



## Effective Pedagogical Practices for Teaching Translation Courses Online in the Post-COVID-19 Era

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Received 15 October 2022 | Received in revised form 17 December 2022 | Accepted 19 January 2023

### APA Citation:

Alkhawajaa, L., Khouryb, O., Ibrahimc, H., Ghnaimd, F., Awwade, S. (2022). Effective Pedagogical Practices for Teaching Translation Courses Online in the Post-COVID-19 Era. *Eurasian Journal of Applied Linguistics*, 8(3), 212-223.

Doi: <http://dx.doi.org/10.32601/ejal.803017>

### Abstract

**Purpose.** Following the outbreak of the COVID-19 pandemic, educational institutions were forced to close temporarily. Subsequently, online education replaced conventional classroom instruction, becoming the mainstream instructional method. This led to a significant change in lecturers' approaches in teaching translation courses. This study aims to investigate lecturers' experiences, reactions to, and techniques in online teaching the practice of translation. **Methodology.** It adopts a qualitative research method using in-depth interviews with university lecturers teaching translation online in Jordan. The participants' reflections were presented considering the components of the TPACK framework, described as knowledge, pedagogy, and teacher content knowledge. **Findings** The results of this study reveal the most relevant and useful skills and knowledge that translation lecturers can acquire from their colleagues' experience of online teaching this subject, as well as the approaches they found best supported the online teaching mode. Also, it highlights the importance of considering the TPACK model in teacher's practices. **Implications for Research and Practice.** The study's findings have implications for teachers and the academic staff in institutions of higher education. The findings reveal information based on teachers' feedback to improve online education for the practice of translation. This information can be taken into consideration in the future planning of training programs for online translation teachers in the post COVID-19 era. The main study limitation is that teachers' self-assessment of competencies can be biased and thus may have affected the results. In order to avoid responses' bias, future studies may adopt different approaches to understand and examine the TPACK of teachers.

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**Keywords:** Online Teaching and Learning, Pedagogy, Translation Practice, TPACK, Post Covid-19

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<http://dx.doi.org/10.32601/ejal.803017>

## Introduction

The COVID-19 pandemic will have a lasting impact on the educational sector (UNESCO, 2020). Although school closures and pandemic restrictions have ended, Jordan's Ministry of Higher Education is considering switching some of the courses in the study curriculum to online mode in future (MOH, 2020). It is uncertain whether such a large-scale online learning mode would be successful. This poses great concern to lecturers, burdening them with worry and tension. When the COVID-19 pandemic started, online teaching and learning showed significant growth. Educators all over the world began searching new ways to deliver their courses online and use virtual learning environments (Hubscher-Davidson & Devaux, 2021). This increased interest has become the focus of the UK Association of Programmes in Translation and Interpreting Studies (APTIS) in different workshops organised in 2020 to discuss the topic of teaching translation and interpreting online.

It is worth noting that a well-planned online learning experience is different from online learning in response to a crisis or disaster (Hodges, Moore, Lockee, Trust, & Bond, 2020). According to Hubscher-Davidson and Devaux (2021), it is important to benefit from emergency remote teaching and enhance our teaching practices of the translation practice. In this regard, Levin and Wadmany (2006) say that teachers' teaching practices in online learning contexts can reveal information about their beliefs towards online teaching and about how their students learn. Mishra and Koehler's (2006) technological, pedagogical, and content knowledge (TPACK) framework was selected to explain the various domains of teachers' TPACK. The TPACK theoretical framework helps in identifying the lecturers' views based on their previous experiences, the content of their online courses, their pedagogy in teaching, their course design, and the technology chosen to facilitate students' learning. Anderson, Barham, and Northcote (2013) state that TPACK can be applied "as a lens through which to further analyse the place of discipline-specific content in relation to the more generic issues of pedagogy and technology in online education contexts" (p.551). Therefore, in this paper TPACK is applied in the field of translation as a discipline-specific to analyse teachers' views on, and ways of, teaching the practice of translation online.

The best online teaching practices improve participation, respect, commitment, and teamwork through a student-focused environment with enhanced teacher visibility (De Gagne & Walters, 2009). Despite efforts to elucidate effective course design and teaching practices meant for online interactions, a gap exists between the underlying philosophy of a particular discipline and the context of online teaching practices (Benson & Samarawickrema, 2009). The majority of modern online education essentially mimics a face-to-face class into a simulated environment, having the same schedule and almost similar content with minor adaptations. In the later stage of the COVID-19 pandemic, a new teaching paradigm became feasible and attractive, and this could become common in the post-COVID-19 era. Whatever the pace of this digitalization, we must be well prepared from a pedagogical standpoint. This will enable us to determine the most effective strategic approach in the process of online teaching and learning of the practice of translation.

