

Adapting Intercultural Communication and Spanish Classes at Shanghai University during COVID-19: Zoom, WeChat, and Beyond

Mitchell R. Bradford Jr.
Xi'an Jiaotong-Liverpool University, China

ABSTRACT

This paper will discuss how intercultural communication (ICC) and Spanish classes at the Sydney Institute of Language and Commerce (SILC)-Business School at Shanghai University were adapted to be conducted virtually during COVID-19. The platforms used included Zoom, WeChat, and pre-recorded videos of lessons. While the Spanish course met for short classes to practice speaking, the ICC course only discussed via messaging in a WeChat group. Both had pre-recorded videos of lessons. The merits and drawbacks of each of these will be discussed. Additionally, perceptions of these tools were collected via questionnaires with 25 Likert-scale items and 15 open-ended items conducted with the students of the courses and teachers of different subjects at SILC. Findings indicate that each have their strengths and weaknesses but could be used synchronously to achieve the best outcomes. For example, Zoom being used only for small groups to practice speaking and videos for lecturing. Interestingly, most teachers reported not using WeChat for teaching purposes despite the students being very familiar with it and finding it useful for several aspects. The paper ends with suggestions on how these methods can be used for classes after the pandemic, whether they are conducted online or in person.

Keywords: *distance education; Spanish; Intercultural Communication; Flipped Classroom; WeChat; Zoom*

INTRODUCTION

The Coronavirus later known as COVID-19, became severe towards the end of 2019 and went on to cause the lockdown in China and, eventually, most of the world. Due to the new norm of being locked down, institutions were forced to adapt their form of teaching, sometimes overnight, which Talidong (2020) calls emergency remote teaching (ERT) which can be “problematic and suicidal” (Alvarez Jr. 2020, p.150). This transition happened during the winter break at the Sydney Institute of Language and Commerce (SILC)-Business at Shanghai University which occurred during the middle of the second trimester. Therefore, the last few weeks of classes of the winter term as well as all our spring trimester courses were conducted online. In the spring term, the researcher taught two courses: Intercultural Communication (ICC) and Spanish 1.1 (henceforth referred to as “Spanish”) through a flipped classroom approach via pre-recorded videos of lectures, Zoom, and WeChat. This paper will detail how those classes were adapted, discuss the findings of research about the three tools, and make suggestions for their use beyond COVID-19.

LITERATURE REVIEW OF THE THREE TOOLS USED

Lecture Videos

Many flipped classes “rely heavily on pre-recorded lecture videos to present basic course content to students outside of classroom sessions” (Beatty et al., 2017, p.376). These videos have several advantages. Firstly, they can be kept for a length of time and reused (Ma et al., 2018) as well as be used by different institutions which allows access to “high quality course materials from well-

known institutions and proficient lecturers” (Koppelman, 2016, p.276). Furthermore, they “not only enhance knowledge by providing rich information” but can also help learners understand and remember the material covered (Pal et al., 2019, p.29). Koppelman (2016) found that students enjoyed having videos to complement textbooks which he believes may mean that they “can help in making courses more motivating and inspiring for distance education students” (p.275). In addition, some video platforms allow learners to increase or decrease the speed of videos (Koppelman, 2016), which allows them to learn at their own pace. The videos (and other learning materials such as e-books) can be uploaded to a Learning Management System (LMS), such as Moodle, where students can access them (Beatty et al., 2017). Despite their strengths, pre-recorded videos of lectures have some drawbacks. One is, as streaming/downloading requires high bandwidth, users who lack faster Internet connectivity may encounter problems accessing them (Pal et al., 2019). Furthermore, some students may not schedule a time to watch the videos or only view parts of them while others might cram and/or binge watch a certain amount (Beatty et al., 2017).

Zoom

While the “in-class” section of flipped classes tends to be conducted on campus, this was not possible during the time of COVID-19 and was instead often completed via video conference platforms. One such platform is Zoom which allows livestreamed online sessions to be conducted in groups to allow teachers to explain new material and for students to interact with classmates while also supporting one-on-one sessions for learners to chat with teachers or classmates if needed (Holubnycha & Baibekova, 2020). Carrying out livestreamed classes has some advantages. One strength is that as it is “not limited by space or time” (Ana et al., 2020, p.23), sessions can be conducted at any time and participants can take part from anywhere as long as they have good Internet connection. Furthermore, over 60% of the participants in Rahayu (2020) reported being satisfied with the amount of communication and quality of lessons provided while taking part in Zoom classes. In addition, while using Zoom to help carry out flipped lessons, Robertson (2020) found them to produce more chances for critical thinking than traditional sessions. There are, however, some drawbacks to using Zoom. Conducting classes with any livestreaming platform is “very much dependent on the Internet” (Ana et al., 2020, p.23) and issues with this include being unable to connect (Alvarez Jr., 2020; Robertson, 2020) as well as slowed access due to a large amount of users at once (Talidong, 2020). Additionally, half of the participants in the study of Ana et al. (2020) and most of the teachers in the research of Talidong (2020) felt e-learning to be more passive than traditional classes. Another weakness was reported by over 60% of the participants in the study of Rahayu (2020) who found it being easier to access materials and understand lessons taught on campus. Ana et al. (2020) point out that a disadvantage of e-learning is that students must be disciplined and getting them to interact will be difficult if classes are not planned well.

WeChat

WeChat is a Chinese social media/messaging app and is considered as many “apps within an app” (Guo & Huang, 2020, p.1) or as a “super app” (Guo & Wang, 2018, p.1) due to its plethora of functions. As for its educational affordances, it can encourage teamwork amongst students “with a variety of class activities” (Wang et al., 2017, p.424) which can be conducted before, during, and/or after class (Zou et al., 2018) through private and/or group chats (Hu, 2019). Furthermore, Huang (2019) found that WeChat created “a friendly and convenient communication environment” (p.15) which might overcome the issue of students being reluctant to express themselves (Che, 2017). Employing WeChat can also result in learners feeling more comfortable about talking to their teachers as it “is more frequently used than e-mail” (Zou et al., 2018, p.705) and thus may increase the frequency of such interactions (Zhang et al., 2019). It has been found to help students improve their vocabulary (Pamintuan et al., 2018), writing (Yan, 2019), speaking (Zou et al., 2018), listening, and reading (Wuyungaowa, 2015). In addition, students of classes which implement WeChat have

been found to outperform those of traditional classes (Dai et al., 2018; Muddeman, 2020). Likewise, teachers of a WeChat-based flipped course have garnered evaluations which were “significantly higher than that in traditional teaching” (Zhang et al., 2019, p.100). Despite its many strengths, using WeChat for learning purposes also has some drawbacks. Firstly, as it is an informal chatting/social media app, it is “not an automatic learning tool” (Guo & Wang, 2018, p.11), which may result in students being easily distracted (Yan, 2019; Che, 2017) and not using the target language (Huang, 2019). In a discussion session, it might be difficult for learners to express themselves without repeating what others had stated as well as participate before the topic changes (Wuyungaowa, 2015). Furthermore, students may send messages in a WeChat group at different times of the day/night (Yan, 2019; Muddeman, 2020) as well as find an information overload due to an abundance of messages (Wuyungaowa, 2015). These various challenges make monitoring and organizing how WeChat is used difficult (Yan, 2019) along with increasing the number of challenges and demands for teachers (such as devoting more time to mentoring students) (Ma et al., 2018).

THE ADAPTED CLASSES

Intercultural communication

ICC aimed to help students better understand basic concepts of intercultural communication, develop intercultural communication habits and skills, learn more about different cultures, and develop critical thinking skills by considering various perspectives. Topics covered included collectivist and individualist cultures, tight and loose cultures, dining habits, family roles, and dating. The main resources for ICC were pre-recorded videos of lectures and WeChat. The number of students per class ranged between thirteen and twenty and all were Chinese.

