*, 128–133. https://doi.org/10.1016/j.sbspro.2011.03.061

Kagan, D. (1992). Professional growth among preservice and beginning teachers. *Review of Educational Research*, *62*, 129–169.

Kim, C., Kyu, M. K., Lee, C., Spector, J. M., & Demeester, K. (2013). Teacher beliefs and technology integration. *Teaching and Teacher Education*, *29*, 76–85. https://doi.org/10.1016/j.tate.2012.08.005

Lancker, W. V., & Parolin, Z. (2020). Comment COVID-19, school closures, and child poverty: A social crisis in the making. *The Lancet Public Health*, *2019*(20), 2019–2020. https://doi.org/10.1016/S2468-2667(20)30084-0

Messer, J. (2020). Turning it inside out: Independent reading in the middle school classroom. *Illinois Reading Council Journal*, *48*(2), 3–18.

Mondol, S., & Mohiuddin, M. G. (2020). Confronting Covid-19 with a paradigm shift in teaching and learning: A study on online classes. *International Journal of Social, Political and Economic Research*, *7*(2), 231–247.

Moorhouse, B. L. (2020). Adaptations to a face-to-face initial teacher education course 'forced' online due to the COVID-19 pandemic. *Journal of Education for Teaching*, *00*(00), 1–3. https://doi.org/10.1080/02607476.2020.1755205

Oliver, P. (2003). *The student's guide to research ethics*. Open University Press.

Pace, C., Pettit, S. K., & Barker, K. S. (2020). Best practices in middle level quaranteaching: Strategies, tips and resources amidst COVID-19. *Becoming: Journal of the Georgia Association for Middle Level Education*, *31*(1), 1–13. https://doi.org/10.20429/becoming.2020.310102

Plaisance, M. (2018). Online course delivery. In J. I. Liontas (Ed.), *The TESOL encyclopedia of English language teaching* (First Edit). https://doi.org/https://doi.org/10.1002/9781118784235.eelt0129

Prestridge, S. (2012). The beliefs behind the teacher that in fl uences their ICT practices. *Computers & Education*, *58*(1), 449–458. https://doi.org/10.1016/j.compedu.2011.08.028

Ratliff, K. (2018). Building rapport and creating a sense of community: Are relationships important in the online classroom? *Internet Learning Journal*, *7*(1), 31–48.

Richards, J., Gallo, P., & Renandya, W. (2001). Exploring teachers' beliefs and the processes of change. *The PAC Journal*, *1*(1986), 47–48.

Sadaf, A., Newby, T. J., & Ertmer, P. A. (2012). Exploring pre-service teachers' beliefs about using Web 2.0 technologies in K-12 classroom. *Computers & Education*, *59*(3), 937–945. https://doi.org/10.1016/j.compedu.2012.04.001

Slaouti, D., Onat-Stelma, Z., & Motteram, G. (2013). Technology and adult language teaching. In G. Motteram (Ed.), *Innovations in learning technologies for English language teaching*. British Council.

Son, J. (2018). Technology in English as a foreign language (EFL) teaching. In J. I. Liontas (Ed.), *The TESOL encyclopedia of English language teaching* (First Edit). https://doi.org/https://doi.org/10.1002/9781118784235.eelt0448

Subekti, A. S. (2018). An exploration of foreign language anxiety in the Indonesian university context: Learners' and teachers' voices. *TEFLIN Journal*, *29*(2), 219–244.

Subekti, A. S. (2019a). A study of Introduction to Colllege English's teachers' beliefs in their teaching roles. *International Journal of Indonesian Education and Teaching*, *3*(1), 21–40. https://doi.org/https://doi.org/10.24071/ijiet.2019.030103

Subekti, A. S. (2019b). Situational willingness to communicate in English: Voices from Indonesian non-English major university students. *Indonesian Journal of English Language Teaching and Applied Linguistics (IJELTAL)*, *3*(2), 373–390.

Subekti, A. S. (2020). Alleviating anxiety, boosting confidence: A proposed model of Willis' Task-Based Learning. *JELTL (Journal of English Language Teaching and Linguistics)*, *5*(1), 131–144.

Walliman, N. (2011). *Research methods: The basics*. Routledge.

Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). Suspending classes without stopping learning: China's education emergency management policy in the COVID-19 outbreak. *Journal of Risk and Financial Management*, *13*(3), 1–6. https://doi.org/10.3390/jrfm13030055

Zhou, L., Li, F., Wu, S., & Zhou, M. (2020). "School's out, but class's on", the largest online education in the world today: Taking China's practical exploration during the COVID-19. *SSRN*, *4*(2), 501–519.

https://doi.org/10.15354/bece.20.ar023.Keywords