Since learning and teaching online are not the same as in the traditional face-to-face mode, we should find the most effective pedagogical approaches in the process of online teaching and learning to improve the process of online education and students' progress. Based on data from interviews, this paper reveals new skills and teaching methods necessary for online learning to take place. Given the importance of integrating technology in teaching the practice of translation (Samman, 2022), this research aims to examine teachers' experiences and knowledge during online learning of the practice of translation. The findings of this research are expected to allow lecturers of translation to benefit from knowing how their colleagues have dealt with emerging problems, by applying the best methods and techniques for teaching online translation courses using TPACK. Although the TPACK model has been applied by different studies (e.g., Li and Lalani (2021); Scherer, Howard, Tondeur, and Siddiq (2021)) since the COVID-19 pandemic, few studies have explored the TPACK model in higher education (Fabian, Clayes, & Kelly, 2019).

## Theoretical framework and Literature Review

- *Online Learning and Pedagogy*

Online learning is defined as a learning experience that can happen in synchronous or asynchronous environments using different devices with internet connectivity. Students in online learning can be anywhere when they communicate and interact with their classmates and their teachers (Singh & Thurman, 2019). Online learning is most conducive when effective teaching methods are fortified by effective course design, structure, and practices (Yang, 2017). Several studies have been conducted in the past few years that investigate the competencies required by teachers to facilitate a practical online course (Albrahim, 2020). Research has demonstrated that the quality of online courses and teaching is affected by the state of the composite parts of the online learning environment (Salmon, 2011).

Moreover, practice, teacher training, and continued professional development are all used to improve teachers' pedagogical skills (Rahman, Tambi, & Anny, 2020). Pedagogy, the philosophy of education, is the

most important factor affecting the consistency of teaching and learning (Murphy, 2008). With the widespread use of informational innovations in teaching and learning, it has become clear that one of the most significant problems in online education is the lack of a sound pedagogy for online learning. According to Serdyukov (2015), there is currently no effective practice or theory of pedagogy for an online classroom setting. Pedagogy refers to any approach that improves the learning experience, such as teachers' online teaching strategies, means of content delivery, interaction with technology, and others; it stresses the interactions and context of learning and teaching dynamics (Murphy, 2008).

- *The Technological Pedagogical Content Knowledge (TPACK): Online Teaching and Learning*

The TPACK framework is relevant in the online learning environment because it emphasizes the complex nature of teaching effectively with appropriate technologies (Koehler & Mishra, 2005). It focuses on recognizing the complex relationships among students, teachers, content, technologies, and practices. The TPACK framework considers different types of knowledge that teachers require for an effective technology integration in the process of teaching. It suggests that teachers should be aware of the importance of integrating technology, pedagogy, and content in their teaching method and they should know how these areas of knowledge interact and influence each another in a particular context as this could impact not only what we teach but how we teach (Koehler & Mishra, 2005).

TPACK is also defined as the connection and interaction between three types of knowledge. TPACK is thus a concept formed by combining Shulman's (1986) pedagogical content knowledge (PCK) framework with the subject matter to be taught (content knowledge), technological knowledge, and pedagogical knowledge (practices, processes, strategies, procedures, and methods of teaching and learning; Koehler and Mishra (2005). The implementation and creation of materials require an excellent understanding of the subject matter and how the interactions between the technology and the online environment can affect the content and pedagogy of the given subject matter. Mishra and Koehler (2006) assert, "For instance, consider faculty members developing online courses for the first time. The relative newness of the online technologies forces these faculty members to deal with all three factors, and the relationships between them, often leading them to ask questions of their pedagogy, something that they may not have done in a long time. (p. 1030)."

In TPACK framework, there are following seven components (Koehler & Mishra, 2009):