ICC Lecture Videos

The lecture videos were recorded by Zoom or Screencastomatic, which displayed the lesson’s PPT and the researcher via webcam in the top-right corner. They usually lasted no more than fifteen minutes and included the researcher going through the lesson. The videos would begin with a short greeting and overview of the lesson which was followed by new cultural themes being introduced. Students were instructed throughout the video to pause as to either read a section from the coursebook, think about some topics/questions, or watch some other supplementary video(s) before returning to the lecture video. Sections from the book were not read and supplementary videos were not detailed. Instead, they were summarized followed by questions, which the researcher posed for students to consider. These questions were not answered or discussed at depth in the video as this was meant to be conducted in the class WeChat group. The recorded lectures ended with explaining the lesson’s homework and upcoming assignments. Videos would be uploaded the weekend before on Chaoxing (SILC’s LMS) and students were expected to watch them and read the sections spoken of from the coursebook before our WeChat discussion time.

ICC WeChat

WeChat was used for many forms of communication which can be broken down into group and private messaging purposes. I felt that having a group discussion on WeChat with the whole ICC class for an hour would have been better than livestreaming on Zoom for the same number of students and time for several reasons. Firstly, learners may have issues in adapting to classes using unfamiliar technology for virtual learning such as Zoom, Google Meet, Google Classroom, and their university LMS (Munni & Hasan, 2020). Therefore, perhaps consideration should be given to employing Social Networking Sites (SNSs) which some teachers have already implemented such as WhatsApp (Srivastava et al., 2020) and Facebook (Munni & Hasan, 2020). In addition, the

researcher noticed that some students might remain silent in Zoom sessions which corresponds with the findings of Ana et al. (2020) and Talidong (2020) who reported learners seeming to be more passive in online classes. This may be due to being shy, fears of losing face, and/or lack of teachers being able to monitor them well. Munni & Hasan (2020) believe that since students are familiar with and enjoy using SNSs, employing them in language classes may help in boosting motivation and self-confidence while reducing anxiety (which they tie to bringing down students' affective filters (factors that cause students to feel anxious/nervous (Krashen, 2009)) thus creating "a positive environment which could accelerate foreign language acquisition" (p.77). Another reason is that WeChat requires less bandwidth than livestreaming on Zoom. Previous studies (Ana et al., 2020; Alvarez Jr., 2020; Robertson, 2020; and Talidong, 2020) have reported issues related to network connectivity while using Zoom or other forms of livestreamed sessions. Once in a session, not many people can talk at once and thus, must wait their turn which reduces everyone's chances to speak in class. Though breakout rooms could handle this, that feature raises the issue of students not speaking unless they are monitored and referring to their first language (L1).

Furthermore, WeChat discussion groups allow members to share what they want without having to wait for someone else to finish. Another merit is that utilizing the app allows learners to be mobile and take part in a discussion anywhere as long as they have decent Internet connection. Additionally, using a WeChat group allows the messages to be reviewed later if needed. This advantage also helped the author keep track of attendance, participation, and homework. If a student had not shared a meaningful thought recently in class or had not submitted their homework, the instructor could call on them by typing '@' and their name (see Figure 3) which would send them a notification directly, thus prompting participation. The final reason why the researcher felt WeChat discussion sessions would be more effective, convenient, and have similar (if not better) outcomes than livestreaming classes was that the aim of ICC was to heighten students' ability to communicate in intercultural situations and understand people of different cultures. Thus, it was not a language class where pronunciation or grammar needed practice which would need live audio/visual interaction.

Before classes started, WeChat groups were formed and titled as each class' name along with the course's name (for example, A3 Intercultural Communication). Each class' WeChat group was the main source of discussion and announcements. Files (such as the course's e-book), audios, photos, videos, and web links could be shared with the whole class. Students could also pose questions here. During discussion sessions, the researcher guided students with questions and topics based on the reading and videos that they (should have) completed before class. These discussions usually lasted for an hour and occurred three times a week. Students' attendance and participation were monitored for each session via an excel sheet being open and filled in while class was being conducted. If a student had not gained marks (either due to having not said anything that was at length, on topic, and original or having not shared anything at all) they would be mentioned (using '@'), so they would receive a notification. This would be similar to calling on someone specifically in a traditional class.

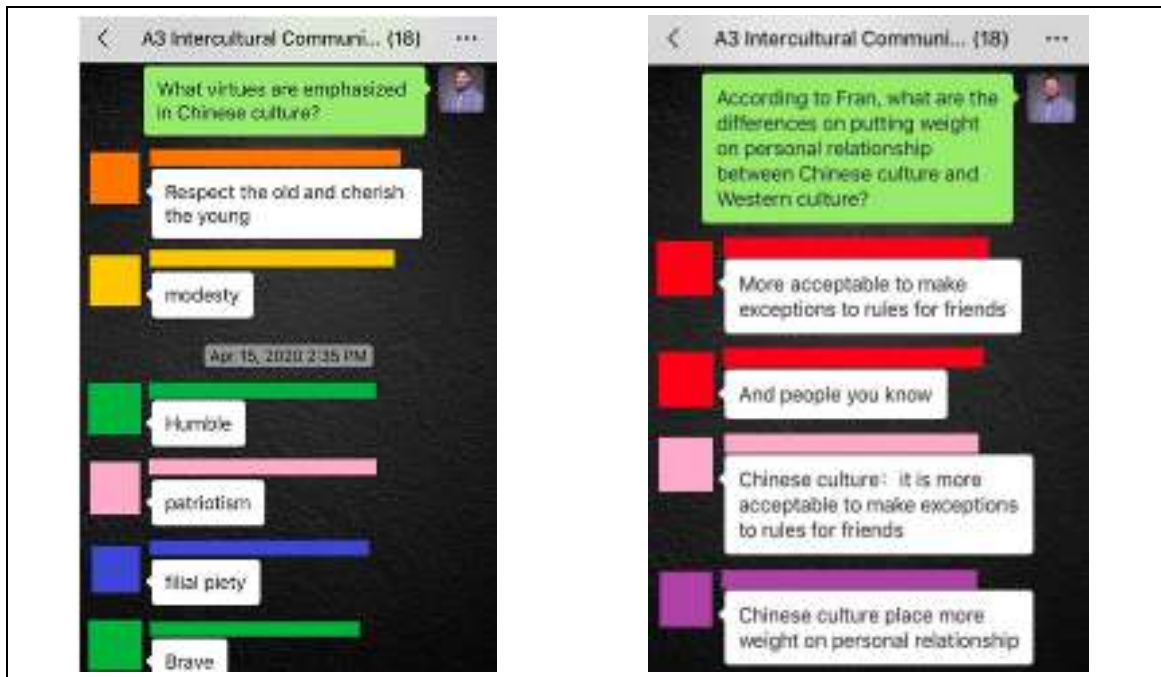


Figure 1: ICC students responding to discussion topics/questions in the class WeChat group

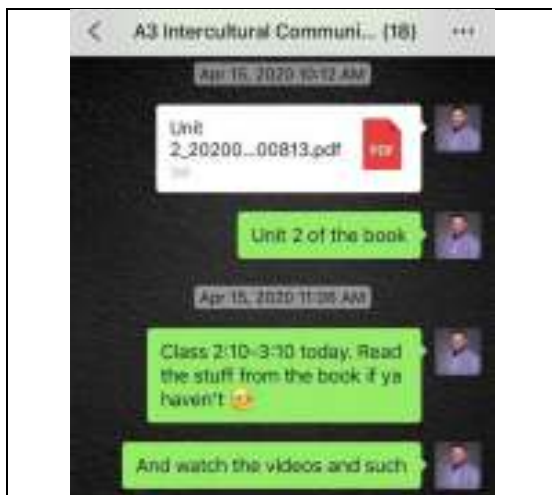


Figure 2: Communication to students



Figure 3: Reminder to students on homework

Private messages were used for submitting homework, answering individual students' questions, and providing individual feedback. Files, photos, videos, and web links could be shared through private messages. As for homework, tasks were assigned after most lessons and usually consisted of students researching or sharing their opinion of an Intercultural communication factor. Roughly half of the assignments were meant to be submitted via text (of at least 100 words) while the others

were to be completed by voice message (each being at least one minute long). Texts were sent in various methods such as word documents, pictures of handwritten work, or simply text messages. Voice messages were usually sent via the voice-messaging feature of WeChat though some students sent them as audio files. Homework grades were based on the completion of the task. Submissions had to be on topic to merit any marks. If on topic, points were given based on length such as 100 words or a 60-second voice message would receive 100% and 50% would be given to submissions of 50 words or 30 seconds speaking and 10% was taken off for each day late. The researcher was able to give homework feedback to each student individually.

