Blended Learning, The International Chinese Learning Trend In Post-Pandemic Era

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Abstract
In the early days of the Covid-19 pandemic, Chinese online learning faced many challenges, including (1) poor internet connection and high internet costs; (2) low computational literacy of teachers; (3) limited interaction between teachers and students; (4) inappropriate teaching materials and methods; and (5) the lack of student discipline and the difficulty of providing assessments. However, these challenges have turned into opportunities for the rapid development of online Chinese learning over time. Academics in China predict that online Chinese learning will be maintained in the post-pandemic era, the blended learning will become a learning trend that is applied globally. This research is descriptive qualitative research with data collection techniques through literature study method and Forum Group Discussion (FGD). The result of this study is a description of the solution to the challenges of Chinese online learning globally during the pandemic, blended learning, and its implementation strategy in the post-pandemic era based on the “Chinese Proficiency Grading Standards for International Chinese Language Education” issued in 2021.

Keywords: Chinese language, blended learning, post-pandemic learning, learning strategy

INTRODUCTION
The Covid-19 pandemic has had a huge impact in all fields. Optimizing the use of the internet in various activities is the main alternative when governments in various countries urge people to carry out work and study activities from home. In the field of Chinese learning, the Covid-19 pandemic has had a visible or invisible impact, directly or indirectly, in the short and long term, as well as positive and negative impacts (Yuming et al., 2020). Learning activities that were previously carried out offline were ‘forced’ to be fully online.

In the beginning, the sudden change of the learning model from offline to online caused many obstacles and challenges. Both Chinese teachers and students do not have sufficient preparation for participating in online learning. Learning platforms, internet connections, and time differences between regions/countries are subjective and objective obstacles that must be faced (Xiuling, 2020). (Hui, 2021) stated that the main obstacles in online learning Chinese during the pandemic are teachers’ lack of
computer literacy skills of teachers, low student participation, limited variety of teaching methods, inadequate teaching platforms, and difficult classroom management.

From the teacher's point of view, the difficulty in controlling student learning activities makes classroom management and assessment even more difficult. From the student's point of view, distractions from the surrounding conditions make it difficult for them to concentrate, and they are easily distracted while participating in online learning (Jinsheng & Lufei, 2021). This obstacle causes the low effectiveness of learning Chinese online, even though learning achievement is far from the expected target.

Nowadays, international Chinese online learning has lasted for more than two years. International students who return to their respective countries due to the pandemic are still following online learning because China is still reluctant to provide study visas for almost all international students who want to study in their country. Chinese online learning has been greatly improved in various aspects, but shortcomings remain.

Even though Chinese online learning is still in the development stage, online learning that has been implemented will not only be maintained, it will even become a learning trend in the future. Experts believe online learning can cover the shortcomings of offline learning because both online and offline learning have weaknesses and strengths that can complement each other, these two types of learning cannot replace each other (Yuming et al., 2020), therefore, both types of learning will continue to be used in the future. It is even more likely that the offline + online blended learning model will become the main international Chinese learning model to be implemented after the pandemic (Yuming et al., 2020).

The Chinese blended learning model that will be applied post-pandemic is expected to be an improvement from offline learning before the pandemic and online learning during the pandemic. Research on offline learning (before the pandemic) has been widely carried out and developed. However, research on online learning is still very limited and has only started to be widely carried out since the pandemic in the last two years. For instance, (S. Juan, 2020) conducts research on Chinese character distance learning (online learning), she states that Chinese characters' distance learning can be carried out with three models: live session learning, video learning, and independent learning with teaching materials distributed by teachers. Sujuan also analyzes the advantages and disadvantages of each model and how to apply them but does not describe solutions that can be done when there are obstacles when applying the learning model. (Ning, 2021) analyzes online learning in a comprehensive elementary-level course that combines teaching materials, processes, tools, and methods. He also analyzes how teachers can apply all of these elements before, during, and after learning. The comprehensive class in Luoning's research covers four language skills, namely listening, speaking, reading, and writing, but does not include translation skills.