1. Content Knowledge (CK) – refers to the knowledge possessed by teachers on the subject matter to be taught. Content on the subject matter varies from field to field and between grades or levels. CK comprises knowledge of theories, concepts, ideas, organizational frameworks, evidence and proof, practices, and approaches needed to develop such knowledge (Koehler & Mishra, 2009).
2. Pedagogical Knowledge (PK) – refers to deep knowledge possessed by teachers about the different methods of teaching and learning. It includes educational purposes, aims, and values. It also encompasses classroom management skills, lesson planning, students' learning and students' assessments (Koehler & Mishra, 2005).
3. Technology Knowledge (TK) – is the knowledge concerned with different ways of applying technological tools. It involves having a sufficient understanding of information technology to use it in both productive and mundane tasks and recognizing when its application can bolster or impede the achievement of an objective. It also covers the ability to keep up with changes in information technology (Koehler & Mishra, 2005).
4. Pedagogical Content Knowledge (PCK) – is the notion of using various pedagogical choices to take the subject matter for teaching into something that learners can comprehend (Shulman, 1986). PCK covers teaching, learning, curriculum, assessment, and reporting (Koehler & Mishra, 2005).
5. Technological Content Knowledge (TCK) – refers to the comprehension of the influence and impediments that technology and content have on each other. Applying particular technologies can alter the subject matter; therefore, it follows that the teacher needs to possess a deeper understanding of the subject matter. The choice of technologies for representation should be dictated by the teachers' understanding of how well-suited those technologies are to the subject matter and how the technologies and the subject matter change or dictate each other (Koehler & Mishra, 2009).
6. Technological Pedagogical Knowledge (TPK) – refers to an understanding of how the application of specific technologies causes variation in teaching and learning. It includes being aware of the pedagogical merits and limitations of different technological tools with respect to the field of subject matter and pedagogical designs and strategies that are developmentally appropriate (Koehler & Mishra, 2009).
7. Technological Pedagogical Content Knowledge (TPACK) – is theory of education and the foundation for teaching effectively using technology. It involves pedagogical practices that incorporate technologies in constructive ways for content instruction; awareness of the inherent complexities of certain concepts that make them difficult to learn, and developing ways in which technology can be used to mitigate the problems that students face. TPACK is the perfect model that every teacher must adopts in the era of education (Koehler & Mishra, 2005).

TPACK addresses three core components required for high-quality instruction by examining teachers' preparation for teaching in online environments (Niess, 2005). Through it, teachers can understand how the

components are currently addressed and devise ways to customize them to meet their needs in online classrooms. This would encourage teachers to equip themselves with the necessary knowledge to cover these elements or to alter their previous knowledge to meet the emerging needs of teachers entering virtual classrooms. In this regard, Niess (2005) wrote, “TPCK, however, is the integration of the development of knowledge of subject matter with the development of technology and of knowledge of teaching and learning. And it is this integration of the different domains that supports teachers in teaching their subject matter with technology (p. 510).

- *Previous studies*

Although many studies (e.g., Fuad, Ariyani, Suyanto, and Shidiq (2020); Li and Lalani (2021); Scherer et al. (2021)) have adopted the TPACK framework since the COVID-19 pandemic to explore teachers’ preparedness to integrate technology in teaching, few studies have explored the TPACK model in higher education (Fabian et al., 2019). For example, Akram, Yingxiu, Al-Adwan, and Alkhalifah (2021) examined the importance of technology integration in education in the time of COVID-19. Using surveys, they assessed online teaching competencies of 256 faculty members from public universities in Pakistan adopting TPACK model. The study concluded that teachers have sufficient knowledge of the aspects of TPACK model especially the CK. On the contrary, teachers showed weak knowledge in TK. In the same vein, Soomro et al. (2018) conducted a study on faculty members of IT and Education departments at one of the universities in Pakistan. They examined TPACK awareness and adaptation among faculty members using a survey and interviews. They found that faculty members adapted TPACK and applied ICT (Information and Communication Technologies) into their teaching by means of personal efforts and collaboration with their colleagues. Similarly, Sumba Nacipucha, Cueva Estrada, Conde Lorenzo, and Mármol Castillo (2020) examined teachers’ perceptions in Ecuador using TPACK model during COVID-19. They conducted a survey to reveal teachers’ knowledge of TPACK. They found that teachers have TK to develop their work but not TPK.

In relation to translation, Du (2022) examined interactive teaching modes and developed a translation teaching model based on TPACK in technical English translation. Du (2022) aimed to improve students’ translation skills and develop translation teaching approaches. For this purpose, a questionnaire was distributed to 35 teachers of translation to examine their students’ translation capacities after teachers applied the TPACK model in translation courses. It was found that students’ translation skills were significantly improved and their translation abilities were increased. By the same token, Peng (2019) investigated teachers’ technological, pedagogical, and content knowledge in their translation courses. A questionnaire was distributed to 98 Chinese teachers to assess their knowledge of the seven components of TPACK. Peng (2019) found that teachers’ technological knowledge was the highest knowledge in the TPACK model. Thus, it was suggested to use effective teaching strategies using technology- IT devices and platforms to enhance instructional strategies in translation courses. Shu and Radio (2016) as well adopted TPACK theory to examine the effect of technology on teachers of translation and concluded that teachers’ knowledge, teachers’ teaching ability and development in teaching the practice of translation were very much affected by acquiring the TPACK knowledge and that TPACK should be integrated in translation teachers’ methods.

