Emergency online Chinese language teaching at the tertiary level: Results of a survey of teachers in Austria, Germany, and Switzerland

LIN Chin-hui 林欽惠

Abstract

Based on an online survey of 42 university Chinese language teachers from 19 higher educational institutions in Austria, Germany, and Switzerland, this study aims to document and examine teachers' experiences and perceptions of online teaching during the first emergency online semester (spring to summer 2020). The scope of investigation includes digital tool use before and during the pandemic, problems teachers encountered in a remote setting, what they regarded as positive and negative about online teaching, and whether their online teaching experiences will influence their future teaching. Furthermore, challenges of online assessments and handwriting skill teaching during this semester will also be discussed.

Keywords: online teaching, teacher perception, digital tools, Covid-19

1. Introduction

The outbreak of Covid-19 pandemic in spring 2020 has had an enormous impact on global education. Educational institutions were faced with the challenge of shifting from the original face-to-face teaching mode to *emergency online teaching* (ERT, Hodges et al. 2020), which was at first regarded as a temporary solution during the crisis (Golden 2020). However, with the pandemic situation steadily worsening, this temporary teaching mode seems to be gradually becoming the "new normal". At the moment, no one is certain how long the current situation will last; maybe one more semester, maybe even longer. It could also be expected that, even after we've finally returned to the classroom, the experiences gained from the online learning semesters will exert a lasting influence on our methods of teaching. To enrich our future teaching, it is thus necessary to examine the experiences of the first online semester during spring and summer 2020 (hereafter: summer term of 2020) from the perspectives of students and teachers.

¹ Acknowledgements: The author would like to express the deepest gratitude to all the 45 participants who responded to the survey and kindly shared their experiences.

Although many studies regarding emergency online teaching at tertiary level with specific focus on Chinese language teaching have been conducted by scholars worldwide since spring 2020 (e.g., Wang and East 2020; Gao 2020; Liu, Wang and Zhan 2020a, 2020b; Zhang C. 2020), comparable studies with a focus on university Chinese language learners and teachers in the German context are still missing. In order to fill in this gap, I previously investigated student perceptions of the first emergency online semester at a German university (Lin forthcoming a), whereby data was collected through an online end-of-term survey of 39 BA students from all levels. In this article, I will focus on the teaching situation at the tertiary level from the perspective of teachers. The findings are based on another online survey distributed to university Chinese language teachers in three German-speaking countries (Austria, Germany and Switzerland) in November 2020. The plan and design of this survey was inspired by Liebau-Liu (2020), who conducted a smaller scale survey in summer 2020.

The principal objective of the current study is to investigate and report on the general situation of teaching and testing Chinese at the university level during the first emergency online semester. It intends to identify general challenges of online teaching in three countries where German is the medium of instruction and to discuss challenges specific to online Chinese language teaching.

2. Background and Method

Around 30 universities (*Universitäten*) and colleges (*Fachhochschulen*) in these three countries currently offer Chinese language courses as part of BA and/or MA degrees in China-related studies (FaCh 2020). Most of these programs provide Chinese language courses for BA1 and BA2 levels (i.e., the first four semesters) with an average of 8-10 contact hours per week. Before the pandemic, these courses were generally taught on a face-to-face basis (see 2.3). Like many other university courses worldwide, after the outbreak of the Covid-19 pandemic all kinds of Chinese language courses suddenly had to be taught online.

Since language learning at universities is usually consecutive, especially in the first four semesters, the question of how to design effective online teaching that also allowed for a smooth transition became the first challenge for all university Chinese language teachers. Most of the teachers were unprepared for the abrupt change. As Russell (2020: 339) indicates, they simply "did not have sufficient time to transition to online or remote teaching". Due to time restrictions they had to make "compromises in planning and implementing online teaching" (Zhang C. 2020: 48). Under tremendous pressure, teachers struggled to mobilize available resources and search for technical

and administrative support in order to ensure a smooth course implementation.

A successful online-class implementation and teachers' pedagogical and digital competences are obviously interrelated. Regrettably, the scope and degree of pedagogical digital competence of German university teachers are scarcely investigated in previous studies (Riplinger and Schiefner-Rohs 2017), not to mention university Chinese language teachers. Some relevant data may be drawn from Lin (2016), who examines the working experiences of 20 Taiwanese pre-service Chinese language teachers at six German universities. Roughly two thirds (65%) of her respondents reported that multimedia in class teaching was used less frequently in Germany than in Taiwan. One respondent reported that "most teachers do not use PowerPoint very often but handouts." The inadequacies of facilities such as "no multimedia classrooms", and that "not all the classrooms were equipped with a projector" were also pointed out by a few teachers (ibid.: 84). The research scope of Lin (2016) is limited to six universities, a more recent and larger-scale study is therefore necessary.

The second challenging aspect of the online semester was online assessments. Before the pandemic, to better test the students' mastery of basics of the Chinese language, it was not common to offer an "open-book" exam at the beginner and lower intermediate levels (i.e., BA1 and BA2). Final grades depended to a large extent on written, closed-book, on-campus exams. During the pandemic, a significant amount of these exams needed to be implemented online, adding a layer of complexity to considerations of student assessments. Apart from the laborious process of redesigning and converting the exam to an online format, ensuring fair conditions for all students was another major concern of many teachers. Compared to on-campus assessments, online assessments increase the possibility of academic dishonesty (Olt 2002), as participants may easily copy a text and have them effortlessly recognized or translated online, if appropriate technical controls are unavailable. On the other hand, the need for the protection of students' privacy reduces the possibility of exam invigilation, which is an essential method to prevent cheating. In either case, teachers were heavily burdened by searching for reasonable methods to have the exam implemented fairly.

Moreover, issues surrounding handwriting in the online teaching mode were a constant struggle for many teachers. Learning to handwrite characters is known for being one of the major challenges of learning Chinese. Before the pandemic, the importance of handwriting competence was heavily stressed at most regular Chinese language programs at German universities. Handwriting is crucial in the teaching practice as well as in exams, especially at beginner and lower intermediate levels. Some programs even offered special courses on a weekly basis in order to improve students' competence in character recognition and writing. Previously, character writing could easily

be presented, monitored, and discussed in a face-to-face, on-campus setting. Online formats make it much more difficult for the teachers to keep an eye on students' writing. "Handwriting" characters online with a mouse is not easy, albeit not impossible. Still, it is not efficient when a teacher needs to present many characters in a natural fashion, because the mouse is somewhat hard to control. It has been pointed out elsewhere that, without adequate facilities such as a writing pad or a tablet, handwriting online is extremely challenging, both for teachers and students (Wang and East 2020; Zhang Q. 2020). In Zhang Q. (2020), teachers recounted how they had coped with the challenges by using gifs or websites to demonstrate the stroke order and voiced their hope of finding a good method or a platform to monitor student's handwriting. One teacher admitted to having given up on demonstrating character writing in class because a "neat and timely fashion" of writing on the online whiteboard could not be found (ibid.: 27).