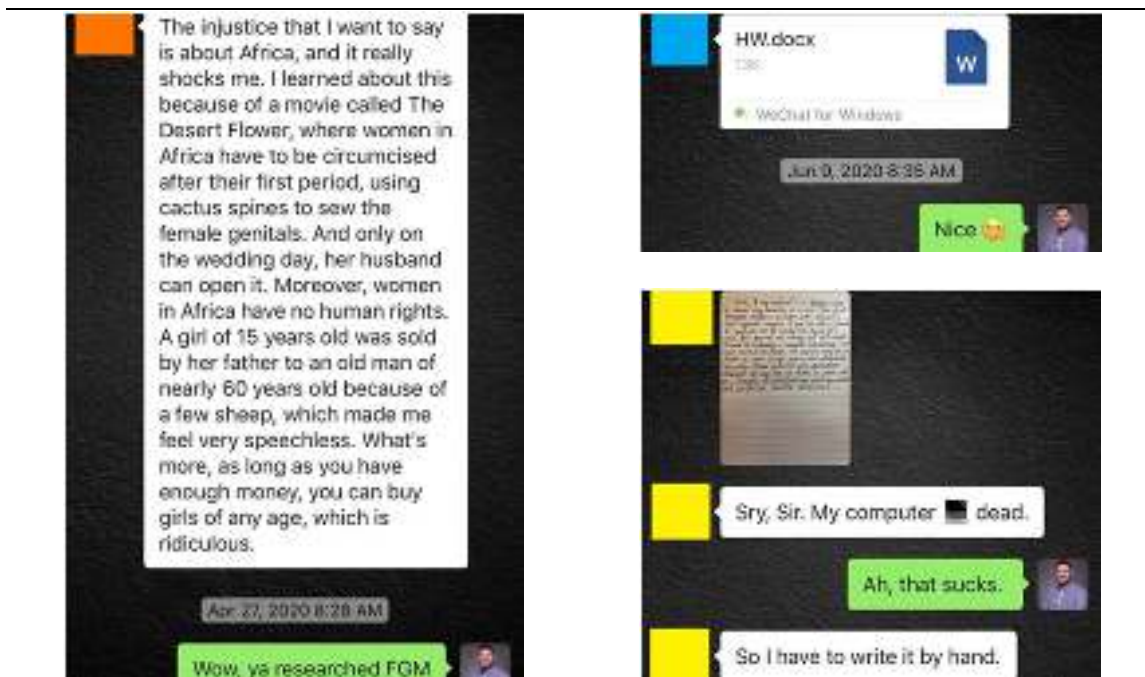


Figure 4: Examples of ICC students submitting homework

Table 1: ICC Class layout

Time	Task	Platform
Pre-class	Watch video(s), review the PPT, and read book sections	Chaoxing or WeChat (if the files can fit and are requested by a student)
In-class	Class discussion	WeChat
Post-class	Homework	WeChat

Spanish

Spanish 1.1 aimed to help students acquire the fundamentals of pronunciation, practical vocabulary, useful phrases, and grammar along with the ability to understand, read, write, and speak basic Spanish. The class met virtually twice a week and had eighteen students. Half were Chinese while the others were international students from various countries. The main platforms used for Spanish classes were lecture videos, Zoom, and WeChat.

Spanish Lecture Videos

Similar to those created for ICC, the lecture videos for Spanish were recorded by Zoom or Screencastomatic and showed the PPT and the researcher in the top right corner. Following a greeting and overview, new language points and their pronunciation were explained and modeled. Sometimes the author would only show himself in the full screen of the video in order to model pronunciation (that is, how to move one's mouth in order to produce a certain sound). During the video, the researcher would guide students to certain pages in their coursebook and instruct them to pause in order to complete tasks. They ended with explaining the homework. Attempts were made to keep the videos to within a fifteen-minute limit. However, this was not always accomplishable. In such cases, lectures were split into two videos. Videos for each week's lessons were uploaded to Chaoxing by the weekend before and remained there throughout the course. Students were expected to view the video(s) and complete the tasks from the coursebook before class.

Spanish Zoom

Livestreamed classes were held via Zoom twice a week. The university advised having all the learners in a Zoom session at the same time for an hour. The researcher did not approve of this suggestion and thus devised his own method. The author felt having smaller groups would increase each student's speaking time and allow for more individual feedback. The designated class time was 2:10-3:50, thus, the researcher would have 100 minutes to try to create the best situation for the learners. In the end, there were five sessions of 3 to 4 learners lasting 20 minutes. Incorporating five different sessions within the designated class time had several benefits. Firstly, though most learners were in the PRC, some international students had returned home during the winter break and were scattered in North America, Europe, Africa, and Asia. As these students were located in different time zones, the author allowed them to have first pick as to which 20 minute session they would like to join. Another merit was that learners could be put in certain sessions based on their common difficulties in Spanish (such as some students finding some pronunciations [such as "rr"] more difficult than others). A final strength of the different sessions was that students could ask to change their session time if they were unable to attend at a certain period. Examples of this include one learner having to attend class earlier due to a driving test and another requesting to join a later session because of a hospital visit for a relative having a baby.

In their groups of 3 to 4, students were guided through speaking tasks based on the lecture videos and course material that they (should have) completed before class. The researcher would highlight common mistakes that were noticed in the students' coursebook tasks (which should have been sent to him via WeChat before class). Students could ask questions and gain feedback while also practicing speaking with others. The sessions would end with the class looking at the homework, completing some examples, and answering any questions about it. These Zoom sessions were how the students gained their attendance score. Being late for their session without notice resulted in a reduction of a third of the score for it while missing a session without notice resulted in a zero. If a student missed class for any reason, they could ask to make it up later with the teacher privately. They would be able to practice speaking, ask questions, and receive full credit for that day's attendance.

Spanish WeChat

WeChat served several functions for the Spanish course. A class group chat was used mostly for sharing announcements (such as the meeting number and password for the upcoming Zoom session), files, and Spanish music to make the course more culturally rich.



Figure 5: Sending files to students and reminding them of the final exam

Private chats were used for students to submit coursework, homework, and heightening student-teacher interaction. The coursework consisted of exercises from the coursebook which were to be sent to the teacher, usually by pictures, via WeChat before class, to which the researcher was able to provide individual feedback. The tasks from the coursebook made up their participation grade. There would be a deduction of 10% for each day late. Homework was assigned after most lessons and usually consisted of learners completing three tasks. The first assignment was to complete activities from the workbook and sending the researchers pictures of them via WeChat. Another task was for students to send the instructor WeChat voice message (or an audio file) of them practicing new grammar, or other activities such as vocabulary, and sentence structures. Some substituted audios for a short video of them speaking as to allow the researcher to view how they moved their mouth while pronouncing to which feedback would be provided. The final piece of homework was for learners to send the instructor a screenshot of messages that they had sent to 2 to 3 classmates using new language points in a mix of text and voice messages. Individual feedback was given to each of these tasks and students were expected to complete them to receive their homework scores. A third of the score would be deducted for any task not completed and 10% would be taken off for each day late.