It is important for teachers, who seek to adopt emerging learning environments, to familiarize themselves with theories for guidance (Goldie, 2016). Goldie asserts that if the existing theories no longer fully or partially explicate learning within this context, other new theories need to be established. In this regard, Liu (2015) states that it is important for a translator to use modern information and communication technologies (ICT). This demands that teachers’ teaching philosophy should be congruent with the changing nature of online learning and the diversity of students.

On that basis, the current study aimed to examine teachers’ perceptions and experiences using TPACK as a valid model to reveal information about the pedagogical paradigm for teaching online the practice of translation. As little existing research has been conducted in the context of teaching the practice of translation during COVID-19, this research thus fills a gap in the literature. This research not only highlighted the importance of TPACK model, but also suggested ways to improve the process of teaching the practice of translation based on participants’ feedback and experiences. Therefore, this research aimed to answer following research questions: How did lecturers in translation courses introduce new skills and teaching methods necessary for learning to take place under COVID-19 conditions? How can the TPACK model depict and analyze teachers’ knowledge? By answering the above research questions, it was expected to enhance our knowledge and enrich our experience in teaching the practice of translation after COVID-19 and in a well-planned learning environment.

## Methodology

- *Research design*

This study adopted a qualitative method using in-depth interviews with university lecturers who taught undergraduates the BA Program in Translation from/into Arabic-English, online courses for the practice of translation. The study aimed to examine the views and opinions of online translation lecturers based on their



teaching experiences. The application of TPACK reveals the most relevant and useful skills and knowledge that lecturers of the practice of translation have acquired from their colleagues' experience of teaching this subject online and the approaches they found to be the best to apply in the online teaching mode.

- *Sampling and research procedure*

A purposive sampling technique was applied to select the participating lecturers for this study. It enabled researchers to select participants based on their knowledge and experience that are required to provide relevant information to the research questions (Patton, 2002). In other words, this type of sampling is optimal for a qualitative study in which a relatively small and purposively selected sample may be employed (Miles & Huberman, 1994), with the aim of increasing the depth of understanding (Palinkas et al., 2015). Purposeful sampling aims to collect rich information from limited resources through communication of experiences and opinions in an articulate, expressive, and reflective manner, and it considers the importance of availability and willingness to participate (Bernard, 2002).

The participants of this study were taken from different universities in Jordan who had at least 10 years of experience teaching online and face to face courses the translation practice from/ into Arabic-English languages. They have a wide range of experiences in higher education as a lecturer/associate professor/professor. The selected participants were well known to the researchers as individuals who are experienced in the field of translation studies and have taught several online and face to face courses in the practice of translation. That is mainly because, according to Scherer et al. (2021), "teachers with little experience reported high levels of struggle related to communication and interaction, and unfamiliarity with effective online pedagogy and technology". To protect the anonymity of the participants and their institutions, the names of all participants were replaced with the letters of the alphabet as follows: A, B, C, D, E, F, G.

*Data collection procedure*

Data were gathered using semi-structured interviews in which seven lecturers were interviewed online. The interviewees were contacted first by phone and asked about their teaching experience in translation practice courses in general and teaching online translation courses in particular. They were then asked about their willingness to participate in this research after they were explained the aim and purpose of this research. Email interviews were sent to the participants, including an introduction to the study, the interview questions, and consent forms. Follow-up emails were sent, and calls were made after receiving the participants' responses.

Based on previous literature on TPACK and pedagogy, teaching and learning the practice of translation, and online learning, eight open-ended questions were formulated. These questions explored the participants' PK, TK, PCK, TCK and TPK. The questions revealed information about the design of the participants' online courses and whether they employed specific strategies or teaching practices for efficient learning outcomes. The participants were asked about the limitations and strengths of online teaching related to the translation practice. They were also asked about their students' preferences, needs, and concerns in online learning, their students' online learning experiences, and whether there were limitations to their use of technology. The participants were requested to express their experiences and opinions concerning online teachers' and learners' roles and responsibilities. They were also asked to pinpoint the changes brought about by online education to translation learning and instruction, and online teachers' preferred methods and activities (e.g., interactive lectures, question-answer format using personal response systems, and discussions by groups of student), their students' evaluation assessment types, areas of student support, and the effect of the online learning environment on student learning.