2.1. Research questions

To explore the aforementioned challenges and issues that university Chinese language teachers are confronted with, and to gain a better understanding of the situation during the first emergency online semester (i.e., summer term 2020) in the German context, four research questions were asked:

- 1. What were the teaching mode(s) and digital tool(s) used *before* and *during* the summer term of 2020 at universities and colleges in Austria, Germany, and Switzerland?
- 2. Which problem(s) did teachers encounter during the summer term of 2020? What were the teachers' experiences and perceptions of online teaching?
- 3. What are teachers' opinions about future course adjustments when the universities reopen?
- 4. How was Chinese handwriting implemented in class teaching and examinations during the summer term of 2020?

2.2. Data collection and analysis

In November 2020, the link to an online survey was distributed via email to Chinese language teachers at China-related degree programs at the tertiary level in Austria, Germany and Switzerland. In order to make the results comparable, two prerequisites were established: (1) a participant needs to have taught during the summer term of 2020 and have prior teaching experiences at universities; (2) the degree program in which the participant works needs to offer regular BA1 and BA2 Chinese language courses (4 semesters). The survey was formulated in Chinese language and was designed using Likert-scale questions, multiple-choice questions and open-end questions. Partici-

pants could answer in German, English or Chinese. Altogether 42 valid responses out of 45 from 19 institutions were collected. The survey was anonymous with the possibility of leaving contact information if one was willing to be contacted for further questions and receive the preliminary results of the survey. An approach of quantitative data analysis was then adopted. Written feedback from individual participants will be presented thematically in the following sections so as to provide a better understanding of what university Chinese language teachers in the German context actually perceived during this online semester. It should be noted that the written feedback quoted in this paper was originally given in Chinese or German and has been translated into English.²

2.3. Participants

Among the 42 participants, 35 were local teachers (full-time or part-time), seven were guest teachers employed through the Hanban project or Taiwan Ministry of Education exchange programs. Eight are German natives and 34 are Mandarin natives from mainland China or Taiwan. The age groups were: 20–29 (1), 30–39 (18), 40–49 (4), 50–59 (16), and above 60 (3). During the summer term of 2020, 31 teachers taught beginner courses (first or second semester), 26 teachers taught lower intermediate courses (third and fourth semester), and 24 teachers taught intermediate courses (fifth semester or higher). Their home institutions are listed as below:

- 1. Albert-Ludwigs-Universität Freiburg, Institut für Sinologie (hereafter: Uni Freiburg)
- 2. Eberhard Karls Universität Tübingen, Seminar für Sinologie (hereafter: Uni Tübingen)
- 3. Freie Universität Berlin, Ostasiatisches Seminar (hereafter: FU Berlin)
- 4. Georg-August-Universität Göttingen, Sinologie Göttingen, Ostasiatisches Seminar (hereafter: Uni Göttingen)
- 5. Hochschule Bremen (hereafter: HS Bremen)
- 6. Humboldt-Universität zu Berlin, IAAW (hereafter: HU Berlin)
- 7. Institut für Ostasienwissenschaften der Universität Wien (hereafter: Uni Wien)
- Johann-Wolfgang-Goethe-Universität Frankfurt am Main, Fachbereich 9
 Sinologie (hereafter: Uni Frankfurt)
- Ludwig-Maximilians-Universität München, Institut für Sinologie (hereafter: LMU)
- Ostasieninstitut der Hochschule Ludwigshafen am Rhein (hereafter: HS Ludwigshafen am Rhein)

² Due to space restrictions, the original written feedback and survey are not included here.

- 11. Rheinische Friedrich-Wilhelms-Universität Bonn, Institut für Orientund Asienwissenschaften, Abteilung für Sinologie (hereafter: Uni Bonn)
- 12. Ruhr-Universität Bochum, Fakultät für Ostasienwissenschaften (hereafter: Uni Bochum)
- 13. Ruprecht-Karls-Universität Heidelberg, Zentrum für Ostasienwissenschaften (hereafter: Uni Heidelberg)
- 14. Universität Leipzig, Ostasiatisches Institut (hereafter: Uni Leipzig)
- 15. Universität Trier, Fachbereich Sinologie (hereafter: Uni Trier)
- 16. Universität zu Köln, Ostasiatisches Seminar (hereafter: Uni Köln)
- 17. Universität Zürich, Ostasiatisches Seminar (hereafter: Uni Zürich)
- 18. Westfälische Wilhelms-Universität Münster, Institut für Sinologie und Ostasienkunde (hereafter: Uni Münster)
- 19. Westsächsische Hochschule Zwickau (hereafter: HS Zwickau)

Before the pandemic, 95.2% of the respondents (count=40) taught on a face-to-face basis, while one teacher taught fully online due to personal circumstances, and one teacher taught partly online, partly offline. During the summer term of 2020, 90.5% of respondents (count=38) taught online, and 4 teachers (from 4 different institutions) taught partly online and partly offline.

3. Findings and discussion

The findings are presented and discussed according to the following six themes: (1) digital tool use before and during the summer term of 2020, (2) familiarity with online teaching, (3) teachers' personal experiences and perceptions of online learning, (4) teachers' opinions about future course adjustments and (5) issues of handwriting and (6) assessments.

3.1. Digital tool use before and during the pandemic

When asked to roughly estimate the frequency of digital tool use before the pandemic, 73.8% (count=31) of the teachers indicated that they *always* or *often* used digital tools in class. Table 1 shows the participants' preferred teaching aids. Interestingly, among the most frequently used aids, non-digital paper handouts/lecture sheets were still the most favored option (37). In terms of digital tools, *MS Word/Pages* (32) and *MS PowerPoint/Keynote* (31) were the favorites. Audio/video materials (30) were also preferred by many teachers. Google Tools, apps and gaming sites were not used frequently.

Table 1: Class teaching aid/tools used before pandemic

Always Often Sometimes Seld

	Always	Often	Sometimes	Seldom	Never
Paper handouts/lecture sheets	17	20	4	1	0
MS Word/Pages	21	11	0	5	5
MS PowerPoint/Keynote	22	9	6	1	4
Audio/video materials	13	17	6	5	1
Google Tools (Google Docs/ Forms/Slides)	4	4	5	9	20
Apps	2	6	13	7	14
Gaming sites	1	3	7	10	21

Source: Author's own compilation.