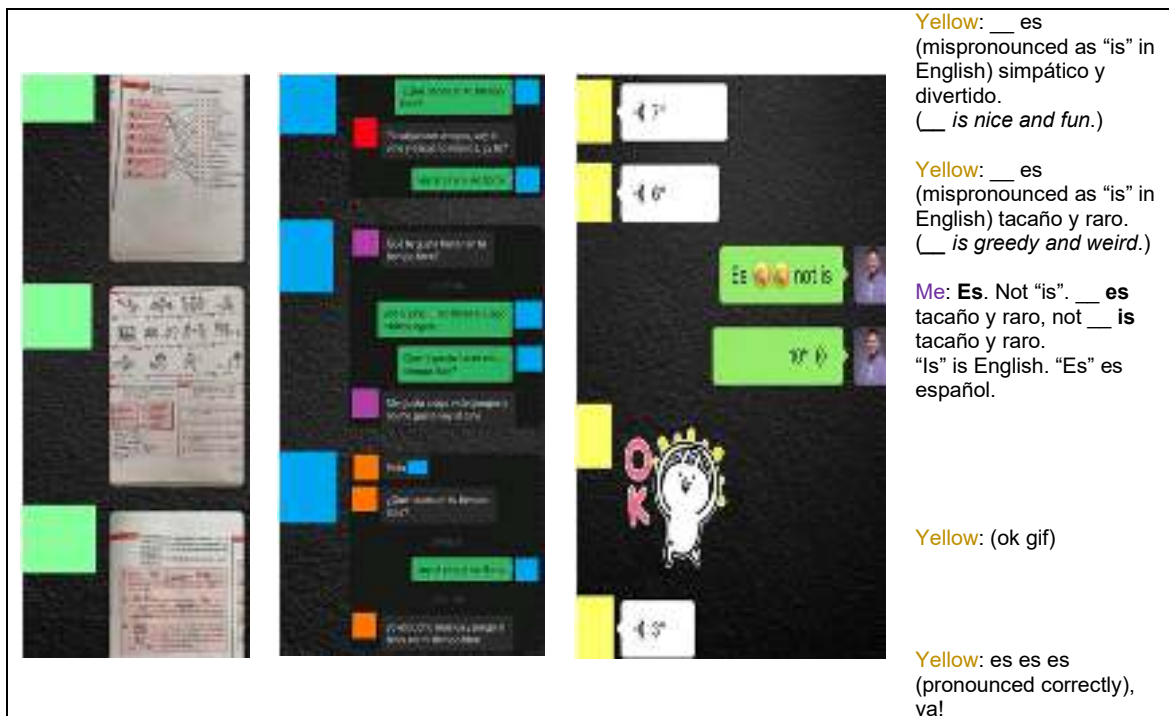


Figure 6: Examples of Spanish students' homework submissions (with audio transcription and English translation)

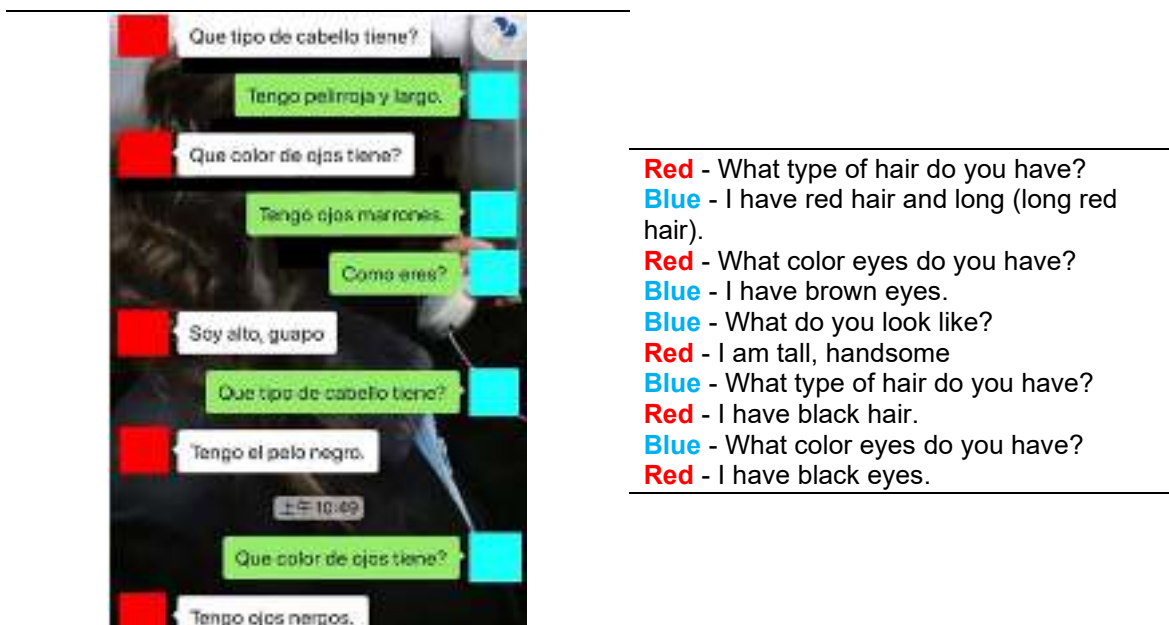


Figure 7: Examples of students chatting with classmates in Spanish via text (translated into English)



Orange – ¿Dónde están las cosas en tu dormitorio?
(Where are the things in your bedroom?)

Pink – La cama está enfrente de la tele.
(The bed is in front of the tv.)

Pink – ¿Dónde están las cosas en tu dormitorio?
(Where are the things in your bedroom?)

Orange – Hay una cama al lado de la puerta, una mesa de estudio enfrente de la ventana, y una silla enfrente de la mesa.
(There's a bed by the door, a desk in front of the window, and a chair in front of the table.)

Orange – ¿Qué hay un tu salón?
(What's in your living room?)

Pink – Hay un sillón y una lámpara de pie.
(There's an armchair and a floor lamp.)

Pink – ¿Qué hay en tu salón?
(What's in your living room?)

Orange – En mi salón, hay un televisión, una lámpara, y un cuadro.
(In my living room, there's a television, a lamp, and a painting.)

Figure 8: Examples of students sending Spanish voice messages (with transcription and English translation)

Table 2: Spanish Class layout

Time	Task	Platform
Pre-class	Watch video(s), review the PPT, and complete coursebook exercises*	Chaoxing or WeChat (if the files can fit and are requested by a student)
In-class	Speaking practice	Zoom
Post-class	Homework*	WeChat

*The coursebook and workbook were on Chaoxing but could be sent to students via WeChat if requested. Completed exercises were to be submitted via WeChat.

METHODOLOGY

Research Design

The researcher wanted to gather feedback from the students to better understand their perspectives about the three main tools which were employed to carry out the courses. Furthermore, the author noticed no other instructors at SILC had adapted their classes as he did. Most were teaching English for Academic Purposes (EAP) courses and seemed to follow the norm of having a whole class (around 20 students) in a Zoom session for one hour and did not implement WeChat or pre-recorded videos of lectures much (if at all). Therefore, questionnaires were created to explore the perceptions of Zoom, WeChat, and lecture videos held by students of ICC and Spanish as well as EAP teachers at SILC. As to acquire both quantitative and qualitative data, a mixed-methods approach was implemented in the form of 25 items on a 5-point Likert-scale and 15 open-ended items as a single approach is unable to produce satisfactory data (Riazi & Candlin, 2014). Doing so allowed the researcher to acquire quantitative data which tends to be easier and quicker to collect and analyze (Dörnyei, 2003) while also implementing open-ended items to further explore responses (Gray, 2004). Feelings while using each of the tools, ability to attend/participate, usefulness, user-friendliness, benefits, drawbacks, and suggestions for improvement were examined. The questionnaires also sought to compare online teaching with traditional classes.

