

Hongyan Liu and Zhenhui Lei*

Ethical issues in online interpreting training

<https://doi.org/10.1515/jccall-2022-0011>

Received March 23, 2022; accepted December 29, 2022; published online March 3, 2023

Abstract: Although online education dissolves boundaries by providing “anywhere and anytime” teaching and learning opportunities, ethical concerns and challenges still exist. Interpreting training is preferably achieved in a face-to-face setting, as it concentrates on individual practice within an authentic interpreting environment for skill development rather than mere knowledge acquisition. This study examines ethical challenges and concerns in online interpreting training, including equality of learning outcomes, emotional support, privacy and audio/video data protection, and misconduct behaviours. Based on the observation of such ethical concerns, possible solutions for addressing such issues in the context of online interpreting training are explored. We suggest developing professional interpreting learning platforms and software, adopting virtual reality technology, compiling a multimodal corpus, and establishing a virtual community to achieve better learning outcomes.

Keywords: emotional support; ethics; online interpreting training; technology support

1 Introduction

Over the past two decades, adaptation and changes in technology have provided sufficient course delivery options for university education. Instructors and students take advantage of web-based resources, learning management systems (LMSs), and live-streaming and video-conferencing platforms to facilitate synchronous, asynchronous, or blended teaching and learning activities. However, interpreting training as a practice-based learning activity is seldom conducted through the internet. Interpreting learners need to develop their interpreting competence in an authentic environment rather than merely acquiring declarative knowledge (Lu, 2016; Xu et al., 2021), which means that an online environment would not be able to adequately fulfil their needs and expectations. Therefore, universities rarely use online courses in their training programmes (Lu, 2020), although there are a few online or blended courses in community interpreting training programmes and

***Corresponding author: Zhenhui Lei**, Queen’s University Belfast, Belfast, UK, E-mail: zlei02@qub.ac.uk
Hongyan Liu, Beijing Foreign Studies University, Beijing, China, E-mail: hongyanliu@bfsu.edu.cn

interpreting certificate programmes (Carr & Steyn, 2000; Ko, 2006; Lee & Huh, 2018; Moeketsi & Wallmach, 2005; Moser-Mercer et al., 2005; Niska, 2007).

To maintain interpreter education during the COVID-19 pandemic, most university teaching and learning activities were moved from offline to online with the help of technology. Instructors and students used social media platforms containing a live-streaming or video-conferencing function to deliver and attend their courses synchronously and used LMSs to manage their courses (Bahri, 2022; Liu, 2020; Lu, 2020; Qin & Xiang, 2020; Ren, 2020; Šveda, 2021; Wang, 2020; Xu et al., 2021; Zhang & Ding, 2021). As such, a synchronous mode is used on an unprecedented scale in university interpreter education, and some ethical dilemmas arise, which are brand new challenges for both instructors and students, as both parties have little experience in online interpreting training. Ethical challenges are largely related to what instructors and students feel when involved in online interpreting training activities.

To elaborate on ethical concerns that need to be addressed in online interpreting training, a closer look at ethics can help us build up a better understanding of what criteria can be followed to judge whether individual interests and rights are facing ethical challenges. In general terms, ethics is about what is good or right for people to do, as Singer (2011); Peterson (2009); Sidgwick (2019), and Moore and Baldwin (1903) explained. When individual interests conflict, ethical principles serve as cooperative and rational norms to guide people's behaviours (Schultz, 2005). When applied to institutions, it allows groups to determine fair and appropriate procedures (Ferrell et al., 2011). Many scholars (Anderson & Simpson, 2007; Bates, 2001; Brey, 2006; Clark, 1983; Colwell & Jenks, 2005; Farahani, 2012; Garza Mitchell, 2009; Nagi & John, 2020; Rabin, 2021; Toprak et al., 2010) have discussed the ethical issues in online teaching and learning environments in terms of the transmission of social, cultural, and academic values, surveillance and consent, equality and diversity, identity and confidentiality, university policies, ethics of practice, and course design. When new technology is introduced, ethical concerns about its possible consequences are considered.

As online interpreting training was treated more as a temporary expedient trial in university education when the pandemic spread unexpectedly, research on ethical issues concerning interpreting online training has been scant. Literature reviews on ethical issues related to interpreting have mainly focused on interpreters' ethical conduct. Instructors place more emphasis on instructing interpreting learners to follow professional codes of ethics. Professional interpreters are gradually showing interest in a "profound understanding of professional ethics" (Bromberg & Jesionowski, 2010). Increased attention has been paid to ethics in the context of pedagogy (Arrojo, 2005; Corsellis, 2005; Washbourne, 2009), but sustained discussions have yet to be found. In response to ethical challenges existing in online interpreting training, difficulties and ethical concerns, as well as possible solutions to these issues, need to be explored.

Following Maček and Zorko's (2021) assertion that it is unethical to simply deliver established courses while omitting the needs of the interpreting market, we hereby argue for the need to rigorously amend interpreting training designs due to the abrupt shift in course delivery from offline classroom-based to pure online instruction. Instructors and students are required to improve their ethical awareness in terms of equality of learning outcomes, emotional support, privacy and audio/video data protection, and misconduct behaviours. Taking the above-mentioned considerations as a starting point, this study aims to reflect on the above-mentioned challenges and concerns regarding ethical issues in online interpreting training and to provide suggestions to address these issues. This effort might provide insight into cultivating awareness of ethical issues in online interpreting training, understanding human–technology relations, and improving and innovating interpreting training activities.

2 Ethical considerations in online interpreting training

Online interpreting training as one of the considerable online trainings faces all the ethical concerns and challenges encountered by general online training. Socioeconomic backgrounds (European Commission, 2020; UNESCO, 2020), specific subject requirements (Al-Balas et al., 2020; Bączek et al., 2021; Hattar et al., 2021; Wang et al., 2021; Zhu & Wang, 2020), and individual and family limitations (Björklund & Salvanes, 2011; Churiyah et al., 2020; Research Group of National Institute of Education Sciences et al., 2020; Walters, 2020) can all lead to inequality in online training, including unequal access and learning outcomes from online courses. Further, instructors' and students' academic misconduct, such as plagiarizing, impersonation, forbidden aids, or outside assistance, and their privacy have been highlighted and discussed repeatedly (Chirumamilla et al., 2020; Mukhtar et al., 2020; Tuah & Naing, 2021).

