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## **Narrative Inquiry into Online Teaching of Chinese Characters during the Pandemic**

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### **Abstract**

Against the backdrop of the coronavirus pandemic, a large number of third-level institutes have had to transfer all teaching and learning activities online. This inevitable and urgently needed remote teaching is likely to lead to difficulties in the study of Chinese characters for beginner learners. Due to the pictographic origin and logographic nature of Chinese script, previous research shows the write-to-read effect and the importance of handwriting-to-character recognition. However, the nature of online learning suggests that all pedagogical practices will have to rely on digital input rather than pen and paper, which minimises the opportunities for handwriting. Furthermore, the worldwide crisis has also led to a lack of time and resources needed to develop a well-paced online curriculum that allow beginner learners to acquire characters while developing their character typing skills. Building upon narrative inquiry, this study explores the approach to studying Chinese characters during the pandemic. It first examines the challenges of teaching and learning Chinese characters online, and then reflects on the first-hand experience of teaching characters online among five CFL teachers based in Ireland and the UK. This study finds that a structured approach seems to benefit the teaching of Chinese characters. Knowledge of Chinese characters should also be explicitly incorporated into online teaching. The study will be one of the first contributing to the design and delivery of online teaching of Chinese characters in the context of a crisis scenario.

### **Keywords**

Chinese as a foreign language, Chinese characters, online teaching, narrative inquiry

## **1 Introduction**

The unusual start to the year 2020 was marked by the global outbreak of the coronavirus, which was characterised as a pandemic by the WHO on March 12, 2020 (WHO, 2020b). Soon after that, the WHO Director-General announced that Europe had become “the epicentre of the pandemic” (Tedros, 2020). In the Irish context, the first case of coronavirus was reported on 28 February, and a secondary school in Dublin was closed on 1 March due to a confirmed case on the premises (RTÉ News, 2020).

With the Covid-19 situation worsening, the Irish government announced that all schools, colleges, and childcare facilities were to close from 6 pm on 12 March (ibid.), only five days before Saint Patrick's Day, a public holiday in Ireland. Although Irish universities may have different academic calendars, it is common for a university to schedule a semester break (e.g. a reading week) around Saint Patrick's Day, which meant there was some time available to plan for and transfer to online teaching. Great Britain, neighbouring Ireland, had its first two confirmed cases of coronavirus on 31 January (BBC, 2020a), almost a month earlier than the first case reported on the island of Ireland. However, it was not until the afternoon of 20 March that the UK government announced that all schools, colleges, and nurseries were to close (BBC, 2020b). As the Easter holidays are usually at the beginning of April, UK universities tend to have a three-week break around that time, though there are variations from college to college. Again, this allowed for a preparation period to shift from face-to-face teaching to a virtual classroom.

In general, the inevitable and urgently needed online courses were designed and put into practice in a short time across third-level institutes worldwide in order to cope with the different extents of lockdown measures during the coronavirus pandemic. The current pandemic is caused by a novel coronavirus which can lead to a serious infectious illness with "unknown etiology" (WHO, 2020a). As a result, there is a need for research in order to understand this new type of disease and its effects, ranging from clinical and medical studies to research into tackling societal issues. It is with this crisis context in mind that we set out the task of reflecting on the online teaching of Chinese characters. This paper first presents a critical review of online language teaching in general, followed by a specific examination of online teaching of CFL (Chinese as a foreign language) and Chinese characters. This paper draws on five self-reflective narratives written by CFL teachers, relating to their teaching experience and online Chinese courses that were put in place in a relatively hasty manner. Discussions and suggestions for teaching Chinese characters online are made at the end of this paper.