Administration and Participants

WeChat messages were sent to 160 people who were either students of the researcher's ICC or Spanish classes or teachers at SILC as to inquire if they would like to participate in this study. Interested parties were sent the surveys along with a consent form on WeChat and returned them via the app. There were 73 people who agreed to take part and completed the surveys. There were 39 ICC students, 13 Spanish students, and 21 instructors.

Table 3: Participants' information

	Number	Age	Years at SILC	Nationalities
ICC Students	39	18-21; 19 (avg.)	3- 1 st year 4- 2 nd year	39- Chinese
Spanish Students	13	18-24; 20.31 (avg.)	6- 1 st year 3- 2 nd year 4- 4 th year	9- Chinese 1- Uzbek 1- Kenyan 1- Indonesian 1- Moroccan
Teachers	21	26-64; 42.11 (avg.)	1- 19; 10.14 (avg.)	11- Chinese 4- USA 2- Australian 1- Singaporean 1- Ukrainian 1- French 1- Canadian

Analysis

The data from the responses to the Likert-items were put into a spreadsheet, analyzed for averages, and compared between the three groups of participants as well as in each category (that is,

willingness to speak, user-friendliness). The analysis of the open-ended questions was conducted via grounded theory (Charmaz, 2014) as codes were noted as they appeared instead of the researcher trying to organize information into predetermined themes.

DISCUSSION OF FINDINGS

Discussion of Close-ended Questionnaire Results

Table 4 below shows the average of responses to the closed-ended questions among the groups - ICC students, Spanish students, and the teachers.

Table 4: Close-ended Questionnaire Averages

	SI(s)*	SP(s)*	T(s)*
I'm/Ss are shy to discuss in a Zoom class.	2.31	2.08	3.29
I'm/Ss are shy to discuss in a class WeChat group.	1.69	1.85	2.81
I'm/Ss are shy to discuss in classes in the classroom.	2.56	2.77	2.48
I/Ss feel safe/confident to speak freely in a Zoom class.	3.51	3.92	3.14
I/Ss feel safe/confident to speak freely in a class WeChat group.	3.87	3.69	3.57
I/Ss feel safe/confident to say what I want in classes in the classroom.	3.28	3.46	3.10
I/Ss discuss a lot in Zoom classes.	3.21	3.38	2.57
I/Ss discuss a lot in class WeChat groups.	3.54	3.31	2.67
I/Ss discuss a lot in classes that are in the classroom.	3.10	3.00	3.19
I/Ss learn a lot in Zoom classes.	3.56	3.92	3.24
I/Ss learn a lot in class WeChat groups.	3.74	3.08	2.67
I/Ss learn a lot from classes that are in the classroom.	4.23	4.08	4.14
I/Ss learn a lot from pre-recorded videos.	3.51	3.85	2.81
It's easy for me/Ss to attend/participate in Zoom classes.	3.90	4.46	3.62
It's easy for me/Ss to attend/participate in class WeChat groups.	4.21	4.00	2.86
It's easy for me/Ss to attend/participate in classes that are in the classroom.	4.13	4.77	4.29
I like using Zoom for class.	3.46	4.08	3.33
I like using WeChat for class.	3.87	3.38	2.62
I like attending classes that are in the classroom.	4.00	3.85	4.57
I like using pre-recorded videos for class.	3.18	3.77	2.81
I think Zoom classes are useful.	3.77	4.00	3.86
I think class WeChat groups are useful.	3.85	3.54	3.67
I think pre-recorded videos are useful.	3.49	4.15	3.29
Zoom is easy to use for classes.	3.95	4.46	3.81
WeChat is easy to use for classes.	4.23	3.46	3.62
* SI(s) = ICC student(s) SP(s) = Spanish student(s) T(s) = Teacher(s)			

Interestingly, both groups of students reported feeling shy to discuss in each area (all of which averaged under 3.00). They were most shy to participate in discussions in classes held in person and the least in WeChat groups. The teachers, however, felt that students are most shy in Zoom and the least in the classroom.

As for feeling safe/confident to speak freely, doing so in classes held in person was ranked the lowest by each group. WeChat was ranked highest by the ICC students (SIs) and teachers, while Spanish students (SPs) felt the safest to speak freely in Zoom. In terms of discussions, both groups of students felt they do so less in classes held onsite. The SIs reported engaging in discussion the most in WeChat while the SPs reported doing so via Zoom. However, the teachers felt students discuss the most in on-campus classes and the least in those conducted via Zoom.

The ability to learn was ranked the highest in traditional classes by all groups (averaging over 4). WeChat classes were ranked second highest by SIs but the lowest by SPs and teachers. Pre-recorded videos were felt to be the least educational by SIs and second least by SPs and teachers. The ease of attending/participating in classes was ranked highest for WeChat groups by the SIs. They ranked Zoom as the most difficult to attend/participate in. SPs and teachers ranked it best for classes held onsite and worst for WeChat.

As for what method they like, traditional classes were ranked highest by SIs and teachers and second highest by SPs. The SPs reported Zoom as their most liked method. Pre-recorded videos were the least liked by SIs and second least liked by SPs and teachers. WeChat was the least liked by SPs and teachers.

In terms of usefulness, SIs and teachers felt pre-recorded videos to be the least useful. Teachers felt Zoom to be the most useful while SIs felt WeChat was and SPs considered pre-recorded videos to be the most useful, which may show that though they do not like them or find them very educational compared to other tools, they do find them useful. Zoom's user-friendliness for classes was ranked higher than that of WeChat by SPs and tutors. However, SIs considered WeChat to be easier to use for classes.

Discussion of Open-ended Questionnaire Results

Zoom: Advantages

The strength of live-streaming platforms like Zoom not being "limited by space or time" (Ana et al., 2020: 23) was mentioned by 13 SIs and 7 SPs who reported enjoying being able to conduct classes anywhere. As for how they felt while using Zoom, 11 SIs, 9 SPs, and 10 teachers reported positive feelings (such as, good, comfortable, and confident) which was mostly related to its features (such as, screen sharing, breakout rooms, and the chat box). Furthermore, some participants linked their positive experiences with Zoom to its use of cameras which enables face-to-face interaction and allow teachers to "give equal attention to all of the students" (SI24) thus making "learning at home more like school" (SI17) which provides support for the findings of Rahayu (2020) where most participants were satisfied with their Zoom lessons. As noted by one participant:

"Livestream classes are better than pre-recorded classes, because they can provide us an atmosphere of real having classes" - SI33

However, feeling shy or nervous was mentioned by 9 SIs and 2 SPs which several related to using a camera. One of these participants noted:

"I'm not really comfortable with the idea of discussing some content with my camera open while everyone is watching... I just tend to get shy when my face appears while I'm discussing something" - SP11

This appears to echo Elledge et al. (2020) whose participants were reluctant to use cameras during Zoom sessions. A suggestion to combat this was made by SP6 who felt making the use of cameras optional as "only voices can make people feel safe to ask and answer questions" which supports

Deutschmann et al. (2019) that students may feel less anxious in virtual environments where they are able to avoid showing their faces.