In this section, we discuss the exclusive ethical concerns and challenges for online interpreting training. We start by introducing the practice of online interpreting training in some universities (Bahri, 2022; Liu, 2020; Lu, 2020; Qin & Xiang, 2020; Ren, 2020; Šveda, 2021; Wang, 2020; Xu et al., 2021; Zhang & Ding, 2021) to provide an overview of how traditional offline interpreting courses are transformed into an online basis. The section ends with a discussion of ethical issues in terms of protection, equality of privacy, learning outcomes, emotional support, privacy and data protection, and misconduct behaviours.

2.1 Online interpreting training

Since interpreting competence is largely developed on the basis of training, a learning-centered approach is gaining wider recognition in the practice of interpreting teaching. Based on the description of the syllabus for university-level interpreting training designed by the China National Committee for Translation and Interpreting Education, course modules for interpreting training in most universities in China are shared by a wide range of courses, such as *Chinese-English/English-Chinese Simultaneous* and *Consecutive Interpreting*, *Interpreting Theory and Practice*, *Interpreting Fundamentals*, *Business Interpreting*, *Conference Interpreting*, *Mock Conference Interpreting*, *Public Service Interpreting*, and *Professional Talks*. Taking *Business Interpreting* as an example, the learning-centered approach well suits the needs of learners of English for Specific Purposes, since such an approach aims to meet the needs of particular learners and involves both what competence enables learners to perform and how that competence is acquired (Hutchinson & Waters, 1987). Based on observations of the actual practice of business interpreting training in many universities, in accordance with the general objectives for cultivating professional interpreters designed by the China National Committee for Translation and Interpreting Education, Figure 1 shows the essential parts involved in the *Business Interpreting* course. With the objective of equipping learners with basic interpreting theoretical knowledge, listening and public-speaking skills, other interpreting skills, and learning strategies, as well as the cultivation of professionalism, the implementation of the course generally involves lecturing, retelling practice, impromptu interpreting practice, listening and memorizing, note-taking, mock conference, and a real-life interpreting practicum. Although not exhaustive, these capture objectives that can actually be attained to a significant degree in the allotted time (Tyler, 1949) and within the offering of online teaching and learning. Further, various forms of

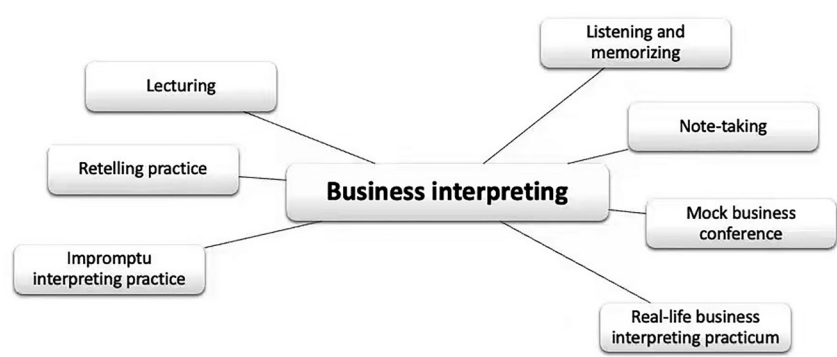


Figure 1: Essential parts involved in the *Business Interpreting* course.

interpreting training are designed in the course, including sight interpreting, consecutive interpreting, and simultaneous interpreting, to incrementally develop learners' interpreting skills.

As educational activities are shifted towards online didactics, adaptations and changes have to be made to suit the needs of learners and guarantee the effect of interpreting training. Based on the practice of online synchronous interpreting courses during the pandemic, new challenges caused by adopting online teaching and training arose, and possible solutions for coping with problems need to be explored.

Delivery of online courses is based on a synchronous method by using video-conferencing platforms, such as Zoom, Zoom Pro, Microsoft Teams, or CCTalk, because these platforms have full functionalities for presenting, sharing, recording, communicating, and splitting, and most importantly the voice is clear. Besides these social platforms, some universities purchase the right to use professional interpreting platforms, such as Sanako, a remote simultaneous interpreting platform with dual-channel listening and recording functions, to enrich the student's learning experience when teaching consecutive and simultaneous interpreting. Instructors also use LMSs such as Blackboard or Canvas to effectively manage their course materials, recordings, assignments, and assessments, as well as other social media platforms such as QQ, WeChat, or email to facilitate the interaction between instructors and students.

In response to new challenges during the pandemic, many universities have adapted to meet the needs of teaching objectives. Course modules remain mostly the same as what is included in classroom teaching, although some highly interactive teaching content is removed, such as interactive interpreting practice (Lu, 2020). The session of mock conference interpreting is delivered differently, in that some universities remove it from their teaching plans, whereas others transform it into an online mock interpreting conference (Wang, 2020). Regarding the design of teaching content, courses are designed to start with discourse analysis, source text retelling, target text retelling, and consecutive interpreting, and end with simultaneous interpreting, which allows students to develop their interpreting skills in incremental steps (Zhang & Ding, 2021). Each lecture in the course usually contains five components: lecturing, practising, commenting, demonstrating, and discussing (Lu, 2020).

In *Business Interpreting* online training, the instructor usually starts by introducing relevant interpreting theoretical knowledge and demonstrating examples to show how theories are applied to guide the actual interpreting practice. Following that, interpreting-related practices of various types are carried out, including impromptu interpreting practice, retelling practice, listening, and memorizing practice, sight interpreting practice, consecutive interpreting practice, and simultaneous interpreting practice. Some learners are chosen to present their interpreting version to the rest of

the online class with instructors' valuable comments and demonstration following. In addition, discussion sessions offer a great opportunity for peer learners to exchange their perceptions of difficulties encountered in the interpreting process.

Based on previous research, the transition to interpreting training seems to be a great success. Instructors invest a great amount of energy in adjusting their teaching plans to the technology-mediated online environment. As a result, most educational activities are maintained, with only a few being modified, removed, or postponed. Most students are satisfied with the online training, and some even prefer having online courses, as there are fewer distractions when they practise in front of a screen than with peers surrounding them in the classroom (Bahri, 2022; Xu et al., 2021). However, compared with traditional classroom teaching, the disadvantages of online interpreting training are obvious, and students and instructors face more ethical concerns than usual.