## 2 Online Language Teaching: In General and for Chinese

Online language teaching is not new, thanks to advances in technology. Various formats of online courses for distance learning – synchronous or asynchronous, exclusively over the internet or with the integrative use of CALL (Computer Assisted Language Learning) – do indeed offer advantages in terms of flexibility and accessibility (Lee, 2016). However, in comparison with conventional classroom-based courses, online teaching can also produce difficulties for both teachers and students, including requirements for technical skills and computer literacy, limited teacher-learner interaction, restricted learner-learner collaboration, and high demands on self-regulation and learner autonomy (Gilbert, 2001; Nobre, 2018; Reinders & Hubbard, 2013). It would therefore be an incorrect assumption to think that face-to-face teaching could be transferred directly into online teaching, or that any language teacher could transmit classroom-based teaching online. Davis and Rose (2007, p. 5) identify five misconceptions regarding online learning:

- Virtual schools and regular school counsellors can handle the few participating students without leadership support. Please note that 'Virtual schools' refers to "organisations that offer online courses" (Davis & Rose, 2007, p. 4), and so 'virtual schooling' de facto indicates online teaching and learning.
- Any regular classroom teacher is already qualified to teach online.
- Any highly qualified face-to-face classroom teacher is ready to teach a quality online course that has previously been prepared or purchased.
- Virtual schooling will fit with regular school routines and practices.
- Newly qualified teachers who learn about virtual schooling in their pre-service programs will be ready to teach online when they graduate.

In other words, despite the benefits that technological progress have brought to language pedagogy, online teaching also introduces a number of variables that increase the level of complexity in teaching practice that ultimately may affect teaching and learning. While there appears to be little doubt that certain skills unique to online language teaching are required, training opportunities to prepare language teachers seem to be scarce (Kessler, 2006). In the case of teaching Chinese as a Foreign Language (hereafter, CFL), Tseng (2017) reiterates the challenges posed by online courses in general and calls for the development of comprehensive training programmes for online Chinese language teaching, instead of merely focusing on software-specific skills or digital literacy.

Furthermore, overuse of digital technology can lead the learning process astray, focusing on operating or navigating a machine rather than mastering a language in an online environment (Wu, 2016). Needless to say, technology itself goes through constant innovations and updates, which may affect its viability in a virtual classroom and delay its applicability to online language teaching, since it takes time for users to become familiar with new functionalities and then apply them in their study of a language.

CFL teachers already need to take into consideration the uniqueness of the language, including tonal variations in pronunciation and the logographic nature of its script. As a result, technological applications and platforms supporting CFL online teaching should cater to both the general needs of a virtual classroom and the specific requirements of the Chinese language. For this reason, technology has been developed to facilitate online CFL teaching, including “the delivery of sounds of individual characters and words, the display of character formation graphically stroke by stroke, and the comparison of speech waves made by students with a benchmark” (Wu, 2016, p. 97).

### **3 Teaching Chinese Characters Online: The Status Quo**

Due to the pictographic origin and logographic nature of the Chinese script, Chinese characters consist of a three-tier structure: strokes are the small units that form a radical, and one or more radicals are grouped to construct a character. This complex, nonlinear configuration of characters require years of study in order to acquire adequate and accurate visuospatial processing in Chinese reading (Zhou et al., 2020). Importantly, previous research shows the write-to-read effect (Guan et al., 2011, Zhang & Reilly, 2015) and the importance of handwriting-to-character recognition (Cao et al., 2013; Mangel et al., 2015). In other words, the spatial analysis of strokes and radicals involved in handwriting a Chinese character, as well as motor memory built upon a temporal sequence of movements in character composition, can together contribute to recognising the character (Cao et al., 2013; Tan et al., 2005).

However, online teaching means pedagogical practice has to rely on digital input rather than pen and paper, which minimises the opportunities for handwriting. One of the main input methods – indeed, the most popular in China – is pinyin input (Zhang & Min, 2019; Zhou et al., 2020). This requires knowledge of the sound of the Chinese characters, as pinyin is the system of romanising character pronunciation. Instead of encouraging the analysis and memorisation of whole character compositions, pinyin input entails typing the pinyin for a character and then choosing the correct option from a list of homophones generated by the input system (ibid.).

In addition to the lighter cognitive load and almost effortless physical work involved in typing with pinyin input, the ease of letting computers handle the character composition also frees learners to some extent to engage with actual communication in the digital world. For this reason, the usefulness of tedious and painstaking handwriting has been questioned, and there have been calls for the introduction of typing to CFL beginner learners (Allen, 2008; Lu et al., 2019; Xie, 2011).