This study aims to explain the solution to the obstacles faced by teachers and students in international Chinese online learning during the pandemic, the function of online learning as a complement to offline learning, and strategies for implementing Chinese blended learning in reading, listening, writing, speaking and translating skills based on the “Chinese Proficiency Grading Standards for International Chinese Language Education” (国际中文教育中文水平等级标准 Guójì zhōngwén jiàoyù zhōngwén shuǐpíng děngjí biāozhǔn) issued in 2021.
RESEARCH METHOD
This research is descriptive qualitative research with data collection techniques through literature studies and Forum Group Discussion (FGD). A literature study is conducted by studying books, journals, theses, and articles in Chinese, English, and Indonesian which are reliable and relevant to the research topic. References to journals and articles in Chinese are taken from the China National Knowledge Infrastructure (CNKI) website, an integrated system containing the most comprehensive and largest research results in China. References in Indonesian and English are taken from books, articles, Sinta accredited journals, and reputable international journals.

Data collection through the FGD was conducted with Chinese language teachers at the high school and universities in Indonesia, as well as with doctoral students majoring in Teaching Chinese to Speakers of Other Languages at China universities regarding obstacles and solutions to Chinese online learning in some countries, and blended learning strategies that can be implemented in the classroom. FGD with Chinese teachers was conducted through semi-structured interviews via Zoom, while discussions with doctoral students were conducted through WeChat. The doctoral students taking part in the discussion came from China, Indonesia, Pakistan, Myanmar, and Cambodia. To maintain the validity and reliability of the research results, the researcher recorded every vital information during the FGD and reconfirmed the information collected in this study to the informants.

RESULTS AND DISCUSSION
The obstacles and solutions of Chinese online learning during the pandemic period
The obstacles faced by teachers, students, and institutions in the implementation of online Chinese learning around the world are generally reflected in five aspects, namely (1) poor internet connection and high internet costs; (2) low information literacy and teacher computing, (3) limited interaction between teachers and students; (4) inappropriate teaching materials and methods; and (5) lack of student discipline and difficulty in conducting assessments. The obstacles and solutions in more detail can be described as follows.

1. Poor internet connection and high internet costs
The online learning process is completely dependent on an internet connection. Since the Covid-19 pandemic hit the world, slow internet speeds, poor connections, and high internet quota fees have become major obstacles for Chinese language teachers and students. Students who live in remote areas with inadequate internet facilities and weak signals are the subjects who have the most difficulty when learning takes place virtual face-to-face. (Qingli et al., 2020). In some developing countries, high internet costs are also a financial burden for Chinese language learners if learning is carried out in synchronous/virtual face-to-face continuously. Learning that is carried out asynchronously also has challenges, such as power outages, bad weather, overloaded Learning Management systems (LMS), etc.

The solution applied by the Chinese language teacher to the internet connection problem is to record virtual face-to-face learning and share the video recording with students who have network problems during the virtual face-to-face learning process so that they can re-learn the material presented in its entirety. Teachers also extend the turnaround time for assignments in the LMS to
anticipate network connection and maintenance issues that may cause students to take longer to upload their assignments.

The solution to the problem of high internet costs is to balance synchronous and asynchronous learning arrangements and reduce the size of audio, video, and document files distributed to students. In addition, the government in developing countries such as Indonesia has issued a policy of providing free internet data quota assistance for teachers and students. (Bantuan Kuota Data Internet 2021 - Kemendikbud, 2021). In Cambodia, although there is no free Internet quota for teachers and students, the government negotiates with Internet service providers to lower the cost of Internet services so that they are more affordable for the community.

2. Low information literacy and teacher computing

“The transformation of learning from offline to fully online is not something that can be completed in a short time. Changing teachers' mindsets and their ability to adapt to technology must continue to be tested” (Yanli, 2016). The pandemic has ‘forced’ teachers who rarely or never use internet-based multimedia in learning to learn in a short time (Y. Juan, 2021). To overcome teachers’ lack of digital literacy knowledge and experience, it is very important to hold ready-to-use computational literacy training (Cahyono et al., 2020).