2.2 Challenges and concerns for ethical issues

Interpreting training is carried out following a more practice-based curriculum featuring high cognitive demands in interpreting practice and individual differences. Thus, ethical issues of equality of learning outcomes, emotional support, privacy and audio/video data protection, and misconduct behaviours should be highlighted, as they garner the attention of both instructors and students.

2.2.1 Equality of learning outcomes

To begin with, the concern for inequality in learning outcomes becomes a major challenge for online interpreting training. Inaccessibility to electronic devices and unstable internet connections can result in low voice quality in synchronous courses and thus affect students' knowledge acquisition and skill learning (Bahri, 2022; Lu, 2020; Ren, 2020; Wang, 2020; Xu et al., 2021; Zhang & Ding, 2021). Scholars have also reported other factors that directly affect online interpreting training. For instance, the use of webcams can be a controversial issue concerning learning outcomes (Ren, 2020; Xu et al., 2021). In online interpreting training, students are encouraged to turn on cameras so that the instructor can assess their interpreting performance and give them more accurate and comprehensive feedback. In this way, the interaction between instructors and students could be maintained to some extent. However, turning on cameras may influence the stability of internet connections. Further, instructors need to demonstrate audio/video resources online for students to practise with the camera on, which requires a higher internet transmission speed. If the internet connection is unstable, the sound quality of

audio/video resources may be impaired, which will affect information reception and production in interpreting practice (Zhu & Wang, 2020).

The other reason for unequal learning outcomes is interpreting practice. Compared with traditional classroom settings, the effect of online interpreting practice is limited by its distance and less immediate and comprehensive feedback. In most cases, an online interpreting training class is realised through lectures and instruction, followed by individual interpreting practice. In traditional classroom teaching, instructors can easily monitor each interpreting learner's verbal and non-verbal behaviours and offer on-site comments and guidance. While practising online, it is hard for the instructor to observe individual interpreting learners' behaviours, and individual interpreting learners have to mute their microphones to avoid interfering with other learners, which makes personalized guidance hard to realise. Only general guidance for most interpreting learners could be given, thus affecting the effect of training for individual interpreters.

In addition, the lack of real on-site experience, which could be realised in interpreting lab training and internship, gives rise to the loss of some essential elements, such as interpreting booths, mock business interpreting and real-life business interpreting practicum in offline interpreting training, which makes it hard to achieve high-quality online interpreting training. To address the issue, instructors have to modify the design of the practice session. Some universities recruit teaching assistants whose duties are to assist the instructor in monitoring students' interpreting practices and giving immediate feedback to them, while others partially or even completely move the practice session to after-class practice (Lu, 2020; Šveda, 2021; Zhu & Wang, 2020). However, the result seems unsatisfactory, and it is difficult to ensure that the learning outcome reaches the level designed in the teaching syllabus. It is hard to guarantee that feedback from a teaching assistant is as professional and helpful as that from an experienced instructor. According to Lu (2020), it is also rather challenging for the instructor to match each student with their recordings in that he is responsible for five English-Chinese interpreting courses in one semester, including a total of 63 students. Thus, more personalized feedback to students is impossible.

In fact, online interpreting training also indicates a lack of hands-on demonstrations of the use of interpreting equipment. As a result, interpreting learners are dissatisfied with the reduced real-world interpreting training experience (Lu, 2020), as they cannot learn as much as they need.

2.2.2 Emotional support

In addition to ethical concerns about equality, the emotional and mental conditions of both instructors and students in online interpreting training should be addressed.

Some students complain that when practising interpreting and being commented on in front of a camera tracking their behaviours and facial expressions, they feel more stressed and uncomfortable (Xu et al., 2021). Some even report that they prefer having no face-to-face interaction when practising interpreting, so that they are freed from the embarrassment and pressure they used to experience in classroom training (Ren, 2020). To guarantee teaching quality and deliver a satisfactory course, instructors need to make more efforts to adjust the teaching design, preparation, teaching, and assessment of online courses to fit the online teaching environment (Lu, 2020; Xu et al., 2021). When teaching online, they need to slow down their voices, highlight key points involved in interpreting training, and even try to be photogenic to attract students' attention. When the internet connection is unstable, the online training class has to be delayed, lengthened, or suspended (Zhang & Ding, 2021). All these issues contribute to greater pressure on the online teaching instructor, including the increase in workload and less satisfactory learning outcomes.

Students can also be more frustrated with online learning than with offline learning. Interpreting practice itself is a high cognitive demand task, and students need emotional support from instructors and peers to complete the training. Such a goal can be achieved more easily in a classroom setting, as the instructor can better observe and detect students' reactions and be more sensitive to students' emotions when physically being with them, which seems to be more difficult in online courses. Problems can be solved in the interpreting lab, where students, with earphones on, can practise loudly without interfering with each other. With the help of professional interpreting equipment, instructors can monitor any student's interpreting practice while performing an interpreting task in a simultaneous interpreting lab. In online courses, instructors are unable to monitor each student's interpreting; instead, they can only monitor the student's practice through the camera by observing their facial expressions and other body language behaviours. Further, the number of students that can be monitored is limited to a certain number due to the display setting. As such, it is hard to identify whether students are suffering from great pressure or nervousness by judging only from their facial expressions and other non-verbal behaviours, which explains why students may feel isolated in online courses.

2.2.3 Privacy and audio/video data protection

Privacy is an individual right, and personal information should be under control and protected (e.g. Brey, 2006; Schoeman, 1984). In online interpreting training, as students and instructors heavily depend on audio/video recordings to complete the practice and feedback parts, both instructors and students show concerns about how their privacy can be protected and how these recordings are saved. Instructors worry about the lecture recordings being clipped, modified, and spread online without

consent, whereas students, who are required to turn on their web cameras for the purpose of interaction and surveillance, especially in interpreting practice, are more concerned about how their information is collected and used in the future (Bedenlier et al., 2021). Being recorded means that they will not know when, why, or how their information will be used.