On the other hand, behavioural research and neuroimaging studies reveal that heavy reliance on pinyin may hinder reading development or even child brain development (Tan et al., 2013; Zhou et al., 2020). Moreover, recent studies (Zhang & Min, 2019; Zhu et al., 2016) suggest that CFL learners may

benefit from typing with an input method if it were introduced at the intermediate level, rather than to complete beginners. It is therefore challenging to teach Chinese characters to CFL beginners online, where handwriting is unlikely to happen.

Furthermore, teaching characters online is usually facilitated with multimedia and animation technology (Sun, 2011; Zhan & Cheng, 2014; Zhu & Hong, 2005). For instance, animation programs can demonstrate the stroke sequence of a character, allowing CFL learners to drill characters by following the stroke animation. Researchers also question the effectiveness of using stroke animation, indicating instead the importance of character knowledge – such as a character’s etymological formation – to character learning (Shen, 2011; Wu, 2016; Zhan & Cheng, 2014).

Taking into consideration this mixed picture of CFL online teaching, and specifically relating to teaching characters to CFL beginners, this study examines the first-hand experience of five CFL teachers offering online Chinese courses during the pandemic lockdown. The study is different from previous literature, as it concentrates on teachers’ perspectives using narrative inquiry. It is also set against the context of the worldwide crisis, which means a lack of time or even resources needed to develop a well-paced online curriculum that allows beginner learners to acquire characters while developing their digital input skills.

## 4 Research Method

Narrative inquiry, “an approach to the study of human lives conceived as a way of honouring lived experience as a source of important knowledge and understanding” (Clandinin, 2016, p. 17), is a qualitative way to study and understand an individual’s experience (Clandinin, 2006; Clandinin & Huber, 2010; Clandinin & Rosiek, 2007). It is particularly useful when little is known regarding certain sociocultural phenomena or circumstances (Squire et al., 2014). The current study is situated in this little-known context as a rapid response to the challenges associated with online CFL teaching, with a focus on Chinese characters during the Covid-19 crisis. Therefore, narrative inquiry is a suitable way for this study to scrutinise this unprecedented experience of CFL teaching and learning.

This paper is based on the reflective narratives written by five CFL teachers who embarked on online teaching during the coronavirus lockdown. All of them have been teaching CFL at the tertiary level for between three and twelve years. Three of them are based in three different Irish higher institutes, while the other two are from two different universities in the UK. As Clandinin and Huber (2010, p. 437) point out, a researcher and his/her participants are “relational” when using narrative inquiry methodology, sometimes even “co-composing each aspect of the inquiry.” Thus, a certain level of collaboration between researcher and participants constructing a shared narrative through the inquiry can be observed (Clandinin & Rosiek, 2007; Connelly & Clandinin, 1990). For this reason, a small number of questions were provided as prompts to assist the participants in approaching the writing (see Appendix 1). However, they were advised not to stick with the suggested questions and it was strongly recommended that they go beyond them, in order to provide a truly self-reflective experience of online teaching of Chinese characters.

In order to gain an in-depth understanding of the individual experience of each participant with a focus on the teaching of Chinese characters, each of the five narratives was first read in detail individually before all five were read again together. Thematic analysis was then employed to identify the common threads across an entire set of narratives. In other words, the current study examined the occurrence of common threads rather than their frequency of occurrence. The analyses and discussion below concentrate on teaching Chinese characters online, though some references to challenges posed by online teaching in general were also mentioned. As a new qualitative methodology that is ethnographic in nature (Clandinin & Huber, 2010), a level of subjectivity in the analysis process is indeed inevitable. Nevertheless, narrative inquiry seems to be the most appropriate approach to newly

emerged and little-known phenomena, as mentioned earlier. Additionally, Stickler (2017) calls for attention to qualitative research in online language teaching. Therefore, the current study builds upon narrative inquiry to scrutinise the teacher experience in teaching Chinese online during the pandemic.