During the summer term of 2020 Zoom was the most frequently used online teaching platform. Some universities provide more than one platform for teachers and departments to choose from. Other platforms used for teaching. testing, or course management included: Moodle, BigBlueButton, WebEx, Microsoft Teams, OLAT, ILIAS, and Blackboard. As for the digital tools, MS PowerPoint/Keynote (29), YouTube videos or similar video sites (28), and MS Word/Pages (24) were still favored by many teachers. Some functions offered by the online platforms such as *Breakout room* (28) or *Polls* (14) were also common choices. Around one fourth of the teachers used *Quizlet* (11) and Google Tools (10). Among these tools, 15 teachers indicated the Breakout room function was most helpful, whereas 17 respondents indicated that online teaching platforms (Zoom, MS Teams, BigblueButton, jitsi) were helpful without pointing to any specific functions. Furthermore, during the summer term of 2020, 73.8% of the teachers (count=31) had designed additional out-of-class exercises or provided additional self-study resources to compensate for possible deficiencies in online teaching, while only 16.7% of the teachers (count=7) ever created instructional videos for students to watch before or after class.

Google Tools were unexpectedly less favoured by the teachers, given the fact that they are free and user-friendly, and can easily enable classroom flipping as well as student collaboration in or outside of the classroom (Ebadi and Rahimi 2017; Lin 2018; Lin forthcoming b). Lin, Liu and Hu (2017: 10) indicate that teachers will be less inclined to use technology if "using a certain technology may cause problems". Considering that in Germany the misuse of data has always been a prevalent concern due to its historical background (Kerres 2020: 691–692), it can be conjectured that some teachers (or their students) may have concerns about privacy issues associated with free online tools.

3.2. Familiarity with online teaching

Despite the fact that more than 70% of the teachers always or often used digital tools in class teaching before the pandemic, 61.9 % of the teachers (count=26) stated that they were not at all or not very familiar with online teaching. This is understandable, as using some digital tools in class teaching and teaching everything fully online are quite different matters. In the latter case, teachers not only have to accustom themselves to one or new online platforms, but also need to achieve sufficient digital competence in order to solve technical problems in class and ensure teaching efficacy. This also echoes what Gao and Zhang (2020) observe with regard to EFL teachers during the pandemic: "teachers were familiar with teaching methods in face-to-face delivery in classrooms before the abrupt breakout of COVID-19 and their information technology literacy was limited to the integration of digital equipment into classroom teaching, with little knowledge and skills for online teaching."

3.3. Personal experiences and perceptions of online teaching

In this section I will present problems teachers encountered during this online semester as well as their views on the pros and cons of online teaching.

3.3.1. Problems

The main problems teachers encountered during the summer term of 2020 can be divided into three categories: heavy workload and resulting health problems, difficulties related to technical problems or insufficient digital competence (such as unstable internet or unfamiliarity with new technology), and difficulties with class teaching or class management in a remote context (such as the dull atmosphere in class, students were distracted).

Table 2: Problems teachers encountered	l during the summer term of
2020	

Problems	Percentage	Count
Unstable internet	83.3%	35
Physical discomfort from increased time spent working in	61.9%	26
front of a computer		
Unable to see the students because their cameras were not	61.9%	26
turned on		
Redesigning the online examination format was laborious	57.1%	24
Converting the original course materials into a suitable for-	54.8%	23
mat for online teaching was laborious		
Students were easily distracted	50.0%	21
Difficulty with correcting assignments online	47.6%	20

Problems	Percentage	Count
Problems with computer equipment	42.9%	18
Unfamiliarity with technology, such as how to record videos,	42.9%	18
how to use the features of teaching platforms, etc.		
The classroom atmosphere was not as good as before and	42.9%	18
was rather dull		
Learning to use new technologies and tools was laborious	35.7%	15
Difficulty in teaching the skill of handwriting Chinese char-	33.3%	14
acters		
Teacher-student interaction was not smooth	33.3%	14
Students cheated during online exams	33.3%	14
Lack of support from the school (e.g., funding, equipment,	28.6%	12
etc.)		
Higher dropout rate than in previous years	16.7%	7

Source: Author's own compilation.

In table 2, the problems are sorted according to percentage (high to low). The most serious problem which more than 80% of the teachers encountered was unstable internet. This is to be expected, as Germany is well known for its weak digital infrastructure and bad internet connections, especially in rural areas (Carrel 2018; Wamsley 2019). Liebau-Liu (2020) states that 90% of the respondents (university Chinese language teachers in Germany) have encountered technical problems. Apparently this problem is not one-sided. In Lin (forthcoming a), students also complained about the insufficient internet speed with the following remarks: "internet in Germany is often not sufficient for online teaching," "I live in a small village and the internet is not really fast, so there are often problems." Technical problems encountered by any of the course participants would definitely affect overall class teaching. Apart from malfunctioning internet connections, more than 60% of the teachers also suffered from physical discomfort due to excessive workload. This workload can be considered a predictable consequence resulting from the need to redesign course materials (54.8%) and exam formats (57.1%) and from dealing with other issues that arose during this online semester.

Another significant problem is that students would often not turn their cameras on (61.9%), either due to bad internet connections or personal privacy concerns. Hurd (2005: 143) states that distant learning has an "inherently non-social nature". Furthermore, Ebner and Greenberg (2020: 538) indicate that the range of nonverbal cues (such as facial expressions, body positioning and gestures) conveyed in videoconferencing is "more limited than in a face-to-face setting, owing to our partial view of our counterpart". When student cameras were turned off, the already limited interaction would be further weakened due to the loss of the nonverbal cues of in-person communication. This will unquestionably lead to a loss of concentration from the students' side and create difficulties for teachers to retain students' attention (50%). It

needs to be emphasized that students having their cameras off has a considerably negative impact on teaching, especially for language teaching, which relies to a large extent on interpersonal communication, including facial expressions and gestures. As Zhang C. (2020: 44) argues:

Direct eye-contact, an encouraging smile and a friendly nod does wonders for both teachers and students alike. These simple moments connect two individuals emotionally and adds to the experience of being human. The uniqueness of feeling cared for and noticed cannot be replaced by computer emojis. This is the authenticity of human interaction and the originality of language teaching and learning.

Moreover, when students' cameras are turned off, it is very difficult for a language teacher to monitor students' learning performance in class, which may lead to language teachers' frustration and uncertainty.