2.2.4 Misconduct behaviours

Regarding course assessment, most components in the assessment remain the same as those included in a classroom assessment, such as students' classroom performance, assignments, and exams. Concerns for increased potential for cheating are drawing more attention when students are learning remotely, with internet searches for answers and collusion with others as main cheating concerns. In response, the implementation of final exams is different. Compared with offline interpreting exams, students have no access to professional equipment in the simultaneous interpreting lab when attending online interpreting exams. They are asked to record their interpreting tasks by using their mobiles and submit their audio recordings to the instructor within a limited period of time by WeChat application. If the submission exceeds the time limit, the grading result will be influenced, and complaints will arise if the late submission is caused by an unstable internet connection or technical problems.

Another common practice for online interpreting exams is the more rigorous procedures, and the whole process of exams is video recorded as well. Students are monitored by two live-streaming cameras—one placed in front of the student to capture images of their front face and upper body and record their voices, while the other is placed on the left/right side to film the surroundings, including the student's upper body, the screen of the computer, and the desk. Before the exam, they are asked to raise their camera to show around the surroundings of their room to ensure that they are taking the exam independently without any help. To ensure the smooth running of online exams, students need to be fully informed of the process and requirements of the exam, and they need to test their electronic devices and internet connections beforehand. If any technological problems occur during the exam process, students should report to the examiners immediately, and the exam can be suspended. In this case, online proctoring against misconduct and cheating behaviours of some students may also cause privacy concerns and complaints.

3 Suggestions for addressing ethical issues in online interpreting training

The use of technology accompanies the whole process of interpreting training, from traditional classroom-based training to simultaneous lab-based training to blended training. Although shifting all offline courses online is a temporary expedient, the use of technology has become a necessity, and technological issues have been reported as one of the most severe and challenging obstacles in online interpreting training. To address the above-mentioned ethical concerns and challenges in online interpreting training, technology-related solutions are explored in this section. We suggest that professional interpreting learning platforms and electronic devices be developed to address equality concerns, and academic professional software be used to facilitate online teaching and learning and avoid academic misconduct. Further, virtual reality technology can be adopted to develop simulated interpreting training scenarios to assist in achieving better learning outcomes. Another strategy is to compile a multimodal corpus to address equality and emotional concerns. A virtual community can also be established to provide emotional support.

3.1 Technology support: professional interpreting learning platforms and electronic devices

During the pandemic, with limited options for assisting in online interpreting training, instructors frequently used social media platforms. However, these platforms cannot fully protect their users' privacy. More frequent zoombombings have been reported (e.g. Ling et al., 2021; Secara, 2020), and some platform operators themselves can, although not intentionally, use their clients' personal data for marketing and promotion reasons (Zoom, 2021) because clients are not aware that they have given consents to the use of their data. Given that a platform is established by a certain university for serving the goal of its own online teaching and learning only, instructors' and students' privacy can be better protected.

In addition, the platforms should lay emphasis on user-friendly designs that cover all functions for online interpreting training. For example, students' voices can be exposed only to the instructor when they practice interpreting. In this case, the instructor is able to listen to each interpreting learner's interpreting by selectively turning on and off their mic so that the students will not interfere with each other. As such, instructors can give immediate in-time feedback to every single student without having to collect students' interpreting data, listen to all in-class interpreting

recordings after class, or offer delayed feedback, which, to some extent, affects the quality of students' learning outcomes. As some universities employ both asynchronous and synchronous teaching and learning methods in online interpreting training during the pandemic, it is also suggested that more platforms, such as the web-based collaborative cyber community (3C) learning platform (Chen et al., 2005), can be established and widely used to minimize inconvenience and improve the integrity of course delivery, learning, and management to increase instructors' and students' willingness to teach and learn online.

3.2 Technology support: professional software and relevant support

Interpreting, a highly complex task consisting of more than simply word-for-word translation, involves receiving information, decoding information, and encoding information combined with contextual, pragmatic, and real-world information, which proved very difficult to process. Professional software can be designed to address ethical issues concerning the interpreting process to reduce the unnecessary workload for both instructors and interpreting learners and improve efficiency, such as LMSs to effectively manage course materials, anti-plagiarism software to prevent academic dishonesty, and automatic speech analysis programmes to detect linguistic errors and fillers in students' renditions. With such helpful academic tools, instructors are, to some extent, relieved from the heavy workload and pressure of potential ethical issues, such as academic misconduct and limited and delayed feedback for interpreting assessments.

3.3 Technology support: virtual reality

Resources are still scarce in business interpreting training. Hansen and Shlesinger (2007) described an initiative to develop video-based interpreting training using video clips that provide bilingual role-play dialogues for self-study purposes. This initiative resulted in a great improvement in student motivation and performance. In response to the lack of a real-life business interpreting practicum in online interpreting training, the application of virtual reality technology should be advocated using an avatar-based 3D virtual reality environment. Course modules with such technology can allow instructors and learners to work together and participate in various virtual business scenarios with their avatars to explore and simulate professional interpreting practices in various business interpreting settings that embed various interpreting modes, such as consecutive, simultaneous, and liaison

interpreting modes. Such innovative trials have been conducted by some scholars (see Braun et al., 2013). Instructors and students can use such tools to increase their levels of trust and familiarity, and their friendship is promoted. Students will feel less uncomfortable and stressed when turning on their web cameras, and the implementation of group interpreting practices can be easier and more effective. The development of the types and languages of interpreting scenarios still remains quite limited, and relevant multimodal corpora based on various business settings of different cultural backgrounds need to be compiled to enrich the data for designing virtual-reality-based interpreting training scenarios.

3.4 Innovation in training approach: video recordings and multimodal interpreting corpus

Interpreting dies in the air. Therefore, it is hard to retrieve the information to the full for instructors to provide comprehensive feedback and monitor students' emotional status when only audio-recording data are collected. Mayer (2005) proved that dual or multimodal learning is preferred to monomodal learning. Humans interact multimodally and learn multimodally. Multimodality has been defined by Kress and van Leeuwen (2001, p. 20) as the “use of several semiotic modes in the design of a semiotic product or event, together with the particular way in which these modes are combined.” Hauck and Youngs (2008, p. 91) also indicated that new media offers the ability to draw on a number of different modes in the making of texts, and that much of communication is now mediated by the computer. Gu (2012, p. 6) pointed out that the internet and mobile technology have profoundly altered our way of interaction over space and time; thus, their impact on and potential for learning is massive but remains to be explored. He put forward a chess master model that involves the use of a 3-ML lab (multimodal, multimedia, and multi-environment learning research lab). The simulation of such 3-ML labs online is quite significant for interpreting training, since interpreting is multimodal in nature, involving linguistic, paralinguistic, kinesic, and extralinguistic information (Liu, 2018). Phonetic information, paralinguistic information, data on background noise, and visual information (e.g. facial expressions, gestures, spectator profiles, and the interpreting setting) all play an indispensable role in interpreting studies.