## 5 Analysis and Discussion

Five CFL teachers, namely Mei, Lan, Zhu, Jü and Song, were approached to participate in the study and provide their self-reflective narrative based on their online teaching experience of Chinese characters. Pseudonyms have been used, to ensure confidentiality. Three are based in Ireland and two are based in the UK. Table 1 below outlines the word count of the five written narratives from the participants.

Table 1.

*The Word Count of the Five Written Narratives*

Narrative	Word count
Mei	1,209
Lan	828
Zhu	608
Jü	600
Song	1,176
Total	4,421

Before they started the writing, several questions were asked in order to paint an overall picture of their online teaching practice, including when they started to transfer to online teaching, what courses they were teaching, and what software platforms were offered to them (see Appendix 1). Further prompt questions were then provided in order to probe into their teaching practice of Chinese characters. Four of the participants had an extremely short length of time to prepare for online teaching, ranging from overnight to nine days. Only one participant, based in the UK, had three weeks before shifting to an online environment, due to the university closure taking place right before the Easter break. In other words, if teachers were actually working during holidays contrary to their original schedule, they potentially had a longer preparation period for the move to a virtual classroom. The total length of online teaching for all participants is between four and five weeks, approximately half of the second teaching semester in the 2019-2020 academic year.

All participants were provided by their institutes with software platforms allowing synchronous online teaching. Two of them were set up with Blackboard Collaborate (Blackboard Inc., 2020), which is a built-in Blackboard platform comprising a virtual classroom with facilitated activities such as synchronous chatting, recording and group discussion in breakout rooms. Its presentation window affords the use of interactive whiteboard, screen sharing, and video conferencing, which enables peer collaborations and interactions (Chen et al., 2019; Tonsmann, 2014). The third participant was equipped with Microsoft Teams, a cloud hub for teamwork which compiles chats, meetings, calls, files and Office 365 apps into a single Learning Management System (Martin & Tapp, 2019; Microsoft Teams, 2020). The fourth participant was initially offered both Microsoft Team and Zoom – another video-conferencing cloud platform allowing online team collaboration through audio, video and text-based chat (Zoom Video Communications Inc., 2020). Zoom later became the only official channel for synchronous teaching. The last participant was instructed to use Zoom as the sole software platform for online teaching.

In addition to all the functionalities of Blackboard Collaborate and Microsoft Teams, an advantage of Zoom is that users do not need a unique username or account. Students can gain access to a synchronous class session simply by clicking a link sent by their teachers. Generally, these software platforms tend to facilitate most of the pedagogical activities that a traditional face-to-face class on campus would possess. The following analyses are based on the common threads identified within the five pieces of self-reflective writing, although there may be small, coherent patterns across the data set.

## 5.1 Technology affordances

All five participants state that their home universities compiled a series of online guides and training courses for staff to assist in their remote teaching. Due to the short amount of time available to transfer all pedagogical practices into a virtual classroom, Lan, Zhu, and Song point out that the technological training on the synchronous teaching platform was rather basic. Some useful tools for encouraging peer online interactions, such as dividing into groups, were not introduced to them, though they learned them through self-study or from peer teachers. Two issues can be identified from this experience, especially in order to cope with teaching Chinese characters online.

The first is the skills needed for online language teaching. Hampel and Stickler (2005) indicate that online language tutoring skills should be in a hierarchical order, with the most general competencies at the foundation to form a broad base supporting individual and creative skills at a higher level. Therefore, they propose a seven-tier skill pyramid to clarify this one-build-on-another structure. The first three competencies that online language teachers need are all technology-related: (a) basic ICT competence, (b) specific technical competence in the software, and (c) dealing with the constraints and possibilities of the medium.

The first competence includes skills that people usually possess in the digital era, such as the ability to use a networked electronic device and its applications, including word processor, audio and video replay, etc.; the second refers to the necessary skills for specific software platforms. Only when these two competencies are consolidated are language teachers able to “deal with [the] constraints and affordances of the particular software they are using” (Hampel & Stickler, 2005, p. 317). Apparently, the basic training provided to the three CFL teachers was not sufficient enough to develop essential skills for online Chinese teaching using the newly introduced platform, not to mention teaching Chinese script, which is different to other alphabets. In addition, Lan and Song clarify that the training was rather basic due to the fact that the IT support team also had little time for preparation and so compiled supporting resources for all, rather than in a subject-specific manner. If CFL teachers have not developed the competence needed to fully explore the potential of a virtual classroom platform, it is rather unrealistic to expect them to adopt and adjust any technology affordances for CFL online teaching in general or for teaching Chinese characters specifically.