- *Data analysis techniques*

This study adopted qualitative content analysis of the data obtained from interviews. It was deemed suitable for this study because the research sought to examine lecturers' opinions, views, perceptions, practices, beliefs, and interactions in different settings where the method is interpretative and the data were presented subjectively (Creswell, 2013; Yin, 2003). Additionally, this analysis method allowed investigators to understand an inclusive comprehension of a particular individual, entity, or event at a particular time while focusing on a specific analysis unit (Creswell, 2013).

## Findings

This qualitative study examined how translation teachers conducted and reflected on online learning and teaching of the practice of translation during the COVID-19 pandemic, to construct meaning from their feelings, experiences, and thoughts during this period. Also, this would help translation teachers in the future to develop their PK, reflect on their PCK in teaching the practice of translation and guide them how to integrate technology in teaching translation and thus develop their TK and TPK. Sharing the interviewees' experiences regarding teaching the translation practice online could help teachers in the future to develop their TPACK further.

- *Reflecting on teachers' online course design and development*

In relation to PK and PCK, lecturers said, when asked to reveal information about their online course design, teaching practices, and classroom activities, that they design their online courses using engaging practices, because in-class activities are crucial teaching tools. Integrating them into the online learning environment necessitates certain ingenuity and knowledge of the technology involved. They also said that there were a significant number of virtual tools that have features such as a shared whiteboard and the ability to create groups. For example, lecturer A (LA) mentioned that she established a visual–auditory classroom using a whiteboard to explain concepts for translation. She added, 'I practiced live training, where students were shown a picture of an incident and were requested to compose their own story using the journalistic writing style.' Lecturer B (LB) also explained that in her design and teaching practices, she took into consideration 'participation and live feedback. Students were usually given some time to translate whether in class or as homework; then, some of them would start reading their target text and others, while the teacher gave them feedback and comments.'

In this regard, Lecturer C (LC) explained that in online learning he presented 'materials in power-point slide format, sharing screen with students, chatting, messaging, and responding to students' online queries and remarks ... providing a full-fledged online teaching–learning environment.' Regarding students' and teachers' new roles and responsibilities in online learning, the interviewed lecturers asserted that as the translation realm in recent years has been digitalized, many significant sources of data and knowledge can be used and retrieved from online dictionaries, students' roles have changed, as the ability to learn the translation practice online has become valuable to them. According to LA, 'Students became aware that learning is a shared responsibility and that they have to enhance their self-learning capabilities. They learned how to look for information and study it on their own. Teachers became ready to limit their role in class and to engage students increasingly in the learning process.'

When lecturers were asked about the new methods that they incorporated in their course structure for efficient online learning, they shared that they had to adopt new methods to engage students and ensure their presence and participation. For instance, lecturer G (LG) emphasized the importance of effectively applying the Socratic approach, which is to use engaging questions to improve learning practices and generate a feeling of authentic care. She said, 'I ask questions to engage students; open-ended questions related to students' desires and priorities are the most effective.' She added that this can be achieved in an online setting by using discussion boards in which each student can participate actively. Similarly, LD asserted the importance of 'expanding communication channels to compensate for what is missed in face-to-face learning.' LC added, 'forming online discussion groups, preparing power-point presentations, sending and receiving assignments, involving themselves in subtitling and dubbing practices helped them become better users of digital technology.' Finally, LB highlighted the importance of 'checking attendance at the beginning of every lecture, encouraging all students to participate by sharing their target text and being strict with the deadline, which are really empowering.'

- *Reflecting on teachers' assessment*

Regarding lecturers' practices in assessing their learners, lecturers affirmed that the most significant activity in assessing learners' comprehension of the learning content is to have them apply critically what they learned to a meaningful real-life situation in front of the class. For instance, lecturer D (LD) stated, 'group project management [is] to be handled and discussed when submitted; students can be asked to work with actual customers who can be part of the assessment.' Similarly, LA said, 'I think that students should not be evaluated based on translating small texts. If online courses continue, students must be assigned to submit a translation project at the end of each course, and each student must be interviewed to debate his translation approaches.' In this regard, LC highlighted that inference- and problem-solving type questions that promote critical thinking are more appropriate than direct questions.

- *Reflecting on digital tools and resources used by teachers in online environment*

Lecturers asserted that the idea of using an online learning environment and online sources would help improve the procedure for instructing translation courses in multiple ways, given that the translation industry is becoming digitalized. For example, LA said that students were introduced to many websites that can help them translate technical terms. Similarly, students were familiarized with appropriate and relevant databases to help them in their translations. Students were also asked to share with their classmates their experiences with these websites and databases.

In the same vein, LC stated, 'As a fast developing discipline, translation studies have been directly affected by shifting to the online learning model ... In today's online learning classroom, the use of slides and sharing the screen with students has become a common practice. Anything short of meeting these requirements will pose some limitations, which will hinder proper learning in translation courses.' LA added that in online learning, students can benefit from technology by attending the class whenever and wherever they like, as all lectures are recorded.