3.3.2. Positive and negative aspects of online learning

Table 3 and 4 list the advantages and disadvantages teachers associate with online teaching. In terms of the advantages, more than 85% of the respondents agreed that the experience of online teaching developed their digital competence. Saving commuting time has also been considered positive. From the perspective of students (cf. Lin forthcoming a), the very same argument was also considered to be one the greatest merits (64.1%).

Table 3: Advantages of online teaching

Advantages	Percentage	Count
Developing my ability to use digital tools	88.1%	37
Saving commuting time	83.3%	35
Environmentally friendly (less paper materials)	69.0%	29
Teaching materials could be stored and filed digitally, which	57.1%	24
is convenient		
Developing my ability to plan classroom activities	52.4%	22
Increased opportunity to use different forms of assessment	47.6%	20
Easier to coordinate classroom management online. (e.g.,	33.3%	14
assignment correction and return, submission of assignments,		
etc.)		
Higher attendance	28.6%	12
More interaction with students outside the classroom	9.5%	4
I could keep track of my students' learning progress better	9.5%	4
The atmosphere in class was more relaxed and students were	7.1%	3
more active		

Source: Author's own compilation.

Significantly, 69% of the teachers agreed that online teaching is environmentally friendly as the digitized course materials could be conveniently stored online (57.1%), without having them printed out. One teacher added:

The learning outcome can be retained in a digital form and used later as an example for other students or in pedagogical exchange with other teachers (if students agree); students might then also feel a sense of accomplishment.

More than 50% of teachers confirmed that online teaching has improved their ability to plan classroom activities. One teacher observed that some students were more relaxed when the camera was turned off. This observation is in accord with some previous studies which claim that the distant setting is of benefit for some learners in reducing anxiety (Hampel et al. 2005; Hauck and Hurd 2005; Hurd 2007).

Additionally, one teacher indicated that the online teaching may to some extent break the barrier between students:

I find that teaching via Zoom also has the positive effect that the groups in the breakout sessions are always put together differently or that I even manually divide them up differently. In face-to-face classes, some pairs or groups always sit together and are less open to others.

With regard to the disadvantages of online teaching, the additional workload and resulting health problems were apparently the major concerns of the teachers. As can be seen in table 4, 83.3% of the teachers emphasized that the excessive use of computers was harmful for their health.

Table 4: Disadvantages of online teaching

Disadvantages	Percentage	Count
Increased hours spent sitting at computers is not good for	83.3%	35
health		
Computer or network problems affected the quality of teaching	78.6%	33
Increased workload and excessive preparation time	69.0%	29
Difficulties in preventing cheating during online exams	64.3%	27
Unfamiliarity with students, especially new students	54.8%	23
Difficulties in teaching pronunciation or oral communication	45.2%	19
online		
Difficulties in teaching the skill of handwriting characters	40.5%	17
online		
The need to purchase your own equipment	40.5%	17
Difficulties with livening up the classroom atmosphere	38.1%	16
Difficulties in interaction with students in class	35.7%	15
Difficulties in keeping students concentrated	31.0%	13
Classroom activities do not progress smoothly	28.6%	12
Lower attendance	16.7%	7

Source: Author's own compilation.

A high percentage of respondents (78.6%) pointed out that computer or internet problems impacted the teaching quality negatively. More than half (54.8%) of the teachers also found it difficult to get to know the students in a virtual classroom, especially new students. More than 40% of the respondents indicated that some skills were hard to implement online, such as oral communication, pronunciation, and character writing.

Also, more than 40% of teachers brought up the issue of purchasing equipment out of their own pocket, indicating that the technical support from their home institutions may not be adequate. Interestingly, the "interaction" issue was not a significant disadvantage from the view of many teachers. Only 35.7% found it difficult to interact with the students online. In Lin (forthcoming a), this issue was the main point of criticism from most of the students (84.6%). This difference could probably be explained by the fact that what the teachers refer to is only "instructor-student" interaction, and what the students refer to may include other types of interaction, especially peer interaction (Dennen, Aubteen Darabi, and Smith 2007: 66). In Lin (forthcoming a), one student mentions:

in the classroom you can easily talk to some classmates, but online you cannot because you would interrupt the lesson, just learning online feels like there is a barrier between teacher/student or student/student.

Some students also missed the opportunity to chat with other students before or after class.

It is worth noting that although only 33.3% of the teachers encountered the problem of cheating during an online exam (see Table 2), twice as many (64.3%) agreed that it is hard to ensure academic integrity in online examinations. This issue will be discussed in 3.6.

3.3.3. Suitability of different learning components in online learning

The teachers were also asked to compare the suitability of different learning components in an online setting and an offline setting. Table 5 summarizes their opinions. The three most suitable learning components for online teaching were grammar (54.8%), reading (47.6%) and translation (42.9%). From the data we can see that the learning components related to speaking or writing skills were less preferred in terms of online implementation. Significantly, although the percentage is not very high (16.7%), a total of seven teachers held that none of these learning components were suitable for online teaching. This result may reflect the fact that a few teachers have a strong preference for face-to-face teaching. As one teacher remarked: "in order to learn a living language, you have to learn face-to-face." Conversely, one teacher seemed to be fairly confident with online teaching: "all the learning components can be

taught online if the internet and facilities allow. However, the number of students needs to be taken into consideration."