Secondly, the narrative writing either explicitly (Lan, Zhu, and Song) or implicitly (Mei and Jü) indicates the importance of interaction. For example, Lan states her enthusiasm for learning “how the platform could help us to maintain the interactive elements [in online teaching],” while Mei expresses concern with the loss of interaction with students in teaching characters: “I found it extremely difficult to not be able to correct any errors in stroke order in real time.” Zhu even spells out that “the interaction has been restricted to 1-on-1” in the virtual classroom.

Indeed, a few scholars have emphasised online interaction and proposed materialising it through online collaborative tasks and learning community-building (Compton, 2009; Hampel & Stickler, 2005; Sun, 2011). However, except for grouping students to allow pair- or team-work, very little is mentioned in the narrative writing regarding exploiting the potential for software to enhance online interaction and foster a learning community and socialisation for Chinese character acquisition.

When we need to move everything online without time for design and preparation, we can just pick the essential part [of the course content]. I'd think [about] how to design the character teaching during the summer break [sic] in the online environment. (Jü)

I am tired of receiving this information [i.e. guides and training courses for online teaching], to be honest, as we are all trying to cope with the sudden shift from physical classroom to virtual classroom in a very short time. It is not possible to be 'brilliant' in the online courses overnight, instead, we are just trying to 'survive' in the online teaching. (Song)

The above writing might express a certain amount of frustration with the challenges for teachers in delivering online classes under time pressure. Although a range of guides and online courses from relevant departments in each university (e.g. the IT or Teaching and Learning Unit) were supplied to assist online teaching, the almost overnight classroom-turned-online reality did not allow these CFL teachers to explore the full potential of the software platform and then design and adjust their pedagogy for Chinese script accordingly. When the common teaching practices of Chinese characters (demonstrating character writing by hand, providing instant feedback to students' handwriting, etc.) in a face-to-face class became impossible in a virtual class, they had to compromise and use whatever method was effective for achieving teaching goals.

Furthermore, the virtual classroom has to operate during the pandemic – a time in which any business that can go online has gone online, requiring that employees work from home. Mei, Zhu, and Song mention that even basic technology expectations, such as Internet connectivity and sufficient bandwidth from both the teacher's and the students' end, were not always met, leading to problems for synchronous teaching. The new reality of working from home probably made practical and immediate IT support inaccessible, which leads to another constraint – that of equipping CFL teachers with full awareness of and competence in the technology affordances. A number of previous studies have already stated the indispensability of adequate training for online language teachers (Chen et al., 2019; Hampel & Stickler, 2005; Kear et al., 2012; Kessler, 2006; Tseng, 2017). As Jü's writing suggests, the coming summer might be a good time for such training.

## **5.2 Difficulties in teaching Chinese characters online**

Teaching Chinese characters online is generally deemed difficult by all five CFL teachers. Two of them, Mei and Song, had direct experience in such a practice due to their teaching focus, while the other three (Lan, Zhu and Jü) either encountered the difficulties when conducting general language exercises with students, or learned about the difficulties from peer colleagues when coordinating online Chinese language courses. The main difficulty of teaching Chinese characters online lies in the lack of technology affordances for handwriting and prompt interactions.