Zoom: Disadvantages

As for other drawbacks of using Zoom, 22 SIs, 6 SPs, and 8 teachers mentioned network issues which may “affect the quality of class” (SI19) in ways such as being late, not being heard by others, and being kicked out of a session which provides support for previous studies (such as Alvarez Jr., 2020; Talidong, 2020) which identified similar issues. Additionally, evidence of livestreamed sessions seeming more passive than traditional ones (Ana et al., 2020; Talidong, 2020) was found in the responses of 14 SIs and 4 SPs who reported difficulty in maintaining focus during Zoom classes with some relating this to them being “less formal than offline classes” (SI24) and it being difficult for teachers to monitor them, especially if they do not need to have their cameras turned on. One participant noted:

“...some students may not listen to the teacher carefully, because some classes don't require a camera, which means the teacher won't notice you when you're lying in bed” - SI3

Further evidence of an increase in passiveness would be a lack of interaction which was reported by 8 SIs, 2 SPs, and 8 teachers. As noted by one of these participants:

“When we are in the BreakingRoom [breakout rooms], sometimes no one speaks, it is very awkward. Maybe sometimes you want to organize a discussion, but no one responds” - SI17

Another issue detailed by 15 instructors was monitoring students which was felt to become more difficult while screen sharing and using breakout rooms. This finding appears to echo Jan (2020) who observed teachers who were unable to pay attention to all the learners in Zoom sessions. A final disadvantage of livestreamed sessions, which supports the way the researcher adapted classes (using Zoom primarily for speaking practice and doing other tasks asynchronously), was found in the comments of two teachers who felt livestreamed classes are not appropriate for every teaching purpose.

“I feel like it is a waste of time to give students L, R or W [listening, reading, or writing] tasks and wait for them to complete them” - T15

“I don't think that live-stream classes work as well for doing listening or reading exercises, or vocabulary & grammar related stuff. Those things really have to be done outside of class and then peer-checked in class” - T18

WeChat: Advantages

Most students of both groups reported positive feelings while using WeChat for classes. A total of 24 SIs and 8 SPs commented on WeChat's convenience which makes it “easy to communicate and...easy for teachers to arrange tasks” (SP6) with most considering it “more convenient than Zoom” (SI28) perhaps because it is a platform that most “students and teachers are familiar with” (SP13). In addition, 12 SIs reported feeling relaxed/comfortable while using it which SI30 contributed to not having to show their face. These findings appear to align with those of Huang (2019) and Che (2017) in that WeChat can create a relaxed and convenient atmosphere where students feel more comfortable expressing themselves. There were 14 teachers who discussed the uses which WeChat messages can serve. These uses ranged from urgent purposes such as messages sent “in case of technical issues on zoom” (T2) or “if you forget to say something during the class” (T18) to homework, feedback, and group discussions.

"WeChat is useful for communications with the students, particularly for homework instructions and sending documents. It is also beneficial for individual communication with students when specific feedback or instruction is needed" - T7

In addition to sending messages, sharing files was mentioned by 5 SIs, 5 SPs, and 8 teachers with some preferring it over email along with mentioning an increase in the comfort and number of teacher-student interactions which was also found in Zou et al. (2018) and Zhang et al. (2019). The ability to type was mentioned by 12 SIs who considered it easier, faster, and able to receive better feedback from teachers than speaking. However, 11 SIs and 3 SPs commented on the issue of typing being slower than speaking. Some felt that this caused them to be unable to express themselves before topics changed or being lost in a sudden surge of messages both of which were mentioned as possible issues in Wuyungaowa (2015).

"While all the classmates answering the questions, messages burst out in several seconds and it is not easy to find the question to recheck. (sic)" - SI35

WeChat: Disadvantages

As for disadvantages, 18 SIs, 5 SPs, and 4 teachers mentioned the possibility of students being unable to focus during WeChat classes as they may seem "too casual" (SI24) and "distractions are only a swipe away" (T15) which was also found in Che (2017) and Yan (2019). In response to being inattentive, a few SIs reported that some learners may copy and paste responses from others which also appeared in Wuyungaowa (2015). Furthermore, 7 teachers felt class management is a drawback with comments such as it being "more difficult to monitor students" (T17) and "hard to assess student participation" (T12) which seems to echo similar issues discussed in Yan (2019) and Ma et al. (2018). Another fault mentioned by 6 SIs and 3 SPs was not practicing speaking or listening much with SP5 feeling that "it is not as comfortable to do oral exercises as it is in person". This appears to contrast Wuyungaowa (2015) and Zou et al. (2018) who found the app to help students improve those two skills amongst others. A total of 4 teachers reported feeling that WeChat has limited educational affordances with some considering that "there is not enough support and features on WeChat to teach an effective lesson" (T7). While using the app for teaching, some instructors reported it being "more like tutoring and guiding than teaching" (T13).

"...teaching a class using WeChat seems not an official class" - T21

These findings support Dai et al. (2018) and Che (2017) in that the app can only be used as a supplementary tool and cannot replace traditional classes. The possible disadvantages of students sending messages sporadically in a WeChat group (Yan, 2019; Muddeman, 2020) and not using the target language (Huang, 2019) were not mentioned by any participants in this study while the possibility of there being a lack of student interaction (Muddeman, 2020; Wuyungaowa, 2015) was only mentioned by 3 tutors. This is likely due to teachers establishing expectations about a certain time frame for discussion, target language usage, and participation while advising students not to stray from these.

Lecture Videos: Advantages

The advantage of lecture videos being able to be stored and reused (Ma et al., 2018) was mentioned by 21 SIs, 3 SPs, and 5 teachers as they enable students to "learn at their own pace and go back to information they may have missed (sic)" (T15). Furthermore, the videos providing a preview of the upcoming lesson was mentioned by 9 SIs and 6 SPs who felt they "can let students know in advance what to learn...and have a general understanding" (SI3). Their ability to be used to preview and review lessons seem to support Pal et al. (2019) who stated that lecture videos can help learners better understand and remember material. In addition, evidence of students enjoying

access to videos which complement other resources (Koppelman, 2016) was found as a few students reported preferring to listen/watch lecture videos than only “read all the material” (SP11). The benefit of pre-recorded videos allowing more time for language practice, discussion, and/or questions in livestreamed classes was mentioned by 2 SPs and 8 teachers. One of the teachers noted:

“Some language points can be explained in the video for self-study so that more time could be used for language production in the class” - T17

A total of 3 SIs and 4 instructors discussed how pre-recorded lectures may facilitate the work of teachers as they allow teachers to not “worry about time or any emergency situation” (SI20) while lecturing and that “there is less danger of technical issues” (T18) and if there is, it is “easy to review and fix a video before sharing...hard to do that with a live lesson” (T13). Interestingly, no evidence was found of network issues influencing students’ ability to access and view lecture videos, contrasting Pal et al. (2019).

Lecture Videos: Disadvantages

As for drawbacks, 11 SIs and 7 tutors mentioned the possibility of students not watching the lecture videos which echoes Beatty et al. (2017). Participants attributed this to factors such as the videos being “too long” (SI32) as well as the fact that their effectiveness “heavily relies on student’s self-discipline” (T2) which may affect participation in classes as “some students have prepared while some not” (T19). For those that do actively watch the videos, other issues may occur. For example, 4 SIs and 3 SPs reported difficulty paying attention to them as “some students may not listen carefully” (SP8) and that “sometimes they are quite long which makes it difficult to watch because they are a bit boring” (SP10) and that their “content is not as rich as that of the teacher at ZOOM (sic)” (SI30). A suggestion made by 2 SPs is that teachers should consider how synchronous sessions will build upon what was covered in the videos.

“If the teacher teaches the same, it’s a waste of time” - SP6

Another weakness mentioned by 11 SIs and 6 teachers was the lack of interaction in lecture videos which “doesn’t fit learners who enjoy analytical/detective work of discovery teaching style...[or]...learning in pairs/groups” (T4) and is unable to “provide an opportunity for students to ask questions” (T18). Furthermore, 5 instructors mentioned not being able to adjust to students in a timely manner.