Table 5: Suitability of learning components in online learning

Based on your experience, what types of classes or learn-	Percentage	Count
ing components do you think are more suitable for online		
instruction than offline instruction?		
Grammar	54.8%	23
Reading	47.6%	20
Translation	42.9%	18
Chinese characters (knowledge)	35.7%	15
Homework discussion	33.3%	14
Listening	28.6%	12
Vocabulary	23.8%	10
Speaking	19.0%	8
None	16.7%	7
Pronunciation	11.9%	5
Chinese characters (practice)	2.4%	1
Based on your experience, what types of classes or learn-	Percentage	Count
Based on your experience, what types of classes or learning components may not be suitable for online teaching?	Percentage	Count
Based on your experience, what types of classes or learn-	Percentage 66.7%	Count 28
Based on your experience, what types of classes or learning components may not be suitable for online teaching?	C	
Based on your experience, what types of classes or learning components may not be suitable for online teaching? Chinese characters (practice)	66.7%	28
Based on your experience, what types of classes or learning components may not be suitable for online teaching? Chinese characters (practice) Pronunciation	66.7% 61.9%	28 26
Based on your experience, what types of classes or learning components may not be suitable for online teaching? Chinese characters (practice) Pronunciation Speaking	66.7% 61.9% 50.0%	28 26 21
Based on your experience, what types of classes or learning components may not be suitable for online teaching? Chinese characters (practice) Pronunciation Speaking Listening	66.7% 61.9% 50.0% 35.7%	28 26 21 15 6 5
Based on your experience, what types of classes or learning components may not be suitable for online teaching? Chinese characters (practice) Pronunciation Speaking Listening Homework discussion	66.7% 61.9% 50.0% 35.7% 14.3%	28 26 21 15 6 5
Based on your experience, what types of classes or learning components may not be suitable for online teaching? Chinese characters (practice) Pronunciation Speaking Listening Homework discussion Writing	66.7% 61.9% 50.0% 35.7% 14.3% 11.9%	28 26 21 15 6 5
Based on your experience, what types of classes or learning components may not be suitable for online teaching? Chinese characters (practice) Pronunciation Speaking Listening Homework discussion Writing Vocabulary	66.7% 61.9% 50.0% 35.7% 14.3% 11.9%	28 26 21 15 6 5
Based on your experience, what types of classes or learning components may not be suitable for online teaching? Chinese characters (practice) Pronunciation Speaking Listening Homework discussion Writing Vocabulary Translation	66.7% 61.9% 50.0% 35.7% 14.3% 11.9% 7.1%	28 26 21 15 6 5 5
Based on your experience, what types of classes or learning components may not be suitable for online teaching? Chinese characters (practice) Pronunciation Speaking Listening Homework discussion Writing Vocabulary Translation Reading	66.7% 61.9% 50.0% 35.7% 14.3% 11.9% 7.1%	28 26 21 15 6 5 5 3

Source: Author's own compilation.

The three learning components which were perceived to be most unsuitable for online teaching were Chinese character writing (66.7%), pronunciation (61.9%) and speaking (50%). These results tie in with what Lin (forthcoming a) finds from the German students' perspectives: "speaking", "pronunciation" and "handwriting" were the three least preferred learning components for online teaching. We may conclude that these three learning components are better taught in a face-to-face setting, from both a teacher's and a student's perspective.

3.4. Opinions about teaching after the pandemic

No matter positive or negative, online teaching experiences will definitely exert some influence on each teachers' future teaching. This influence may relate to any pedagogical decision-making, such as the degree of digital tool application, approaches for assignment correction and exchange, class activity design, or curriculum planning. To understand the teachers' attitudes in this regard, two questions were included in the survey. First, the teachers were asked about their intention to use more digital tools in the future. A total of 34 teachers (81%) confirmed that they will consider integrating more digital tools into future class teaching, six teachers (14.3%) will not. Two teachers remarked additionally: "it depends on the course type", "the online tools could be used as assisted-learning tools for reading." Although the reasons why the six respondents did not consider integrating technology into future teaching were not mentioned, previous literature provides possible barriers to language teachers' adoption of ICT (information and communication technology): lack of financial, peer, or administrative support, insufficient time. insufficient resources, pedagogical beliefs, technological know-how and demographics such as gender and age (Lin, Huang and Chen 2014 on US university Chinese language teachers; Lin, Liu and Hu 2017 on a literature review).

The second question explored whether the teachers would consider the possibility of adjusting the teaching format after the pandemic. For the beginner level, 68.8% of the teacher preferred to maintain face-to-face teaching (count=22), whereas for the lower intermediate level the result was 43.8% (count=14), and for the intermediate level 32.4% (count=11). Chart 1 thus shows the following tendency: the higher the course level, the more inclined a teacher is to (partially) integrate the online mode into the curriculum (blended mode). One teacher proposed that online teaching format could be considered as an alternative in times when a teacher cannot go to the university due to personal circumstances.

Notably the support ratio of a fully online teaching mode remains low. This result echoes what Lin (forthcoming a) reports about the students' attitude towards fully online teaching: "the number of students who supported fully online teaching in the future is low". Moreover, in that study I also observed that the higher a student's language competence level is, the greater the support expressed for learning in a blended mode is, which is comparable to the opinion of teachers.

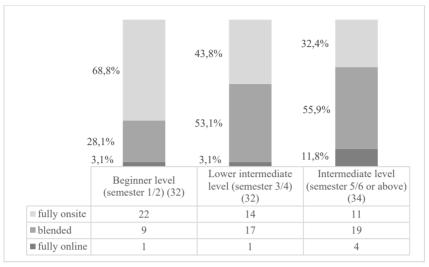


Chart 1: Preferred teaching mode in future teaching

Source: Author's own compilation.

3.5. Issues of handwriting

As mentioned previously, the importance of handwriting skill training has been stressed in many university Chinese language programs. Among 35 teachers who taught the BA1 and/or BA 2 courses *before* the pandemic, 60% of the respondents (count=21) stated that students were expected to be able to handwrite *all* the characters they had learned, whereas 40% of the respondents (count=14) stated that students were expected to handwrite a selection of characters. Whatever the case, it can be confirmed that handwriting is regarded as a key competence among the learning achievements of Chinese language education at the tertiary level. One teacher made the following comment on handwriting skill training:

I think that while students are still learning the basics of Chinese, especially in the first two years, you should attach importance to handwriting skills of Chinese characters. There is no need to put special emphasis on learning to type characters at this time, because they naturally start to develop it slowly and unconsciously. At the intermediate and advanced levels, i.e., from the fifth semester onwards, after students have developed a certain familiarity with Chinese characters and have some muscle memory for handwriting, more assignments of typing training could be given.

Keeping these considerations in mind, it is not surprising to see that 23 of the 35 respondents (65.7%) confirmed that during the pandemic their final exams

still retained the handwritten format. As handwriting on a computer required special facilities that were not available for all students, most universities compromised with accepting photos of students' handwriting during the exam. A few teachers allowed students to type during the exam. The proportion of typed vs. handwritten examination components was subject to different regulations by individual teachers.

Aside from testing, teaching handwriting in class is also problematic. It is always vital for beginners to receive visual input and to see how a character is handwritten. Traditionally, the handwriting instruction at the beginning stage of learning Chinese depends a lot on teachers' writing demonstration and immediate feedback on students' writing, which is easy to implement in a face-to-face setting. To be sure, handwriting is possible in an online setting. Yet compared to face-to-face teaching, it requires that both teachers and students are equipped with adequate facilities and technology, which is not realistic. Zhang Q. (2020: 22) points out that online teaching "minimises the opportunities for handwriting". As mentioned earlier, one of the teacher participants in her study stated that handwriting in class was given up entirely owing to insufficient technical support. In other words, technical restrictions play a major role in a teacher's decision of whether or not to include handwriting in online teaching.