It is extremely challenging, if not impossible, to use a mouse to 'write' characters, even though the software platforms usually contain a 'whiteboard.' This challenge is not unique to Chinese character writing. Tonsmann (2014, p. 57) also says "it was time-consuming and took more steps than was practical" to draw mathematical equations in a virtual classroom. However, some affordances of the software platforms were used to assist in teaching characters. For instance, Mei used "gifs [an animation] to demonstrate the correct stroke order"; Lan enabled the "'share my screen' [functionality] of Collaborate Ultra [...] so that they would have [seen] the visual parts of Chinese characters." A similar practice is also found in Zhu's narrative. However, these practices are very time-consuming and do not allow teachers to keep track of students' learning:

Teaching Chinese characters online was perhaps the most challenging aspect throughout my experience. [...] I therefore used gifs to demonstrate the correct stroke order and talked my students through the strokes as I would have in [physical] class. This enabled them to have some familiarity with previous learning tools but made it almost impossible for me to track their learning of characters in real time as per a physical classroom. (Mei)

And using websites to show orders of strokes is more time-consuming than simply writing it on the whiteboard in factual [physical] classrooms. (Lan)

[...] find it [teaching characters] very difficult as they [CFL tutors] couldn't see what the students were doing on the other side of the screen. [...] I think we need to discover a platform/method where students can show their work and the teacher can feedback or correct simultaneously. (Zhu)

Teaching characters is actually one of the challenges and issues for my online teaching. I didn't find the right tool/software/platform that facilitate[s] the writing in online class. All the existing resources are useful for the demonstration, but it's still difficult to use them to teach/monitor the handwriting [...] Basically there was no character teaching content in the online class, both due to the technological and the time limitation. (Jü)

Since I cannot 'write' characters in a neat and timely fashion on the whiteboard built in the Zoom platform, I decided to give up demonstrating how to write characters to save time for other kinds of writing exercises. This indeed leads to the fact that I don't know if they [students] can write the newly learned characters correctly or not, at least not until they used the characters in a text composition submitted at a later stage. (Song)

The problems caused by the prolonged process of drawing characters are consistent with those of writing mathematical expressions. Therefore, "a lot of patience from all class participants" is needed and the process could be improved by the use of touch screens (Tonsmann, 2014, p. 57). Mei and Song also mention the possibility of using a tablet and stylus to write characters, but this would only mitigate the issue from the teacher's end unless students had access to the same technology so that their learning of characters could be monitored effectively. Nevertheless, Mei maintains that "this is probably too much to ask of students," even if only taking into account the financial investment needed.

Pedagogical practices that positively contribute to teaching characters online can also be identified in the narratives. Mei and Song indicate that the character teaching was delivered in a relatively structured way, while Lan explicitly stresses the usefulness of breakout rooms for student interactivity:

[...] I made sure to reiterate the stroke order and remind students of when we had previously learned certain characters [...]. I also instructed my students to write out the dialogues/other oral exercises conducted during the online class so that they could perhaps make up for any time lost to spend learning the characters. Finally, I pointed them in the direction of different apps [...] that tests[sic] character learning in different ways. (Mei)

I usually started my class by providing feedbacks[sic] to their text composition in the previous week, and then moved into the new content. [...] Each time when I introduced a new grammar,

in order to practice character writing, I asked the students to practice the grammar by creating new sentences in writing and even asked them to share their writing in a group. (Song)

The interactive elements of the face-to-face class were maintained in the way that the students could be divided into groups to complete pair and group tasks. [...] The students enjoyed communicating in different groups and practicing and learning from different classmates. (Lan)

The positive practices are in line with previous research findings. Shi and Stickler (2018) indicate that a structured approach for a beginner level language course can contribute to effective learning, since learners are able to devote all their attention to language production, especially in the case of CFL beginners with a limited command of the language. Even a rather old-fashioned teaching structure like Presentation, Practice, Production (PPP) has been found to be conducive to Chinese speaking (Shi & Stickler, 2018).

Furthermore, learners are likely to be comfortable and confident when interacting in a small group (Brown & Adler, 2008; Kear et al., 2012; Tonsmann, 2014), ideally of two to four students (Sun, 2011). As mentioned earlier, learning Chinese characters require labour-intensive manual practices and seemingly endless memorisation of character pronunciation in order to facilitate pinyin typing. Although these exercises can be completed through self-study, success in language learning still lies in engaging learners with communication through peer learning, class and task participation, and instant or at least timely feedback.