The data for interpreting learners should be collected and analysed using a multimodal annotation design to assist with online interpreting teaching and learning. Many scholars (Gu, 2013; Liu, 2012, 2018, 2020; Liu & Hu, 2015; Zhang, 2013) have attempted to collect these video data to establish their own multimodal interpreting corpus for research purposes. Such recordings contain not only the course

content and students' interpreting practice but also the behaviours of students and instructors, their interaction and reaction, and their teaching and learning environment. Therefore, ethical concerns, such as consent and privacy regarding lecture recordings, are worthy of more attention. Consent from both instructors and students should be obtained before recording lectures, as these recordings can be easily modified and spread on social media for non-academic reasons. On the one hand, consent forms can be a protection for instructors, as Deflem (2021) and Flaherty (2020) pointed out that recordings being intentionally modified without consent have caused serious outcomes for the instructor. On the other hand, students' privacy can also be well protected. Anderson and Simpson (2007) and Newlands et al. (2020) suggested that instructors should obtain informed consent from students when they intend to record a lecture. Further, informed consent should be clear about how their data can be protected, as video-conferencing platforms such as Zoom are easily hacked (Newlands et al., 2020; Rajab & Soheib, 2021). As long as recordings are generated, students' participation in the online course can be tracked, monitored, and analysed by the instructor (Webb et al., 2021). The use of such multimodal data should be limited to academic purposes and should not be used for commercial purposes. By means of the multimodal annotation software ELAN, instructors can appropriately make use of multimodal interpreting data by investigating the whole process of interpreting and demonstrating the relations between linguistic phenomena, behaviours, psychological status, and cognitive processes. The results of the research can, in turn, have a washback effect on interpreting teaching and learning and can guide interpreting pedagogy.

3.5 Innovation in training approach: establishment of a multimodal annotation framework

With the establishment of a multimodal annotation framework, interpreting learning can be more learner-centered as students are able to analyse their own performance comprehensively rather than fully rely on the instructor's delayed feedback. Thus, learning outcomes can be increased.

As mentioned in Section 2.2, some learners feel embarrassed to turn on the webcam in front of instructors and other learners. Therefore, they are asked to record their own interpreting practice video data after class, analyse their own data, and write a reflection journal. Based on observations of the interpreting learners' corpus, a multimodal annotation framework can be designed with reference to the information classification involved in interpreting corpora, as defined by Roach et al. (1998), Poyatos (2002), and Monti et al. (2005). Parameters involved in the multimodal annotation framework for interpreting learners are divided into four major

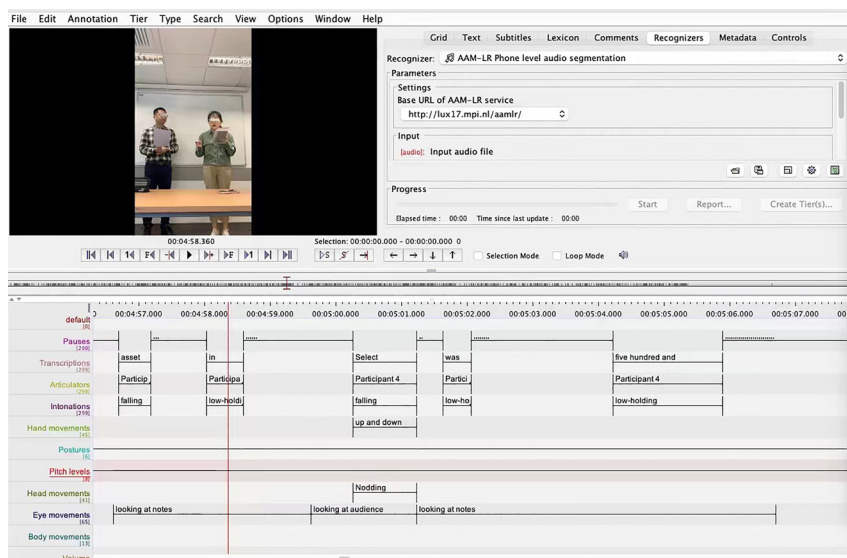


Figure 2: A multimodal annotation excerpt generated by ELAN.

types: linguistic information, paralinguistic information, kinesic information, and extra-linguistic information, which are designed to present a whole picture of the interpreting process. Figure 2 illustrates how multimodal information is annotated with ELAN software.

Instructors can be trained to use multimodal analysis software to annotate and analyse interpreting learners' multimodal data to retrieve information involved in the English learners' interpreting process, thus exploring relevant interpreting theories and strategies to promote the coordinated development of studies on interpreting teaching and training.

3.6 Emotional support: virtual community

In spite of the fact that asynchronous online interpreting training overcomes the constraints of time, space, and pace, instructors and students are separated in online interpreting training compared with offline interpreting training. Therefore, there is a lack of more effective on-site and real-time effective communication between instructors and students, as well as between peer learners. It is suggested to build a virtual community by using social media platforms to reduce the feeling of isolation, which is an important criterion for achieving better student satisfaction for online

courses (McInnerney & Roberts, 2004). This virtual community should be established not only among students but also among instructors and between students and instructors. The virtual community offers a knowledge-sharing channel in which teaching and learning experiences, solutions for technological issues, and even non-academic issues are shared (Ren, 2020).

The virtual community is not designed to be a group chatroom; instead, students' online interpreting training behaviours should be regulated by assigning different roles to students and designing role rotations to arouse awareness of the interdependence of roles. Such arrangements can encourage students to participate in various training activities and enable interpreting learners to experience diverse training opportunities. Professional interpreters can also be invited to join the community to cooperate with the instructor to design training activities, assign specific protocols for different roles, and share their experience in dealing with challenges when they were novice interpreters. With goals of overcoming the sense of isolation and promoting effective emotional communication by means of information exchange, resource, and experience sharing, as well as role interdependence, the sense of a shared community can be fostered among interpreting learners and instructors.