Chart 2 shows the teachers' choice of method for teaching example sentences or single characters *during* the pandemic. At the beginner level 58% (count=18) used handwriting (or partially used handwriting) in class; at the lower intermediate level the portion dropped to 42.2% (count=11), while at the intermediate level 37.5% (count=9) of the respondents said they used handwriting. At the same time, more than 40% of the teachers only typed in class – the higher the level they taught, the more inclined they were to type. Although the reasons for these choices were not supplied by respondents, it can be speculated that not many teachers were equipped with a proper writing pad or a tablet.

Generally speaking, technical restrictions made it harder to monitor and test students' writing in class. This may lead to a loss of motivation for students to practice handwriting. In Lin (forthcoming a), 56.4% of the students admitted that they spent less time practicing handwriting during the online semester. In the current survey, one teacher also expressed the following concern about the regression of students' handwriting skill during the online semester:

Two students would always type their assignments. One of them switched to handwriting later on and we found that this student had many problems with learning to write by hand. Learning performance will inevitably be affected if we can't correct them at the beginner level, or if they only type and do not write by hand.

12.9% 41.9% 19,2% 57.7% 41.9% Lower Intermediate level Beginner level (semester 5/6 or intermediate level (semester 1/2) (31) (semester 3/4)(26) above) (24) others (write on the 1 1 1 blackboard) only writing (on a writing 4 5 2 pad or tablet) ■ typing plus writing 13 ■ only typing 13 15 15

Chart 2: Teachers' use of handwriting vs. typing in class during the summer term of 2020

Source: Author's own compilation.

3.6. Assessments

The last issue discussed in this study is the format of assessments, with a focus on the BA1 and BA2 courses. As mentioned previously, exam implementation was one of the major challenges in a remote context. As can be seen from the data in table 6, there is some degree of variation in terms of exam format. At many universities, one format made up of online, blended and onsite modes for one level was chosen, whereas at Uni Göttingen, Uni Köln, and Uni Wien, different exam formats were opted for courses at the same level. From teachers' feedback it is evident that various approaches were employed experimentally. Some teachers mentioned that they had attempted to integrate different assignments or additional writing tasks into the final grade. However, it is imaginable that due to the different exam regulations of these institutions, not all the teachers had the freedom to redesign the components for assessments and could only organize one final written exam.

As mentioned in the previous sections, more than 60% of the teachers had concerns about cheating during online examinations, and 33.3% of the teachers were actually confronted with this problem. The relatively low portion of actual cheating in exams may be attributed to the fact that some universities did not offer (fully) online assessments during this semester. In order to ensure integrity and fairness in exams, some universities decided to hold on-campus exams instead when the circumstances allowed.

Table 6: Exam formats during the summer term of 2020

	Semes- ter 1/2	Semester 1/2	Semester 1/2	Semester 3/4	Semester 3/4	Semester 3/4
	online	blended	on-campus	online	blended	on-campus
Uni Bochum	0			0		
Uni Bonn	0			0		
HS Bremen	0			0		
Uni Frankfurt			0			0
Uni Freiburg			0			0
FU Berlin	0			0		
Uni Göttin- gen	0	0		0	0	
Uni Heidel- berg	0			0		
HU Berlin		0			0	
Uni Köln		0	0		0	0
Uni Leipzig		0			0	
LMU		0		0		
HS Ludwigs- hafen/ Rhein		0			0	
Uni Münster						0
Uni Trier			0			0
Uni Tübingen		0			0	
Uni Wien	0			0	0	
Uni Zürich	0			0		
HS Zwickau	0			0		

Source: Author's own compilation.

Other universities implemented one or more of a variety of strategies to make online examinations fairer and more functional, including: organizing exams through a safe browser, presenting exams on a shared screen, and introducing additional elements to exams such as oral components and time limits. The following excerpt is one teacher's experience:

One method was to conduct additional one-on-one oral exams to see whether the listening and speaking skills of a student corresponded to their written ability, or to set a time limit and ask them to handwrite the answers based on a pdf-format exam. So far there is no perfect solution. Giving a fair grade depends to a large extent on the students' self-control and honesty, as well as the teachers' familiarity with the students.

In their discussion of possible measures to prevent dishonesty in online assessments, Stollhoff and Jeremias (2020: 15–16) state:

In the case of pure knowledge queries in the form of multiple-choice questions or simple text entries, the correct answer can usually be found with the help of reference books or by asking external third parties, which makes a fraud attempt seem worthwhile due to the low level of effort involved.

Compared to other subjects, it is relatively hard to avoid testing "pure knowledge" in a Chinese language test, such as checking the correct use of grammar or vocabulary items, character handwriting skills, or pronunciation of a single character, especially at the beginner level. In other words, it is not easy to offer an "open-book" language test - the form that Fischer and Dieterich (2021: 111) identify as more suitable for an online assessment. Under such circumstances, an appropriate invigilation of Chinese language tests becomes crucial, as Fischer and Dieterich (ibid.: 110) also proposed: "proper invigilation needs to be guaranteed, especially for online tests" ("insbesondere bei digitalen Klausuren ist eine angemessene Aufsicht zu gewährleisten"). However, the invigilation issue is complicated considerably by data protection and security concerns. Proctoring software and webcam surveillance have been regarded as violation of students' privacy in Germany and other EU countries (Krüger 2020; Schaps 2020). How to ensure that students get a grade that they truly deserve became a real dilemma for teachers and universities.

Through my recent personal correspondence with some colleagues, I learned that quite a few German universities have suggested that teachers convert closed-book assessments to open-book assessments, and prohibited room scanning or turning on cameras. These measures were understandable, but they did add another level of difficulty for language teachers to organize exams. Since online teaching may last for another semester or even longer, this issue may be one of the most worrisome problems for many Chinese language programs.

4. Final remarks and limitations

This study presents a general overview of the teaching and testing situation at 19 higher education institutions in Austria, Germany, and Switzerland during the summer term of 2020. It attempts to document the university Chinese language teachers' voice, focusing on their experiences and perceptions of the unprecedented emergency online semester. It first reports on the situation of digital tool use before and during the pandemic, and illustrates the challenges teachers were confronted with and their opinions about the pros and cons of online teaching. Before the pandemic the majority of the respondents always or often integrated digital tools in their face-to-face class teaching, yet fully online teaching was still a challenge for many teachers.