However, as mentioned in 5.1, synchronous teaching does not necessarily allow prompt teacher-student or student-student interaction. Both Zhu and Song state that students were unwilling to turn on their cameras and most even preferred to mute their microphones in the virtual classroom – the upside of this can be that less use of video means less bandwidth is required, improving the quality of live streaming. Also, the software platforms can only display a limited number of student images on the screen, usually showing the faces of whoever has spoken most recently. Zhu mentions that the online class lacks “the feeling that you were teaching towards the whole class” and “there was no immediate or instant response/reaction from the students.” In other words, in addition to the issue of technology affordances for online interaction, student behaviour also has an impact on the effectiveness of online teaching, as is further discussed in the next section.

### **5.3 Observations of student learning**

Four of the five participants provide their observations of students' experience of online classes, which is generally positive. Zhu mentions it in reference to online CFL teaching in general, while Mei, Lan, and Song directly link it to the teaching of Chinese characters. A common feature of the relatively satisfactory experience of students seems to be that the virtual class began towards the end of the second semester – a time when CFL beginners have already acquired a substantial number of Chinese characters and developed a foundation in learning them. That is to say, notwithstanding all the pedagogical challenges described above, the comparatively short time spent learning in the online environment and existing knowledge of the script contributed to this overall positive experience. In particular, CFL learners who have been studying for longer may have developed some learning strategies to acquire these characters, which they can then also apply to the online study of Chinese script.

A virtual classroom also entails issues of classroom management which might be similar to those encountered in other learning environments but must be dealt with differently due to the change in teaching modality. For example, regarding attendance, Mei and Song mention that synchronous

teaching can be automatically recorded, so that students who miss a session – whether for personal reasons or due to faulty connections – have asynchronous access to the recorded lectures.

Interestingly, Lan, Zhu, Jü, and Song all bring up the reluctance of students to engage in whole-class communication during a synchronous session, which has also been identified in previous literature (Chen et al., 2019; Guo & Möllering, 2016; Kear et al., 2012; Rogers, 2011). This is mostly demonstrated in the following ways in a virtual classroom, according to the participants' narratives: students a) disable their cameras and microphones, b) only ask questions via text-based messaging on a one-to-one basis with the teacher or after being divided into smaller groups, c) engage in activities only when necessary. One possible reason for this use of text-based messages might be the uniqueness of the Chinese script. Because of the unreliable association between the sound and the visual representation of a Chinese character, text chat can provide visual assistance for Chinese character learning.

However, this overall reluctance may stem from self-consciousness and a lack of trust-building in the virtual classroom established overnight. The sense of trust is actually two-fold. First, as mentioned already, there are similar expectations of classroom management when teaching is shifted from face-to-face to online. 'Netiquette,' proposed by Hampel and Stickler (2005, p. 318), shows the reasonable behaviour expected from students when constructing an online "socialisation of students into a cohesive group of online learners," which is similar to the etiquette implemented in a physical classroom. This may include, for example, behaving in a non-violent manner, showing respect to each other and to the teacher, attending to class content and engaging with activities, etc.

Secondly, because of the absence of the social interaction that naturally occurs during face-to-face encounters, online language teachers need to develop different skills to facilitate the formation of "a sense of community, a group feeling or an atmosphere of trust and confidence" in an online learning group (Hampel & Stickler, 2005, p. 318). As suggested in previous research (e.g. Bower et al., 2014; Chen et al., 2019; Stickler et al., 2005), individual teaching styles and strategies such as turn-taking play a crucial role in encouraging student interactivity and enhancing learner community building.

While it might be comparatively easy to achieve the first step, especially for an experienced CFL teacher, it takes time, training and substantial practice to progress into the second stage and build the essential pedagogical skills and specialised knowledge to support trust- and community-building in an online environment for Chinese character sessions. In addition, training is also needed for students to familiarise themselves with the software platform for effective online learning (Tonsmann, 2014) and to be aware of their responsibilities on an online course (Compton, 2009). This is particularly the case for a CFL beginner course, during which learners need to lay a solid foundation of character knowledge for a script that is significantly different from the alphabetic scripts that they are familiar with. It is possible for a learning community to fail to be established due to large group activities becoming unmanageable (Sun, 2011). As learners are key stakeholders in a virtual classroom, training is essential in order to boost their autonomy and allow them to develop a sense of ownership of online learning (Compton, 2009). However, preparation and class time are needed for such training, and, like any community, an online learning community requires time to mature. This required time, of course, was not available to the CFL classes hastily transferred online.