4 Conclusions

Internet-based technology is becoming increasingly significant in university online education, and the transformation of traditional offline courses has accelerated. The current trend of synchronous teaching and learning has urged us to re-evaluate online interpreting training activities. This paper specifically focuses on how online interpreting training is organized during the pandemic in terms of its content, design, delivery, and assessment. Issues of equality of learning outcomes, emotional support, privacy and audio/video data protection and misconduct behaviours turn out to be major ethical concerns faced by both instructors and interpreting learners in online interpreting training. Possible solutions are explored to address the above ethical concerns. First, technology support is regarded as an important means of improving the situation. We suggest that an interpreting-specific online learning platform be established to ensure learning outcomes. Professional software can be applied to reduce workloads and improve efficiency. Further, with the help of virtual reality technology, a simultaneous interpreting lab-based training model, mock conference, and real-life interpreting practicum can be simulated to assist in achieving a better learning outcome in online interpreting training. Innovation in interpreting training approaches, such as the establishment of a multimodal annotation framework and the compilation of a multimodal interpreting corpus for

research and pedagogical purposes, has proven to be significant in objectively describing the interpreting process, which, in turn, could assist a better understanding of interpreting for both instructors and interpreting learners. Lastly, as to emotional support for interpreting learners, a virtual community should be established to build an effective emotional connection among interpreting learners as well as between instructors and learners.

Solutions for ethical concerns in online interpreting training aim to facilitate interpreting teaching and training with the aim of eliminating or reducing the impact of ethical issues caused by the transformation from traditional offline training to online training. More empirical interpreting studies should be conducted to review the entire teaching and learning process and to explore effective ways to improve learners' interpreting experiences and interpreting performance.

Acknowledgments: We would like to express our sincere gratitude to Prof. Gu Yueguo, Prof. Tang Jinlan and Dr. Zhang Shuai for their valuable comments for improving the manuscript throughout the revision process.

Research fundings: This manuscript was supported by research grants "The Commissioned Research Project for Year 2021, Affiliated to the 14th Five-Year Plan for Science and Research of State Language Commission" (Project Number: YB145-4), "Major Project of China's National Social Science Fund" (Project Number: 21&ZD294) and "China Scholarship Council" (Project Number: 201910080001).

References

- Al-Balas, M., Al-Balas, H. I., Jaber, H. M., Obeidat, K., Al-Balas, H., Aborajooh, E. A., & Al-Balas, B. (2020). Distance learning in clinical medical education amid COVID-19 pandemic in Jordan: Current situation, challenges, and perspectives. *BMC Medical Education*, 20(1), 1–7.
- Anderson, B., & Simpson, M. (2007). Ethical issues in online education. *Open Learning: The Journal of Open, Distance and e-Learning*, 22(2), 129–138.
- Arrojo, R. (2005). The ethics of translation in contemporary approaches to translators' training. In M. Tennent (Ed.), *Training for the new millennium – pedagogies for translation and interpreting* (pp. 225–245). John Benjamins.
- Bączek, M., Zagańczyk-Bączek, M., Szpringer, M., Jaroszyński, A., & Woźakowska-Kapłon, B. (2021). Students' perception of online learning during the COVID-19 pandemic: A survey study of polish medical students. *Medicine*, 100(7), 1–7.
- Bahri, H. (2022). Advantages and disadvantages of online consecutive interpreter training from students' perspectives. *Translation Studies Quarterly*, 20(79), 38–55.
- Bates, T. (2001). International distance education: Cultural and ethical issues. *Distance Education*, 22(1), 122–136.
- Bedenlier, S., Wunder, I., Gläser-Zikuda, M., Kammerl, R., Kopp, B., Ziegler, A., & Händel, M. (2021). Generation invisible? Higher education students' (non) use of webcams in synchronous online learning. *International Journal of Educational Research Open*, 2, 100068.

- Björklund, A., & Salvanes, K. G. (2011). Education and family background: Mechanisms and policies. In E. A. Hanushek, S. J. Machin, & L. Woessmann (Eds.), *Handbook of the economics of education*. (Vol. 3, pp. 201–247). Elsevier.
- Braun, S., Slater, C., Gittins, R., Ritsos, P., & Roberts, J. (2013). Interpreting in virtual reality: Designing and developing a 3D virtual world to prepare interpreters and their clients for professional practice. In D. C. Kiraly, S. Hansen, & K. Maksymski (Eds.), *New prospects and perspectives for educating language mediators* (pp. 93–120). Narr.
- Brey, P. (2006). Social and ethical dimensions of computer-mediated education. *Journal of Information, Communication and Ethics in Society*, 4(2), 91–101.
- Bromberg, J., & Jesionowski, I. (2010). Trends in court interpreter training. *Multilingual*, 21(4), 35–39.
- Carr, S. E., & Steyn, D. (2000). Distance education training for interpreters: An insurmountable oxymoron. In R. P. Roberts, S. E. Carr, D. Abraham, & A. Dufour (Eds.), *The critical link 2* (pp. 83–88). John Benjamins.
- Chen, N. S., Kinshuk, Ko, H. C., & Lin, T. Y. (2005). A model for synchronous learning using the internet. *Innovations in Education and Teaching International*, 42(2), 181–194.
- Chirumamilla, A., Sindre, G., & Nguyen-Duc, A. (2020). Cheating in e-exams and paper exams: The perceptions of engineering students and teachers in Norway. *Assessment & Evaluation in Higher Education*, 45(7), 940–957.
- Churiyah, M., Sholikhah, S., Filianti, F., & Sakdiyyah, D. A. (2020). Indonesia education readiness conducting distance learning in Covid-19 pandemic situation. *International Journal of Multicultural and Multireligious Understanding*, 7(6), 491–507.
- Clark, B. R. (1983). *The higher education system: Academic organization in cross-national perspective*. University of California Press.
- Colwell, J. L., & Jenks, C. F. (2005). Student ethics in online courses. In *Proceedings frontiers in education 35th annual conference* (p. T2D). IEEE.
- Corsell, A. (2005). Training interpreters to work in the public services. In M. Tennent (Ed.), *Training for the new millennium – pedagogies for translation and interpreting* (pp. 157–73). John Benjamins.
- Deflem, M. (2021). The right to teach in a hyper-digital age: Legal protections for (post-) pandemic concerns. *Society*, 58, 204–212.
- European Commission. (2020). *Educational inequalities in Europe and physical school closures during COVID-19. Fairness policy brief series*. https://ec.europa.eu/jrc/sites/jrcsh/files/fairness_pb2020_wave04_covid_education_jrc_i1_19jun2020.pdf
- Farahani, M. F. (2012). Ethics principles in distance education. *Procedia-social and Behavioral Sciences*, 46, 890–894.
- Ferrell, O. C., Fraedrich, J., & Ferrell, L. (2011). *Business ethics: Ethical decision making and cases*. South-Western Cengage Learning.
- Flaherty, C. (2020). *Failure to communicate: Professor suspended for saying a Chinese word that sounds like a racial slur in English*. <https://www.insidehighered.com/news/2020/09/08/professor-suspended-saying-chinese-wordsounds-english-slur>
- Garza Mitchell, R. L. (2009). Ethics in an online environment. *New Directions for Community Colleges*, 2009(148), 63–70.
- Gu, Y. (2012). 教师发展的大师复盘模式 [A chess master model for classroom teaching and teacher/researcher development]. *Chinese Journal of Applied Linguistics*, 35(1), 7–25.
- Gu, Y. (2013). 论言思情貌整一原则与鲜活话语研究——多模态语料库语言学方法 [The whole people principle of illocution, thought, emotion, and appearance and situated discourse – a multimodal corpus linguistic approach]. *Contemporary Rhetoric*, 6, 1–19.