Online training is considered the fastest and most effective implementation method during the pandemic. Many educational institutions provide free online Chinese teaching method training for teachers. For instance, online teaching training held by an official institution affiliated with the Chinese Ministry of Education called the Center for Language Education and Cooperation (CLEC) for local Chinese teachers in several countries in the world; online teaching method training, syllabus preparation, and learning animation videos initiated by the Beijing Chinese Language and Culture College for Chinese teachers in Thailand; socialization of the use of the Youtube and Edpuzzle platforms in online learning of Mandarin organized by Al Azhar University Indonesia for Mandarin teachers in Greater Jakarta (Lailatul Qadriani et al., 2021), etc.

3. Limited interaction between teachers and students

In language learning, interaction is essential because students learning a language is to communicate and interact with other people. However, in online learning, direct interaction between teachers and students and between students is limited. For instance, during virtual face-to-face learning, interaction can only be carried out in one way. Group reading activities are difficult because when students read together, online class conditions will be noisy, and teachers will also find it difficult to make corrections if students' pronunciations are not quite right. In addition, the distance that separates students makes students feel isolated from one another. When learning online, they feel they do not get help and support and a shared learning atmosphere, so they lack social presence and feel lonely while studying. (Jinsheng & Lufei, 2021).

The solution is to apply flipped classroom learning model. Before and after lessons, teachers optimise message sharing applications such as Whatsapp, WeChat, E-mail, and others to interact with students. During the lessons, the teacher takes advantage of the breakout room feature found on several platforms so that students can interact, discuss and complete tasks together in small groups (González-Lloret, 2020). The implementation of the flipped classroom learning
model has proven to be effective in increasing interaction in online learning during the pandemic (Rui, 2020). Teachers also try to choose lesson themes closer to students' lives, choose appropriate audio-visual teaching materials to increase student interest and motivation, and get closer to social relationships with students (Xiu Qin & Lin Lin, 2020). So that, the lack of social presence in online learning can be minimised.

4. Inappropriate teaching materials and methods

In the early days of the pandemic, it was quite difficult for teachers to deliver material and provide exercises because textbooks, syllabi and learning designs were not designed for online learning. For instance, in speaking subjects, the guide in the textbook asks students to role-play to practice their spoken Mandarin skills. This exercise is easy to apply in an offline class and is often a technique to liven up the classroom atmosphere. However, even though learning is done face-to-face in online classes, students still find it difficult to express their language and movements due to various technical obstacles.

The solution implemented is by developing online teaching materials. The development of Chinese teaching materials tailored to the needs of online learning is a very important thing to do and is one of the strategies to promote the Chinese language more broadly (Rui, 2019). Currently, learning platforms such as MOOC, Coursera, and many others contain quality learning materials. LMS such as Chaoxing, Xuexitong, Moodle, and Blackboard also systematically organise the learning process. Chinese teachers worldwide are trying to integrate these resources into classroom learning.

5. Lack of student discipline and difficulty in conducting assessments

The results of a study (Yumeng, 2021) of 90 international students from 14 countries at one of the universities in China showed that the main problems of students in Chinese online classes are that students are often late to enter the virtual room, leaving the virtual room before the lecture ends, not attending lectures, lack of motivation to study and not to be able to complete tasks on time. Online learning requires students to have a high sense of responsibility and discipline. However, due to space and time differences, it is very hard for teachers to monitor their students' learning behaviour.

The implementation of assessments such as dictation (听写 tīngxiě) which teachers often use to test students' mastery of Chinese characters (Hanzi), is also hard to implement. Students tend to be more eager to prepare small notes, which they then stick near the laptop camera lens, on the wall, or on the desk to use as a cheat sheet during dictation. This certainly greatly reduces the effectiveness of dictation.

The solution made by the teacher in dealing with student discipline problems is to continue to provide students with an understanding of the characteristics of online learning, which places more emphasis on student-centred learning. Therefore, students are expected to improve their learning attitudes and mindset. Teachers and institutions also provide feedback on their learning outcomes by implementing a more stringent system of reward and punishment.