## 6 Conclusion

The paper employs narrative inquiry to scrutinise the experience of five CFL teachers delivering online classes with a focus on Chinese character teaching during the coronavirus pandemic. While the overnight transfer of courses from the classroom to an online environment did indeed pose a number of challenges to the teaching of characters, this study reveals practices that attempt to find a balance between the common and the effective in the virtual classroom. For example, when the common practice

of demonstrating how to write characters by hand was unfeasible, animation programs and technology were used to show a character's stroke order. This study also finds that a structured approach seems to benefit the teaching of Chinese characters. The structured approach can consist of three components: a) a structured class design and/or structured tasks and activities, b) existing knowledge of Chinese script and previous learning strategies for structuring further character acquisition, and c) a structured classroom management, including a protocol for using microphones and cameras, a system of turn-taking and other forms of 'netiquette.'

A few universities around the world have planned either hybrid or remote delivery of academic programmes in the Autumn 2020 semester, such as King's College London in the UK (KCL, 2020), Harvard University in the US (Harvard University, 2020), McGill University in Canada (McGill University, 2020), and National University of Ireland Galway (NUI Galway, 2020). Because of the time needed to create a vaccine and to bring the coronavirus completely under control, this integration of the online environment into the academic structure will probably be the norm in the academic year to come. As a result, it is clearly important to learn from the CFL online teaching experience during the Covid-19 peak. Building upon the findings of this study, it is worth considering the following recommendations for future online teaching of Chinese characters.

At the micro level, in addition to the use of animation to show stroke order, knowledge of Chinese characters should be explicitly incorporated into online teaching. The contributing effect on character learning of the study of the etymological formation of characters has been particularly emphasised in previous research (Shen, 2011; Wu, 2016; Zhan & Cheng, 2014). Furthermore, CFL teachers will face a cohort of complete beginner learners with no pre-existing knowledge of the Chinese language. It is therefore necessary to introduce the new script to CFL beginner learners from both the analytic (stroke-by-stroke) and the holistic (character knowledge) perspective.

At the macro level, training for both teachers and students is vital. Incoming first-year students will not know each other or their teachers. As a consequence, extra effort will be needed to build a learning community and a sense of trust, in order to allow the student-student and student-teacher interactivity and communication which is key to successful language learning. As found in this study, there was barely any time for such training when teaching was recently and suddenly transferred online. However, there will be approximately three months before the start of the new academic year, which seems to be an ideal window for such training and preparation.

The current study is indeed small in scale, concentrating on the experiences of five CFL teachers in two countries. Its primary focus on teaching Chinese characters may overlook other aspects of CFL pedagogy in a virtual classroom. Nonetheless, it is a rapid response to the new challenges derived from an unprecedented teaching experience. While time and resource constraints seem to be the main causes of difficulties when adopting common pedagogical practices to allow effective teaching and learning, it might be too soon to assume that online teaching will run smoothly after sufficient training and preparation. The attempt to balance the common and the effective may continue to be needed as we advance our understanding of teaching in an online environment.

## **Appendix**

### **Prompt Questions for the Self-narrative Writing**

- Technology provided and technical skills. For example,
  - Which platform and software did your employer (i.e. the university you are working for) provide to you for the online teaching?
  - What kind of training and/or support were you given to use this platform and software?
  - What is your experience of using the platform / software to teach online?

- Significant differences and similarities between face-to-face and online teaching of Chinese characters, specifically for first year students/beginner learners. For example,
  - How did you teach Chinese characters online? E.g. What pedagogical activities did you design specifically for teaching characters online? To what extent can the platform and software be used to design and carry out these activities?
  - What are the main difficulties and challenges you experienced when teaching Chinese characters online?
  - What are the benefits of teaching Chinese characters online?
- Strategies and techniques to facilitate online Chinese character learning. For example,
  - How do you find your students coping with learning characters online?
  - When you look back to the online teaching of Chinese characters, what would you do differently and why?

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