- Hansen, I., & Shlesinger, M. (2007). The silver lining – technology and self-study in the interpreting classroom. *Interpreting*, 9(1), 95–118.
- Hattar, S., Hadidi, A. A., Sawair, F. A., Alraheam, I. A., El-Ma'aita, A., & Wahab, F. K. (2021). Impact of COVID-19 pandemic on dental education: Online experience and practice expectations among dental students at the University of Jordan. *BMC Medical Education*, 21(1), 1–10.
- Hauck, M., & Youngs, B. L. (2008). Telecollaboration in multimodal environments: The impact on task design and learner interaction. *Computer Assisted Language Learning*, 21(2), 87–124.
- Hutchinson, T., & Waters, A. (1987). *English for specific purposes: A learning-centered approach*. Cambridge University Press.
- Ko, L. (2006). Teaching interpreting by distance mode: Possibilities and constraints. *Interpreting*, 8(1), 67–96.
- Kress, G., & van Leeuwen, T. (2001). *The modes and media of contemporary communication*. Arnold.
- Lee, J., & Huh, J. (2018). Why not go online? A case study of blended mode business interpreting and translation certificate program. *The Interpreter and Translator Trainer*, 12(4), 444–466.
- Ling, C., Balci, U., Blackburn, J., & Stringhini, G. (2021). A first look at zoombombing. In *2021 IEEE symposium on security and privacy (SP)* (pp. 1452–1467). IEEE.
- Liu, H. (2012). 《口译学习者语料库建设及应用》 [*The Construction and Employment of Interpreting Learners' Corpus*]. China Radio Film and TV Press.
- Liu, H. (2018). Disfluency in Chinese English learners' multimodal interpreting corpus. In J. Colpaert, A. Aerts, & F. Cornillie (Eds.), *CALL your data proceedings* (pp. 247–260). XIXth International Computer Assisted Language Learning (CALL) Research Conference.
- Liu, H. (2020). 远程翻译专业教学管理的创新与发展 [The innovation and development of distance translation and interpreting education management]. *Chinese Translators Journal*, 6, 67–69.
- Liu, J., & Hu, K. (2015). 多模态口译语料库的建设与应用研究 [The construction and employment of multimodal interpreting corpus]. *Foreign Languages in China*, 12(5), 77–85.
- Lu, X. (2016). 中国口译教学 4.0: Practeasearcher 模式 [interpreting teaching 4.0 in China: Practeasearcher model]. *Shanghai Journal of Translators*, 4, 60–67.
- Lu, X. (2020). 基于视频会议平台的远程同步口译教学——以北外高翻同声传译课程为例 [Distance teaching of interpreting: Delivering simultaneous interpreting courses via video conferencing at GSTI, BFSU]. *Chinese Translators Journal*, 4, 74–84.
- Maček, A., & Zorko, H. B. (2021). Ethical challenges of interpreter training at the University of Ljubljana: The faculty of arts responds to social change. *Verba Hispanica*, 29(1), 97–114.
- Mayer, R. E. (Ed.). (2005). *The Cambridge handbook of multimedia learning*. Cambridge University Press.
- McInerney, J. M., & Roberts, T. S. (2004). Online learning: Social interaction and the creation of a sense of community. *Journal of Educational Technology & Society*, 7(3), 73–81.
- Moeketsi, R., & Wallmach, K. (2005). From sphaza to makoya!: A BA degree for court interpreters in South Africa. *Journal for Speech, Language and the Law: Forensic Linguistics*, 12, 77–108.
- Monti, C., Bendazzoli, C., Sandrelli, A., & Russo, M. (2005). Studying directionality in simultaneous interpreting through an electronic corpus: EPIC (European parliament interpreting corpus). *Meta*, 50(4), 114–129.
- Moore, G. E., & Baldwin, T. (1903). *Principia ethica*. Cambridge University Press.
- Moser-Mercer, B., Class, B., & Seeber, K. (2005). Leveraging virtual learning environments for training interpreter trainers. *Meta*, 50(4).
- Mukhtar, K., Javed, K., Arooj, M., & Sethi, A. (2020). Advantages, limitations and recommendations for online learning during COVID-19 pandemic era. *Pakistan Journal of Medical Sciences*, 36(COVID19-S4), 27–31.