Meanwhile, in terms of giving an assessment, the teacher makes adjustments to the form and content of the assessment and requires students to prepare additional tools. For instance, when dictating the character of Han, the teacher does not only include elements of listening and writing but also elements of
speaking as a form of verbally writing Chinese character. The teacher also requires students to use two devices, laptops and smartphones, to monitor them during dictation or exams.

**Online Learning as a Complementary to Chinese Offline Learning**

Offline and online learning have a complementary relationship, and the combination of the two aims to improve the quality of learning (Kekang, 2002). Blended learning combines offline face-to-face learning and online technology (Tomlinson & Whittaker, 2013). Before the pandemic, Chinese teaching was conducted face-to-face, and online learning by utilizing various technologies and resources on the internet has not been widely applied. Since the pandemic, Chinese teaching experts have begun to realize the importance of implementing blended learning to improve the quality of Chinese teaching after the pandemic.

The application of blended learning can cover up the shortcomings of offline learning implemented so far. These shortcomings are in four things, namely learning resources, learning models, interactions in learning, distance, and cost-effectiveness.

In terms of learning resources, the large number of quality learning videos made specifically by Chinese language teachers and professionals on various platforms such as MOOC, Coursera, and EdX can make up for the lack of textbooks which tend to be static in their content. Students can learn according to their needs and interests. In addition, recordings of virtual face-to-face learning can be useful for students who have slower absorption of lessons than their peers. They can look back at the teacher's explanation and internalize the taught material.

In terms of the learning model, even though in offline Chinese learning, the teacher tries to apply a student-centered learning model, in reality, students still tend to be passive and very dependent on the explanations given by the teacher. Online learning can train students' active and independent learning. They are required to have “student-centred learning” awareness, which creates a more effective learning environment (Brown Wright, 2011). Online learning can speed up student-centred learning, which is still hard to realize in offline Chinese learning.

In terms of interaction in learning, lack of interaction is considered one of the main problems in Chinese online learning. However, online learning actually provides many opportunities for teachers and students to interact if implemented optimally. If offline learning only provides face-to-face interaction between teachers and students and interactions between students, online learning also provides opportunities for interaction between students and the media used. The interaction between students and technology media is one way to hone independent learning. Students are expected to be able to use the media to access and collect information, analyze and solve their problems so that independent learning skills can grow and shape students into skilled individuals (Yumeng & Shumei, 2020). However, the need for social presence can only be met through offline learning. Therefore, the application of blended learning can certainly complement the shortcomings of each type of learning.

In terms of distance and cost-effectiveness, online learning provides many conveniences. As the second most spoken language globally (What are the top 200 most spoken languages? | Ethnologue, 2022), Chinese learners also come from various countries of the world. The opportunity to learn and communicate with Chinese native speakers is something that students need. However, not all students have the opportunity to study in China due to the long-distance and relatively high costs. Online classes allow students to study with native teachers from China without
going to China and incur large costs. Schools or universities can invite teachers from China to teach Chinese online.

**The Implementation of Blended Learning in Five Chinese Language Skills**

Blended Learning and the inculcation of Blended Learning in prospective Chinese teachers will become the new normal in international Chinese learning (Jianming et al., 2020). In the blended learning model, the teacher plays a major role in guiding, motivating, and monitoring the learning process to optimize the development of student initiative, activeness, and creativity (Kekang, 2005).

In 2021, the National Language and Writing Committee of the Ministry of Education of China released the “Chinese Proficiency Grading Standards for International Chinese Language Education”, a guideline for international Chinese teaching. This standard replaces the previous Chinese proficiency standard, which only consisted of four skills: listening, speaking, reading, and writing. A 'translating' skill is added to the new proficiency standard applied to intermediate and advanced Chinese learners (China’s & Committee, 2021).

Blended learning in teaching five Mandarin language skills in the post-pandemic era can be applied with the following strategies.