“The spontaneity of the class is lost and the students’ response is negated through lack of contact. There is no feedback for the teacher to inform their future teaching and lesson planning” - T7

CONCLUSION

Gaps between the groups of participants seem to be apparent. The Spanish students seem to be more positive towards Zoom and lecture videos than those of ICC. Conversely, the ICC students appear to hold WeChat in higher regard than the Spanish learners. This may be due to how the researcher adapted his classes with the students (Spanish utilizing Zoom for short sessions and the videos being the source of new language input while ICC used a WeChat discussion group and their videos serving as compliments to other resources). Furthermore, the teachers seem to be the most positive towards Zoom which is likely due to most of them not employing WeChat or lecture videos much (if at all). Both groups of students appear to be rather positive towards implementing WeChat for learning purposes as it is user-friendly, mobile, does not require a great deal of bandwidth, and makes them feel safer to express themselves, perhaps due to not having to show

their faces via a webcam. The learners were much more positive about using WeChat than the instructors who mostly reported not using it (and some feeling that it is not fit) for teaching. Therefore, there appears to be a gap between the students and lecturers as to what can and cannot be used for educational purposes.

Each of these tools have their strengths and weaknesses. Lecture videos allow students to take advantage of fragmented learning and can deliver new content but may not be viewed attentively (or not at all) as well as lack of interaction. Livestreaming enables face-to-face communication but may be impacted by network issues as well as cause increased anxiety amongst camera-shy students along with being difficult to monitor. WeChat can allow discussions to be held, files to be shared, and assignments to be submitted in a more comfortable environment but may not be taken serious due to it being a social media app. In short, none of these tools should be used in isolation but instead perhaps used synchronously for different purposes. New material can be delivered via lecture videos then practiced/discussed later. If a focus of the course is to improve students' speaking/listening skills, livestreaming sessions should be implemented. However, if the course does not focus on improving learners' oral communication, there is no real need to conduct live sessions. Therefore, the researcher conducted Spanish classes on Zoom but only used a WeChat discussion group for ICC. Furthermore, WeChat can be used for sharing materials and providing feedback.

Suggestions

Lecture videos

As learners are asked to invest their "most valuable resource – time" in watching lecture videos (Beatty et al., 2017, p.384), teachers must aim to create them to be efficient and meaningful. Firstly, attempts should be made to keep them short. The researcher aimed to limit them to 15 minutes; however, this was not always possible. In such cases, videos should be segmented which has been done by others (Guo et al., 2014; Beatty et al., 2017; Robertson, 2020). Another suggestion would be to implement various forms of media (visual and audio) in a complementing manner (Lange & Costley, 2020). This was accomplished by instructing students to pause the videos to complete other tasks such as reading a text or completing an exercise, before returning to the video. In addition, they should seem personal and directed at individual students. This can be achieved by displaying the instructor's face, recording in an informal environment, looking into the camera, and writing on the screen/PPT slides (Guo et al., 2014). Beatty et al. (2017) add that the videos should be uploaded no more than a week in advance to avoid students looking too far ahead. Furthermore, teachers should attempt to not repeat what was covered in lecture videos as this may be seen as a waste of time.

Zoom/livestreaming

If instructors are going to conduct livestreamed classes, many suggestions can be made to better ensure their impact. Firstly, teachers should aim to conduct sessions with small groups which will provide each student more opportunities to speak and receive feedback. However, the time for sessions may be rather short. Despite this drawback, it was found that smaller groups with less time were more beneficial than longer ones with a whole class. Some participants reported that, the longer classes are, the more boring and less interactive they become. Furthermore, prolonged screen time may cause eyestrain (Talidong, 2020). Additionally, making cameras optional should be considered. Many students reported mixed feelings about using webcams with some stating that they make online classes feel more real while others found them to decrease their willingness to communicate. Perhaps students can choose not to use them unless teachers feel they are not focusing. Moreover, the sessions should be as interactive as possible. Students reported a desire for livestreamed classes to be more interactive "instead of lecturing the whole class" (SP10). Of course, new material needs to be introduced and different skills may need to be practiced. However, ERT "should not be confined synchronously" (Alvarez Jr., 2020, p.150), but should instead

implement asynchronous tasks (e.g., lecture videos and assignments completed before/after live sessions). As T17 stated, live sessions should be used “for language production, but not for the whole lesson”.

WeChat

As for suggestions about using WeChat, firstly, groups can be created for individual classes which can serve as the basis for announcements, questions, and material sharing. Similarly, smaller groups of learners can be established to aide learners in completing self-study tasks (Yan, 2019) and provide an environment in which students can support each other (Ma et al., 2018). Additionally, adding learners individually should be considered as it can help with the submission of tasks and individual feedback. While discussing, topics should be set. Wuyungaowa (2015), Huang (2019), and Muddeman (2020) report the lack of interaction in WeChat groups if students are not prompted and guided. Furthermore, a time for discussion should also be established in order to avoid messages being sent sporadically throughout the day but instead during a limited timeframe which may result “in an increased amount of high-level interactions” (Muddeman, 2020, p.68). Finally, teachers should adapt to their learners while creating discussion groups. Muddeman (2020) found that some students wanted the teacher to be a silent observer which Wuyungaowa (2015) believes would allow them to lead and organize themselves in discussions. However, others may desire the instructor to act as a leader, supervisor, and organizer to heighten and lighten the atmosphere while guiding students with questions/topics to discuss (Muddeman, 2020) along with providing instructions and joining in the conversation while monitoring (Wuyungaowa, 2015).

LIMITATIONS

There are several limitations of this study. Firstly, it was only conducted at the English department of SILC. Thus, it took place at only one department of the Business school at one university in China. Furthermore, only students of the author’s ICC and Spanish courses were asked to participate and how the courses were designed likely influenced their responses. In addition, the study was conducted after students received their marks for the courses which might have influenced how they viewed the use of technology in them. A final limitation is that there was no control group to compare with.

REFERENCES

- Alvarez Jr., A. V. 2020. “The phenomenon of learning at a distance through emergency remote teaching amidst the pandemic crisis”. *Asian Journal of Distance Education*, vol. 15, no.1, pp. 144-153. Retrieved September 4, 2020, from: <http://www.asianjde.org/ojs/index.php/AsianJDE/article/view/453>.
- Ana, A., et al. 2020. “Students’ Perceptions of the Twists and Turns of E-learning in the Midst of the Covid 19 Outbreak”. *Romanian Journal for Multidimensional Education / Revista Romaneasca pentru Educatie Multidimensionala*, vol. 12, pp. 15-26. doi:10.18662/rrem/12.1sup2/242.
- Beatty, B. J., Merchant, Z., & Albert, M. 2017. “Analysis of Student Use of Video in a Flipped Classroom”. *TechTrends: Linking Research and Practice to Improve Learning-A publication of the Association for Educational Communications & Technology*, vol. 63, no.4, pp. 376-385. doi: 10.1007/s11528-017-0169-1.
- Charmaz, K. 2014. *Constructing grounded theory* (2nd edn.). SAGE, London.