The major problems teachers were confronted with include heavy workload and resulting health problems, technical problems or insufficient digital competence, and difficulties in class teaching or class management in a remote context. Nevertheless, it was confirmed that online teaching experiences strengthened teachers' digital competence; they also identified saving commuting time and less paper waste as advantages of online teaching. Furthermore, comparable to German university students' opinions (Lin forthcoming a), learning components relating to grammar, reading and translation were regarded as more suitable components to be taught online, whereas those relating to oral competences were regarded as unsuitable.

This study also explores the influence of online teaching on future teaching. A majority of teachers (81%) will consider integrating more digital tools into future class teaching. The higher the course level, the more inclined a teacher is to (partially) integrate the online mode into the curriculum (blended mode). It is notable that very few teachers supported fully online teaching, which is also in line with the opinions of German university students (Lin forthcoming a). Lastly, this article discussed the challenges of teaching handwriting and organizing assessments in a remote setting. The findings show that the online teaching mode did change the method of the Chinese language teaching in class teaching and testing. Other than that, preventing cheating and finding proper testing formats in an online examination was perceived to be challenged.

According to most teachers and students, online teaching could never replace in-class teaching. On the other hand, the teaching experiences made in the first online semester have already broadened our horizons and enriched our quality of teaching. As demonstrated in this study, a majority of teachers will consider integrating more digital tools or online teaching modes into future course planning when the universities reopen. The findings of the current survey also indicate that, except in the case of handwriting and its relevance for student assessment, Chinese language teachers and other educators shared common challenges during the crisis.

We are currently in the midst of the third online semester, and the coming winter term may also need to be implemented online. Despite the fact that both teachers and students seem to be better prepared, many problems remain unsolved. If the pandemic situation worsens, how could we cope with the problem of teaching oral and handwriting skills online? How and to what extent can we ensure the integrity of an online language exam? What kinds of question formats are suitable for an online Chinese language test? How can we extend our technical pedagogical content knowledge (TPACK, Mishra and Koehler 2006)? There are many truly challenging issues waiting to be resolved. As Zhang (2020: 48) indicates, under the sudden transition, "teachers' frustration and worries will not remain as temporary issues." To strengthen the support for teachers during and after the pandemic, I believe that more empirical studies on teachers' perspectives and their experiences are necessary.

Due to its preliminary nature, this study inevitably has some limitations. More profound insights would require a combination of quantitative and qualitative approaches, including interviews and detailed descriptions of sample programs. It is also beyond the scope of this study to offer a more indepth discussion on topics such as the correlation between attitudes towards digital teaching and participants' backgrounds in terms of gender, age, etc., or the role of typing and digital input in future course or curriculum design, etc. Despite its limitations, I hope this article will serve as a base for future studies by providing a contextualized, comprehensive and comparable reference to the challenges faced by university Chinese language teachers in three German-speaking countries during the pandemic.

References

- Carrel, Paul (2018), Where Europe's most powerful economy is falling behind, in: *Reuters investigates*, 25 June, online: <www.reuters.com/investigates/special-report/germany-digital-gap/> (accessed: 4 May 2021).
- Dennen, Vanessa P., A. Aubteen Darabi, and Linda J. Smith (2007), Instructor–Learner Interaction in Online Courses: The relative perceived importance of particular instructor actions on performance and satisfaction, in: *Distance Education*, 28, 1, 65–79.
- Ebadi, Saman and Masoud Rahimi (2017), Exploring the impact of online peer-editing using Google Docs on EFL learners' academic writing skills: a mixed methods study, in: *Computer Assisted Language Learning*, 30, 8, 787–815.
- Ebner, Noam and Elayne E. Greenberg (2020), Designing Binge-Worthy Courses: Pandemic Pleasures and COVID-19 Consequences, in: *Negotiation Journal*, 36, 535–560.
- FaCh (= Fachverband Chinesisch [Chinese Language Teacher Association in German-speaking area]) (2020), *Chinesisch an Hochschulen* [*Chinese at universities and colleges*], online: www.fachverband-chinesisch.de/chinesisch-als-fremdsprache/hochschulen (accessed: 4 May 2021).
- Fischer, Edgar and Peter Dieterich (2021), Digital Prüfungen: Ein aktueller Überblick über die prüfungsrechtlichen Anforderungen [Digital exams: An up-to-date overview of exam requirements], in: *Forschung und Lehre*, 2/21, 110–111.
- Gao, Lori Xingzhen and Lawrence J. Zhang (2020), Teacher Learning in Difficult Times: Examining Foreign Language Teachers' Cognitions About Online Teaching to Tide Over COVID-19, in: Frontier in Psychology, 11, 549–653.
- Gao, Xiaoping (2020), Australian Students' Perceptions of the Challenges and Strategies for Learning Chinese Characters in Emergency Online Teaching, in: *International Journal of Chinese Language Teaching*, 1, 1, 83–98.

- Golden, Cynthis (2020), Remote teaching: The glass half-full, in: *EDU-CAUSE Review*, 23 Mar, online: https://er.educause.edu/blogs/2020/3/remote-teaching-the-glass-half-full (accessed: 4 May 2021).
- Hampel, Regine, Uschi Felix, Mirjam Hauck, and James A. Coleman (2005), Complexities of learning and teaching languages in a real-time audiographic environment, in: *GFL: German as a Foreign Language*, 3, 1–30.
- Hauck, Mirjam and Stella Hurd (2005), Exploring the link between language anxiety and learner self-management in face-to-face and virtual language learning contexts, in: *European Journal of Open, Distance and E-Learning, EURODL*, 2, 23 pages.
- Hodges, Charles, Stephanie Moore, Barb Lockee, Torrey Trust, and Aaron Bond (2020), The difference between emergency remote teaching and online learning, in: *Educause Review*, 27 March, online: https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning (accessed: 4 May 2021).
- Hurd, Stella (2005), Distance learning in modern languages, in: J. Coleman and J. Klapper (eds.), *Effective Learning and Teaching in Modern Languages*, London: Routledge, 142–147.
- Hurd, Stella (2007), Anxiety and non-anxiety in a distance language learning environment: The distance factor as a modifying influence, in: *System*, 35, 487–508.
- Kerres, Michael (2020), Against all odds: Education in Germany coping with Covid-19, in: *Postdigital Science and Education*, 2, 690–694.
- Krüger, Gino (2020), Online-proctoring: Interview mit Stefanie Schweiger zu Digitalen Prüfungsformaten, in: *Hochschulforum Digitalisierung*, 26 May, online: https://hochschulforumdigitalisierung.de/de/blog/online _proctoring_interview> (accessed: 4 May 2021).
- Lin, Chin-Hsi, Liu Haixia, and Ying Hu (2017), Technology and the Education of Chinese-language Teachers: Where Are We Now?, in: *Journal of Technology and Chinese Language Teaching*, 8, 1, 1–15.
- Lin, Chin-hui (2016), 德國中文教學概況——海外視角下的師資培育 Déguó Zhōngwén jiāoxué gàikuàng: hǎiwài shìjiǎo xià de shīzī péiyù [Chinese language teaching in Germany: Looking at pre-service Chinese language teacher education from outside Taiwan], in: 臺灣華語教學研究 Táiwān Huáyǔ jiāoxué yánjiù [Taiwan Journal of Chinese as a Second Language], 12, 67–98.
- 林钦惠 Lin, Chin-hui (2018), 通过教学设计促进自主学习——一种"翻转"课堂的尝试与思考 Tōngguò jiàoxué shèjì cùjìn zìzhǔ xuéxí: yī zhŏng fānzhuǎn kètáng de chángshì yǔ sīkǎo [Motivating autonomous learning through course design: a "partially-flipped" classroom], in: *CHUN Chinesischunterricht*, 33, 7–28.