**Blended Learning in Listening Class (听力课 tīnglì kè)**

Teachers can share recorded conversations in textbooks through messaging applications or LMS in online learning sessions. Students are asked to explore material and complete assignments independently. In face-to-face offline classes, teachers and students discuss the answers and the use of language points (语言点 yǔyán diǎn) in the conversation. In addition, teachers can also use more interesting media, for example, the use of online media Edpuzzle to provide explanations and questions in the form of interactive videos, then use a word-connecting game technique (接龙游戏 jiēlóng yóuxì) in offline classes to improve listening skills. When giving assessments, the best way is to use face-to-face offline learning so that teachers can more easily monitor student movements and evaluate their learning outcomes.

**Blended Learning in Speaking Class (口语课 kǒuyǔ kè)**

One of the obstacles in face-to-face online learning is that it is difficult for teachers to use learning techniques in the classroom, especially in speaking skills classes. Therefore, offline learning can be further optimized in speaking class practice. Students can use flashcard applications such as Quizlet, Anki, and others to increase vocabulary memorization in online learning sessions. The teacher conveys the themes of conversation or discussion for students to explore independently before practising speaking in offline classes. Conversational exercises, discussions, and presentations can be applied in offline learning. Besides that, the teacher can also make corrections to students' pronunciation errors during face-to-face offline sessions in class.

**Blended Learning in Reading Class (阅读课 yuèdú kè)**

Reading classes focus on developing the ability to recognize Han characters, understand reading content, and properly use Chinese grammar. In online learning, teachers can provide reading material that can be studied independently by students. Students have to recognize and read Han characters correctly and fluently, understand important information in articles, and analyze and summarize the contents of articles.
In face-to-face learning in the classroom, teachers can use these sessions to answer questions if there are parts that are not understood by students, consolidate students' understanding of vocabulary and grammar, and help students practice intensive and extensive reading techniques.

**Blended Learning in Writing Class (写作 xiězuò kè)**

In online learning, teachers can make learning videos that contain explanations about the structure and components of Chinese characters (汉字组成部分 hànzì zǔchéng bùfen), how to form Chinese characters (汉字造字法 hànzì zàozìfǎ), article structure (语篇结构 yǔpiān jiégòu), semantics (语义 yǔyì), grammar (语法 yǔfǎ) for the learner to learn independently. By using learning videos, explanations can be played repeatedly until they fully understand. If students have problems or questions, they can take advantage of the class group chat feature on the messaging application.

Teachers can provide thematic assignments for writing exercises. For beginner-level students, the dictation method can be applied during face-to-face offline learning. The teacher can monitor student behaviour during dictation and ensure they memorize well the dictated Chinese characters. Teachers can also give corrections for errors contained in the writings/essays they make in face-to-face learning in the classroom.

**Blended Learning in Translation Class (翻译 fānyì kè)**

The ability to translate Chinese into native language speakers and vice versa is a must-have skill for Chinese language learners considering the need for qualified translators is getting higher. Translation classes are usually taught to students in grades 3 and 4 or those who already have good Chinese skills. In online learning, teachers can focus on practising written translation skills by providing translation materials such as stories, song lyrics, film subtitles, advertisements, posters and others. Meanwhile, in face-to-face offline learning, the focus is on translating orally (interpreting), for example, simultaneous or consecutive translation.

**CONCLUSION**

The difference between online and offline learning is not the lack of “face to face” but rather the physical closeness between teacher and student (Moorhouse et al., 2021). Blended learning aims to improve the quality and effectiveness of learning because online and offline learning has strengths and weaknesses and can complement each other. Online learning can overcome distance and time constraints and teaching materials in offline learning, which tend to be static. In contrast, offline learning is a solution to the problem of the lack of physical closeness and social presence from online learning.

A balanced arrangement of online and offline learning can result in more varied and effective learning of Mandarin and encourage technological development and innovation in education. The blended learning model will become the new normal and widely applied to international Chinese language learning in the post-pandemic era. Therefore, research on applying Chinese blended learning at various levels of education, the obstacles faced, and strategies in learning are still needed.