- Che, S. 2017. "Integration of Three CBI Models and WeChat Mobile Learning in Business English Teaching". *English Language Teaching*, vol. 10, no.9, pp. 218-226. Retrieved September 4, 2020, from: <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1153892&site=eds-live&scope=site>.
- Dai, G., Liu, Y., & Cui, S. 2018. "A Study on the Mobile Learning of English and American Literature Based on WeChat Public Account". *English Language Teaching*, vol. 11, no.6, pp. 47-66. Retrieved September 4, 2020, from: <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1179238&site=eds-live&scope=site>.
- Deutschmann, M., Steinvall, A., & Wang, A. 2019. "Participating on More Equal Terms?: Power, Gender, and Participation in a Virtual World Learning Scenario". In Becnel, K. (ed.), *Emerging Technologies in Virtual Learning Environments*, pp. 67-94. Information Science Reference, Hershey PA.
- Dörnyei, Z. 2003. *Questionnaires in second language research: construction, administration, and processing*, Lawrence Erlbaum Associates, Mahwah N.J.
- Elledge, R., et al. 2020. "Maxillofacial education in the time of COVID-19: the West Midlands experience". *British Journal of Oral & Maxillofacial Surgery*. doi: 10.1016/j.bjoms.2020.07.030.
- Gray, D.E. 2004. *Doing research in the real world*. SAGE, London
- Guo, J. & Huang, J. 2020. "Information literacy education in WeChat environment at academic libraries in China". *The Journal of Academic Librarianship*, vol. 46, no.1, pp. 1-6. doi: 10.1016/j.acalib.2019.102073.
- Guo, M. & Wang, M. 2018. "Integrating WeChat-based Mobile-Assisted Language Learning into College English Teaching". *EAI Endorsed Transactions on e-Learning*, vol. 5, no.17, pp. 1-12. doi: 10.4108/eai.25-9-2018.155646.
- Guo, P. J., Kim, J., & Rubin, R. 2014. "How video production affects student engagement: An empirical study of MOOC videos". *Proceedings of the First ACM Conference on Learning@Scale Conference*, pp. 41-50.
- Holubnycha, L. & Baibekova, L. 2020. "Modern Technologies for University Students' Language Learning in Pandemic". *Postmodern Openings / Deschideri Postmoderne*, vol. 11, no.2, pp. 59-65. doi: 10.18662/po/11.2/158.
- Hu, X. 2019. "Designing Higher Vocational College English Blended Learning Mode based on Wechat Platform". *海外英语 (下) / Overseas English*, vol. 6, pp. 266-267. Retrieved September 4, 2020, from: <http://search.ebscohost.com/login.aspx?direct=true&db=edscoj&AN=edscoj.hwyy.x201906124&site=eds-live&scope=site>.
- Huang, X. 2019. "WeChat-based teaching for an immersion cultural exchange program – a case study in CFL". *Smart Learning Environments*, vol. 6, no.1, pp. 1-21. doi: 10.1186/s40561-019-0087-0.

- Jan, A. 2020. "A phenomenological study of synchronous teaching during COVID-19: A case of an international school in Malaysia". *Social Sciences & Humanities Open*, vol. 2, no.1, pp. 1-9. doi: 10.1016/j.ssaho.2020.100084.
- Jiang, W. & Li, W. 2018. "Linking up learners of Chinese with native speakers through WeChat in an Australian tertiary CFL curriculum". *Asian-Pacific Journal of Second and Foreign Language Education*, vol. 3, no.1, pp. 1-16. doi: 10.1186/s40862-018-0056-0.
- Koppelman, H. 2016. "Experiences with using videos in distance education: a pilot study: a course on human-computer interaction". *Issues in Informing Science & Information Technology*, vol. 13, pp. 269-277. Retrieved September 4, 2020, from: <http://search.ebscohost.com/login.aspx?direct=true&db=edsgea&AN=edsgcl.498675923&site=eds-live&scope=site>.
- Krashen, S. D. 2009. *Principles and practice in second language acquisition*. Pergamon Press Inc, Oxford.
- Lange, C. & Costley, J. 2020. "Improving online video lectures: learning challenges created by media". *International Journal of Educational Technology in Higher Education*, vol. 17, no.1, pp. 1-18. doi: 10.1186/s41239-020-00190-6.
- Ma, F. et al. 2018. "A Study on the Flipped Class Mode of Medical English Reading Based on WeChat Platform". *海外英语 / Overseas English*, vol. 5, pp. 239-241. Retrieved September 4, 2020, from: <http://search.ebscohost.com/login.aspx?direct=true&db=edscoj&AN=edscoj.hwyy.z201803109&site=eds-live&scope=site>.
- Muddeman, G. 2020. "Exploring the Affordances of WeChat for Reflective Purposes on a CLIL Module Whilst Assessing Chinese University Students' Participation and Interaction". In *Proceedings of ThaiTESOL Conference 2020* (pp. 58-71), Bangkok, Thailand.
- Munni, B. E. & Hasan, S. M. 2020. "Teaching English during COVID-19 Pandemic Using Facebook Group as an LMS: A Study on Undergraduate Students of a University in Bangladesh". *Language in India*, vol. 20, no.6, pp. 76-94. Retrieved September 4, 2020, from: <http://search.ebscohost.com/login.aspx?direct=true&db=edo&AN=144535458&site=eds-live&scope=site>.
- Pal, S., Pramanik, P. K. D., & Choudhury, P. 2019. "A Step Towards Smart Learning: Designing an Interactive Video-Based M-Learning System for Educational Institutes". *International Journal of Web-Based Learning and Teaching Technologies*, vol. 14, no.4, pp. 26-48. doi: 10.4018/IJWLTT.2019100102.
- Pamintuan, C. F. et al. 2018. "The Use of WeChat Application on CFL Learners' Vocabulary Acquisition". *TESOL International Journal*, vol. 13, no.4, pp. 26-38. Retrieved September 4, 2020, from: <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1244122&site=eds-live&scope=site>.
- Rahayu, D. 2020. "Students' E-Learning Experience through a Synchronous Zoom Web Conference System". *Journal of ELT Research*, vol. 5, no.1, pp. 68-79. doi: 10.22236/JER_Vol5Issue1pp68-79.

- Riazi, A. M. & Candlin, C. N. 2014. "Mixed-Methods Research in Language Teaching and Learning: Opportunities, Issues and Challenges". *Language Teaching: Surveys and Studies*, vol. 47, no.2, pp. 135-173. Retrieved September 4, 2020, from: <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1031715&site=eds-live&scope=site>.
- Robertson, S. 2020. "Going Hard and Early: Tertiary Teaching Under Lockdown in New Zealand". *International Studies in Educational Administration (Commonwealth Council for Educational Administration & Management (CCEAM))*, vol. 48, no.2, pp. 107-113. Retrieved September 4, 2020, from: <http://search.ebscohost.com/login.aspx?direct=true&db=asn&AN=145310241&site=eds-live&scope=site>.
- Srivastava, V. et al. 2020. "Utility of Real-Time Online Teaching During COVID Era Among Surgery Postgraduates". *Indian Journal of Surgery*, vol. 5, pp. 762-768. doi: 10.1007/s12262-020-02592-2.
- Talidong, K. J. B. 2020. "Implementation of emergency remote teaching (ERT) among Philippine teachers in Xi'an, China". *Asian Journal of Distance Education*, vol. 15, no.1, pp. 196-201. Retrieved September 4, 2020, from: https://www.researchgate.net/publication/342000471_Implementation_of_emergency_remote_teaching_ERT_among_Philippine_teachers_in_Xi'an_China/link/5f48fedf458515a88b7ca63e/download.
- Wang, J. et al. 2017. "The usability of WeChat as a mobile and interactive medium in student-centered medical teaching". *Biochemistry & Molecular Biology Education*, vol. 45, no.5, pp. 421-425.
- Wuyungaowa. 2015. "Engaging EFL learners through WeChat: A mobile phone-based EFL learning project in China". *International HETL Review*, vol. 5, no.5. Retrieved September 4, 2020, from: <https://www.hetl.org/engaging-efl-learners-through-wechat-a-mobile-phone-based-eflllearning-project-in-china>.
- Yan, L. 2019. "A Study on WeChat-Based Collaborative Learning in College English Writing". *English Language Teaching*, vol. 12, no.6, pp. 1-9. Retrieved September 4, 2020, from: <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1215465&site=eds-live&scope=site>.
- Zhang, L. et al. 2019. "Analysis on WeChat-Based Blended Learning in Network Marketing Course". *International Journal of Emerging Technologies in Learning (iJET)*, vol. 14, no.17, pp. 86-101. Retrieved September 4, 2020, from: <http://search.ebscohost.com/login.aspx?direct=true&db=edo&AN=138635495&site=eds-live&scope=site>.
- Zou, B., Li, H. & Li, J. 2018. "Exploring a Curriculum App and a Social Communication App for EFL learning". *Computer Assisted Language Learning: An International Journal*, vol. 31, no.7, pp. 694-713. doi: 10.1080/09588221.2018.1438474.