The interviewees affirmed that teachers' effectiveness is likely to improve as a result of technological advancements. The modern, internet-connected environment has expanded training and learning opportunities and has transformed the teacher into a facilitator. These views are supported by Pushpanathan (2012), who claimed that a teacher serves as a facilitator in an e-learning environment. The lecturers emphasized that in their online teaching method, they ensure that their students search for knowledge by themselves, and this grants them freedom to distinguish between invalid and valid sources of data, as well as freedom in searching for data. For example, LD emphasized the importance of developing students' research skills to help them build their own knowledge.

Moreover, lecturer F (LF) asserted that technology 'enables us to teach in novel ways, meeting both emerging and old needs. Access to interactive information, new assessment methods, mobile distribution, and collaboration and engagement with peer's present learners diverse learning methods.' As such, learners can actively participate in shaping their learning and knowledge sharing activities. Similarly, LC contended that students in online learning become 'more creative and innovative because they are more directly involved in the teaching-learning process.' He added that using technology improves learners' language skills and enables them to become more confident.

- *Reflecting on the limitations of online environment*

The majority of lecturers admitted that the lack of physical presence of learners in online translation courses has negatively influenced the mental and physical interactions between students and teachers. For example, lecturer E (LE) said that students find that the lack of physical communication, face-to-face contact, and use of body language—which hinders psychological, linguistic, and social communication with their teachers—are all barriers that result in the loss of suggestive and vital messages, as well as eye contact, body language, and abstract messages.

In the same vein, as the number of students in online learning courses is greater than in traditional courses, lecturers find it difficult to follow up with each student and allow all students to share their work and track their progress. For example, LA stated that "because online learning allowed a rise in the number of students, it was extremely difficult for me to follow up with assignments and observe the progress of each individual student." She added, "the participation issue was a disappointment for many students because they were not given enough room to share their work." Along the same line, LD opined that in online learning, uncontrolled attendance "results in poor participation and thus less beneficial classes."

Lecturers also expressed their experiences in relation to students' concerns and preferences regarding online learning explaining their TCK and TPK. From the interviews, we gathered that lecturers of online translation courses stress the importance of making their students choose their translation materials freely and shape their knowledge under their supervision. For example, LB contended that she tried to give students texts of various genres for translation throughout the course, as "students normally like to translate different kinds of texts of different genres in order not to feel bored."

LD said that time management is a concern for online learners. That is, online learning entails a specific place at a specific time, and this requires discipline and a real understanding of how to manage one's time wisely. In this regard, LA affirmed that "most students said that learning from home was very annoying because it was not possible for them to separate themselves from their families in order to focus or participate in classes."

In the interviews, the learners expressed their concerns regarding online learning. Specifically, they shared that they are struggling to adapt to emerging learning approaches, as they are used to the conventional didactic, lecture-based class settings. LC explained this issue as follows, 'Given that both students and lecturers have not been well-trained or prepared for the online learning model, they consequently have to adapt gradually to the new system.' He suggested that teachers should take certain aspects into consideration such as 'students' concerns about securing the technical support infrastructure of internet connections, laptops, iPads, and so on, to support online learning, changing their teaching-learning habits and transitioning from face-to-face to online learning ... educating themselves on how to use the new digital technology electronic devices for learning.'

Moreover, some of the lecturers revealed that many students expressed frustration over poor internet connectivity, slow internet connections, or limited access from homes in some areas. This can lead to students falling behind academically. In this regard, LC affirmed that 'Perhaps the biggest challenge [that] students face is acquiring the technical infrastructure for a successful online learning operation. This includes efficient internet bandwidth and connections, securing electronic devices and gadgets, such as laptops or iPads, needed for effective e-learning.'

In addition, students lack the necessary knowledge and skills to deal with technical issues during their online learning, making them lackadaisical. Thus, proper training in using technology and education-related applications to support online learning is essential. LA, for example, said that 'many students are not actually technology-savvy. If anything goes wrong during the class or exam, they usually could not fix it, and this irritates them.'

Table 1 & 2 below summarize the findings of this study in relation to the research questions. First, based on the interviews, Table 1 presents recommendations that we deduced from teachers' innovative practices in online teaching. These practices are based on their reflections and experiences in online teaching and considered in relation to four aspects; online course design, teachers' assessment, teachers' use of digital tools and potential solutions to address the limitations of teaching online courses.