Lin, Chin-hui (forthcoming a), Emergency Remote Chinese Language Learning at a German University: Student Perceptions, in: Liu Shijuan (ed.), *Teaching the Chinese Language Remotely: Global Cases and Perspectives*, London: Palgrave Macmillan.

- Lin, Chin-hui (forthcoming b), Google 辅助语言学习——门高年级线上課程之设计与实践 Google fǔzhù yǔyán xuéxí: yī mén gāoniánjí xiànshàng kèchéng zhī shèjì yǔ shíjiàn [Google-assisted language learning: An online Chinese course for advanced learners], in: Liu Shijuan (ed.), Online Chinese Teaching and Learning in 2020, to be published by National Foreign Language Resource Center, University of Hawaii.
- Lin, Chun-Yu, Huang Chung-Kai, and Chang-Hua Chen (2014), Barriers to the adoption of ICT in teaching Chinese as a foreign language in US universities, in: *ReCALL*, 26, 1, 100–116.
- Liebau-Liu, Xiaoqing (2020), 2020 年夏季学期德语区高校中文课网课调查 2020 nián xiàjì xuéqī Déyǔqū gāoxiào Zhōngwénkè wǎngkè diàochá [A survey of online Chinese language courses at universities in Austria, Germany, and Switzerland during the summer term 2020], Presentation given at the 3rd workshop for Chinese language education within Chinarelated BA/MA programs in German-speaking countries [3. Arbeitstagung zur Chinesischausbildung im Rahmen von chinabezogenen BA/MA-Studiengängen im deutschsprachigen Raum], 13 November, Bonn University, Germany.
- Liu, Shijuan, Wang Yanlin and Hong Zhan (2020a), A Survey of Student Perspectives on Learning Chinese Online: Preliminary Results, Presentation given at The International Forum of Textbook Development and Virtual Conference on Teaching Chinese as an International Language, The Education University of Hong Kong, Hong Kong, 11 July.
- Liu, Shijuan, Wang Yanlin and Hong Zhan (2020b), A Survey of Instructors on Teaching Chinese Online in 2020: Preliminary Results, Presentation given at The International Forum of Textbook Development and Virtual Conference on Teaching Chinese as an International Language, The Education University of Hong Kong, Hong Kong, 11 July.
- Mishra, Punya, and Matthew J. Koehler (2006), Technological pedagogical content knowledge: a framework for teacher knowledge, in: *Teachers College Record*, 108, 6, 1017–1054.
- Olt, Melissa R. (2002), Ethics and distance education: Strategies for minimizing academic dishonesty in online assessment, in: *Online Journal of Distance Learning Administration*, 5, 3, 1–6.
- Riplinger, Tim, and Mandy Schiefner-Rohs (2017), Medieneinsatz in der Hochschullehre. Akademische Lehr-Lernkonzepte zwischen Zumutung und Zu-Mutung [Media use in university teaching. Academic Teaching-Learning Concepts between Imposition and Excessive Imposition],

- online: http://your-study.info/wp-content/uploads/2018/01/Review-Riplinger-Schiefner Rohs.pdf> (accessed: 4 May 2021).
- Russell, Victoria (2020), Language anxiety and the online learner, in: Foreign Language Annals, 53, 338–352.
- Schaps, Karolin (2020), Dutch students raise privacy concerns over online exam surveillance, in: *Reuters*, 21 April, online: <www.reuters.com/ar ticle/us-health-coronavirus-netherlands-educat-idUSKCN22329E> (accessed: 4 May 2021).
- Stollhoff, Rainer and Xania V. Jeremias (2020), Konzeption und Durchführung von Fernprüfungen an Hochschulen. Eine systematische Einordnung und aus der Praxis motivierte konkrete Empfehlungen [Design and administration of remote examinations at universities: A systematic contextualization and recommendations from an applied perspective], Wildau: Technische Hochschule.
- Wamsley, Laurel (2019), Germany's (dis)connectivity: Can the broadband internet gap be bridged?, in: *The Local*, 29 August, online: <www.the local.de/20190829/germanys-disconnectivity-can-the-broadband-gap-be -bridged-internet> (accessed: 4 May 2021).
- Wang, Danping and Martin East (2020), Constructing an Emergency Chinese Curriculum during the Pandemic: A New Zealand Experience, in: *International Journal of Chinese Language Teaching*, 1, 1, 1–19.
- Zhang, Chun (2020), From Face-to-Face to Screen-to-Screen: CFL Teachers' Beliefs about Digital Teaching Competence during the Pandemic, in: *International Journal of Chinese Language Teaching*, 1, 1, 35–52.
- Zhang, Qi (2020), Narrative Inquiry into Online Teaching of Chinese Characters during the Pandemic, in: *International Journal of Chinese Language Teaching*, 1, 1, 20–34.

疫情中的高校汉语线上教学——德语区高校汉语教师教学调查报告结果 摘要

基于一份针对来自 19 所德语区高校 42 名汉语教师的问卷,本研究首先探讨了在新冠疫情影响下的第一个线上学期(2020 年夏季学期)中,德语区高校汉语教师们所面临的困难、对于线上学期的看法以及此一经验对其未来教学的可能影响,同时也调查了教师们在疫情前与疫情中数字化教学工具的使用情况。此外,本研究还提出了在线上学期中手写汉字教学以及测试方面的问题。

关键词:线上教学、教师看法、数字化工具、新冠疫情