- Nagi, K., & John, V. K. (2020). Plagiarism among Thai students: A study of attitudes and subjective norms. In *2020 sixth international conference on e-learning (econf)* (pp. 45–50). IEEE.
- Newlands, G., Lutz, C., Tamò-Larrieux, A., Villaronga, E. F., Harasgama, R., & Scheitlin, G. (2020). Innovation under pressure: Implications for data privacy during the Covid-19 pandemic. *Big Data & Society*, 7(2), 1–14.
- Niska, H. (2007). From helpers to professionals: Training of community interpreters in Sweden. In C. Wadensjö, B. E. Dimitrova, & A. L. Nilsson (Eds.), *The critical link 4: Professionalisation of interpreting in the community* (pp. 297–310). John Benjamins.
- Peterson, A. (2009). *Everyday ethics and social change: The education of desire*. Columbia University Press.
- Poyatos, F. (2002). *Nonverbal communication across disciplines: Volume 1: Culture, sensory interaction, speech, conversation*. John Benjamins Publishing.
- Qin, J., & Xiang, Y. (2020). 我国翻译在线开放课程现状及对策研究——基于新冠肺炎疫情期间在线教学的反思 [Situations and strategies for current online open courses in China – reflections on online learning during the COVID-19 pandemic]. *Chinese Translators Journal*, 4, 67–75.
- Rabin, C. (2021). Care ethics in online teaching. *Studying Teacher Education*, 17(1), 38–56.
- Rajab, M. H., & Soheib, M. (2021). Privacy concerns over the use of webcams in online medical education during the COVID-19 pandemic. *Cureus*, 13(2), e13536.
- Ren, W. (2020). 疫情和后疫情时代的口译教学: 基于教师视角的案例分析与反思 [interpreting education in the (post-) pandemic era: A case study and reflection from the view of instructors]. *Chinese Translators Journal*, 6, 69–74.
- Research Group of National Institute of Education Sciences, Wang, S., Wang, X., Kang, J., Cao, P., & Zhao, Z. (2020). 大规模在线教育的六点启示 [Six inspirations of massive online education]. *Basic Education Forum*, 15, 1.
- Roach, P., Stibbard, R., Osborne, J., Arnfield, S., & Setter, J. (1998). Transcription of prosodic and paralinguistic features of emotional speech. *Journal of the International Phonetic Association*, 28(1–2), 83–94.
- Schoeman, F. D. (Ed.). (1984). *Philosophical dimensions of privacy: An anthology*. Cambridge University Press.
- Schultz, R. A. (Ed.). (2005). *Contemporary issues in ethics and information technology*. IGI Global.
- Secara, I. A. (2020). Zoombombing – the end-to-end fallacy. *Network Security*, 2020(8), 13–17.
- Sidgwick, H. (2019). *The methods of ethics*. Good Press.
- Singer, P. (2011). *Practical ethics*. Cambridge University Press.
- Šveda, P. (2021). Interpreter training in central Europe: Looking back and ahead. In P. Šveda (Ed.), *Changing paradigms and approaches in interpreter training* (pp. 248–261). Routledge.
- Toprak, E., Ozkanal, B., Aydin, S., & Kaya, S. (2010). Ethics in e-learning. *Turkish Online Journal of Educational Technology-tojet*, 9(2), 78–86.
- Tuah, N. A. A., & Naing, L. (2021). Is online assessment in higher education institutions during COVID-19 pandemic reliable? *Siriraj Medical Journal*, 73(1), 61–68.
- Tyler, R. W. (1949). *Basic principles of curriculum and instruction*. The University of Chicago Press.
- UNESCO. (2020). *Adverse consequences of school closures*. Retrieved October 11, 2021, <https://en.unesco.org/covid19/educationresponse/consequences>
- Walters, A. (2020). Inequities in access to education: Lessons from the COVID-19 pandemic. *The Brown University Child and Adolescent Behavior Letter*, 36(8), 8.
- Wang, B. (2020). 疫情之下的英国利兹大学远程翻译教学管理 [The management of distance translation and interpreting education in Leeds under the pandemic]. *Chinese Translators Journal*, 6, 75–76.
- Wang, K., Zhang, L., & Ye, L. (2021). A nationwide survey of online teaching strategies in dental education in China. *Journal of Dental Education*, 85(2), 128–134.
- Washbourne, K. (2009). *Manual of Spanish-English translation*. Prentice-Hall.

- Webb, A., McQuaid, R. W., & Webster, C. W. R. (2021). Moving learning online and the COVID-19 pandemic: A university response. *World Journal of Science, Technology and Sustainable Development*, 18(1), 1–19.
- Xu, M., Zhao, T., & Deng, J. (2021). An empirical study on distance interpreter training in China before the covid-19 pandemic: A mixed-methods approach. In C. Wang, & B. Zheng (Eds.), *Empirical studies of translation and interpreting* (pp. 259–280). Routledge.
- Zhang, A., & Ding, N. (2021). 抗疫背景下的远程专业口译教学 [distance interpreting education in the covid-19 pandemic]. *Chinese Translators Journal*, 1, 81–88.
- Zhang, W. (2013). 口译语料库研究的原则与方法 [Principles and methods of interpreting corpus research]. *Technology Enhanced Foreign Languages*, 1, 63–68.
- Zhu, X., & Wang, H. (2020). Implementation and consideration of online teaching of physical education courses in Chinese universities under the COVID-19 pandemic. In *2020 conference on education, language and inter-cultural communication* (pp. 111–115). Atlantis Press.
- Zoom. (2021). *Zoom privacy statement*. Retrieved October 19, 2021, <https://explore.zoom.us/docs/en-us/privacy.html>.

Bionotes

Hongyan Liu

Beijing Foreign Studies University, Beijing, China
hongyanliu@bfsu.edu.cn

Hongyan Liu is Professor at Artificial Intelligence and Human Languages Lab, Beijing Foreign Studies University, China. Her research interests include interpreting learners' corpus-based study, multimodal corpus linguistics, and Aging speakers' discourse study. She is the principal investigator of 10 international, national-level and provincial-level research projects. She is also a standing member of the China Computer-assisted Language Learning Association.

Zhenhui Lei

Queen's University Belfast, Belfast, UK
zlei02@qub.ac.uk

Zhenhui Lei is a PhD Candidate in the Centre for Translation and Interpreting at Queen's University Belfast, UK, whose PhD project is supported jointly by the university and the China Scholarship Council. His research interests include computer-assisted language learning, interpreter training and assessment, and multimodal corpus-based conversation analysis and discourse analysis.