**Table 1: Recommendations for best practices in online teaching**

Online Course design and development	Teachers' assessment	Teachers' use of digital tools and resources	Solutions to address the limitations of online learning
Teachers should develop their courses using engaging practices and class room activities.	It is important to assess students of translation in real-life situations.	Teachers are required to develop students' knowledge on relevant databases and websites.	Teachers should consider adopting the constructivist learning theories to solve the challenges of a lack of educational socialization in online courses. This entails integrating teaching strategies that require students to communicate, reflect and collaborate.
It is recommended to use virtual tools to develop students' self-learning skills.	Teachers' assessments should be designed to develop students' skills in problem solving and critical thinking.	Teachers are required to develop their technological skills and to try to advance their students' technological knowledge and skills.	Teachers should introduce technology-based learning and teaching tools to track students' progress.
It is recommended to adopt the Socratic approach.	It is recommended to adopt the democratic aspect of progressive philosophy of teaching, which grants students the right to choose their learning materials independently and shape their knowledge under the supervision of their teacher.		Teachers should help students to learn how to use technology effectively through professional development resources and workshops. It is recommended to educate students on how to manage time wisely.

Second, based on teachers' views and practices, Table 2 presents information about teachers' TPACK knowledge.

**Table 2: The components of TPACK model in the teaching process**

• CK	Teachers are well-informed in the field of translation.
• PK	They have deep knowledge of teaching and learning methods and practices.
• TK	They know how to use technology.
• PCK	They have deep knowledge of teaching the practice of translation.
• TCK	They value the importance of integrating technology in teaching the practice of translation.
• TPK	They value the importance of integrating technology in the teaching process.

## Discussion

It is evident that teachers of online translation courses bear a vital responsibility in the online teaching process, which includes delivering knowledge to learners and training them on how to make the most use of online resources. For instance, an online teacher may assist students in selecting the most appropriate materials for studying translation courses. Teacher's role is no longer limited to conventional teaching styles and methods that concentrate on the use of a textbook. Thus, instructional philosophy is employed to train students to become independent and self-directed learners who seek knowledge instead of simply being knowledge receivers.

The central pedagogical idea of online teaching translation classes is to train students to be translators while working in real-life environments as they can apply their theoretical knowledge in their professional careers; this is recognized by a progressivism teaching philosophy (Hayes, 2006). A progressivism teaching philosophy is a student-centered philosophy in education that is based on the belief that real-life experiences are the most effective way for humans to learn (Winick, 1978). Additionally, online learning classes may moderate teachers' authority imposed directly upon learners in their class settings, as the learners may have



relatively high freedom when choosing their sources of learning and are likely to be more self-directed, not dependent (Hayes, 2006). As such, progressivism may be partially convenient for accommodating the requirements of an online learning environment, where learners are independent (Hayes, 2006).

We can infer from the practices of lecturers that it is important to consider the TPACK model in their teaching process as they understand the relationship between content and technology and how they interchangeably modify or dictate each other. This guides lecturers in their choice of efficient or the best-suited technologies for delivering course material in their domains (Koehler & Mishra, 2009). The lecturers cited examples of using technology in their teaching methods and suggested online materials to be consulted by students to enhance peer-assisted learning.

Based on the lecturers' answers to the interview questions, we can argue that they possess some degree of pedagogical knowledge as they have deep knowledge of the teaching and learning processes, methods, and practices. This is evident in their knowledge of the need to plan and develop ideal supporting materials for learning activities to attain specific learning goals, in line with pedagogical principles. Their reflections further display their pedagogical knowledge by acknowledging various recognized structures supported by Koehler and Mishra (2009) as methods of teaching and learning. The TPACK definition of pedagogical knowledge sufficiently covers the varied responses given by lecturers based on their perceptions of their approach to teaching online and to teaching in general.

The lecturers asserted that online learning context has become pedagogically important for teaching translation classes. These observations mean that lecturers should develop their TCK using professional development resources and workshops, to learn how to use technology effectively. A significant number of the lecturers who took part in the interview claimed that integrating the various sources of technology into teaching translation classes has become a cognitive and intellectual requirement for learners and teachers. That is because sources allow students' access to specialized online sites and professional groups found in online databases, translation resources and dictionaries.

Moreover, based on the lecturers' experiences, it is obvious that the lecturers engaged their students with online activities such as looking up online dictionaries, reading material, and conducting online surveys. Moreover, as internet connection has become more readily available in households, integrating technology in the learning process can be considered effective. Through the Internet, students are presented with recent information that is highly beneficial to their learning (Johnson, Jacovina, Russell, & Soto, 2016). Moreover, the interviews reveal that lecturers and students do not use only textbooks, and students are now being taught how to use the web efficiently, as they increasingly use computers in their learning process.

Similarly, lecturers demonstrated their TPK as they tried to improve students' critical thinking skills, which is at the heart of the philosophy of teaching, with students being taught to be selective and critical when looking for information on the Internet and when distinguishing valuable and significant information from irrelevant information that has no bearing on their studies. In short, we can say that critical thinking skills should form a large part of the modified educational philosophy adopted for online teaching. This aligns with the democracy aspect of the progressivism philosophy of teaching, which grants students the right to choose their learning materials independently and shape their knowledge under the supervision of their teacher, not through their teacher's authorial position.

In addition, applying new teaching methods and technologies can address challenges regarding students' nonphysical presence, lack of motivation, and psychological distress. Lecturers should adopt an instructional philosophy that aligns with the requisites of the online learning environment. Moreover, social constructivist learning theories can solve the challenges of a lack of educational socialization in online courses by integrating teaching strategies that require students to communicate, reflect, collaborate, and explore (Uskov et al., 2018). Teachers must integrate constructivist learning concepts into their instructional philosophy to solve the issues that arise due to the absence of learners in online translation classes. According to Rane and Sasikumar (2007), constructivist learning methods are currently being extensively utilized in virtual learning communities and emerging online systems known as intelligent online systems, in contrast to conventional e-learning systems. This means that lecturers have to revise and develop their online teaching skills and course design by introducing technology-based learning and teaching tools and environments.

Lecturers' comprehension of the importance of TPACK helps them understand how technology enriches their teaching experiences and introduces different ways in which technology can be leveraged with respect to changes in context and purpose (Koehler & Mishra, 2009). However, based on the lecturers' responses, one can argue that they do not follow a unified or definite instructional strategy while teaching online translation classes.

Moreover, the lecturers' reflections in the interviews focused mainly on pedagogical and technological knowledge instead of content-related lecturer knowledge. Prior to the lecturers' interviews, we expected to find content-related knowledge, as the interviewees have the necessary CK, which includes the theories, principles, and concepts of the translation practice that are gained and developed through their experiences over the years.

Teacher's application of content knowledge can be viewed as either unique or universal in their disciplinary context. The approaches the interviewees take for online teaching are influenced by the combined knowledge of their teaching methods and how best they understand the learning process of students. The choice of technology used to assist in delivering course material depends on the lecturer's knowledge about it, which further affects learners' online learning experience.

## Conclusion

This study concludes that TPACK can be applied in online classroom and that lecturers are familiar with almost all areas of the TPACK model. That is, they demonstrated their knowledge in applying the TPACK model in their online teaching. Specifically, they knew how to utilize technology in their classrooms. This allows teachers and researchers to integrate technology with a clearer understanding of its importance and to focus on the overlaps between technology, content, and pedagogy as they occur in classroom contexts (Koehler & Mishra, 2009).

This study contributes to the understanding of how translation lecturers can enhance their teaching practices and performance by choosing a dependable teaching philosophy using technology that allows them to better comprehend online learning conceptual matters and the fluctuating demands of the translation learner, translation industry, and labor market. Online teachers can use this understanding and learn from previous experiences to improve their teaching philosophy and practices and better address online learning problems and challenges. Therefore, these findings are crucial for recommending practical ways to enhance the performance of translation teachers and the effectiveness and quality of online translation learning.

The findings have implications for teachers and academic staff in institutions of higher education. The teachers' views and practices uncovered in this study demonstrate that teachers' knowledge in pedagogy, technology, and content, as relayed in the TPACK framework, has impacted online teaching practices and course design structures significantly. The combination of the three forms of pedagogy, technology, and content in online learning environments forms a system through which a teacher or course designer can introspectively evaluate their teaching practices. Consequently, future research could investigate students' perceptions of the use of the TPACK framework, wherein students and teachers share their commentary on the potential effect of teachers' knowledge on students' learning achievement.

Theoretically, this study has added to the literature by exploring the technological pedagogical competencies of teachers during the COVID-19 pandemic and validated the use of the TPACK model in the context of translation. For academics, this study reveals information based on teachers' feedback to improve online education for the practice of translation. This information can be taken into consideration in the future planning of training programs for online translation teachers in the post COVID-19 era.

The authors of this study are aware of the study major limitation which is teachers' self-assessment of competencies as it can be biased and thus may have affected the results. In order to avoid responses' bias, future studies may adopt different approaches to understand and examine the TPACK of teachers.

**Competing Interests and Funding:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

**Conflicts of Interest:** The Authors declare that there is no conflict of interest.

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