**REFERENCES**

*Bantuan Kuota Data Internet 2021 - Kemendikbud.* (n.d.). Retrieved February 24, 2022, from https://kuota-belajar.kemdikbud.go.id/
Brown Wright, G. (2011). Student-Centered Learning in Higher Education. *International Journal of Teaching and Learning in Higher Education, 23*(3), 92–97. http://www.isetl.org/ijtlhe/

Cahyono, S. I. H., Drajiati, N. A., & Ngadiso, N. (2020). Am I a Technophile? the Narrative Study of Teachers’ Belief about Digital Literacy. *Lingua Didaktika: Jurnal Bahasa Dan Pembelajaran Bahasa, 14*(1), 1–11. https://doi.org/10.24036/LD.V14I1.106724

China’s, & Committee, M. of E. and S. L. W. (2021). *Chinese Proficiency Grading Standards for International Chinese Language Education*. Beijing Language and Culture University Press.

González-Lloret, M. (2020). Collaborative tasks for online language teaching. *Foreign Language Annals, 53*(2), 260–269. https://doi.org/10.1111/flan.12466

Hui, W. (2021). 冠病毒疫情影响下的国际中文教育: 问题与对策 (International Chinese education under the influence of the Covid-19 Epidemic: Problems and Strategy). *Language Teaching and Linguistic Studies, 4*, 1–12.

Jianming, L., Xiliang, C., Wangxi, Z., Peng, Z., Xia, L., Yanqun, Z., Liping, F., Rui, S., Meiling, H., Chuanyu, G., Haiyan, J., Tian, S., Hong, C., Chen, W., Ying, X., Jingjing, J., Yang, Z., Li, L., Liang, B., … Xianying, L. (2020). 冠病毒影响下的汉语国际教育:挑战与对策“大家谈” (Teaching Chinese to Speakers of Other Languages under the Covid-19 Pandemy: Challenges and Strategy). *Language Teaching and Linguistic Studies, 5*, 1–16.

Jinsheng, S., & Lufe, W. (2021). 冠病毒背景下高校留学生线上汉语教学调查研究 (Investigation and research on online Chinese teaching for international students in colleges and universities under the background of the Covid-19). *Language Teaching and Linguistic Studies, 4*, 23–33.

Juan, S. (2020). 海外远程汉字教学模式分析 (Analysis of Overseas Distance Chinese Character Teaching Model). *Modern Society, 21*, 174–176.

Juan, Y. (2021). 冠病毒下高校教师信息素养调查与反思 (Investigation and reflection on information literacy of college teachers under the Covid-19 pandemic). *豫章师范学院学报 Yuzhang Shifan Xueyuan Xuebao, 36*(5), 76–82.

Kekang, H. (2002). E-learning 与高校教学的深化改革 (上) (E-learning and the Deepening Reform of College Teaching (Part 1)). *China Educational Technology, 2*, 8.

Kekang, H. (2005). 从Blending Learning看教育技术理论的新发展 (The new development of educational technology theory from the perspective of Blending Learning). *Journal of the Chinese Academy of Governance, 9*, 10–18.

Lailatul Qadriani, N., Hartati, S., Dewi, A., Al, U., Indonesia, A., Sisingamangaraja, J., Masjid, K., Al Azhar, A., Baru, K., & Selatan, J. (2021). Pemanfaatan Youtube dan Edpuzzle sebagai Media Pembelajaran Daring Berbasis Video Interaktif. *Jurnal Pemberdayaan Masyarakat Universitas Al Azhar Indonesia, 4*(1), 1–8. https://doi.org/10.36722/JPM.V4I1.841

Moorhouse, B. L., Li, Y., & Walsh, S. (2021). E-Classroom Interactional Competencies: Mediating and Assisting Language Learning During Synchronous Online Lessons: *RELJ Journal, 003368822098527*. https://doi.org/10.1177/0033688220985274

Ning, L. (2021). 线上混合式教学在初级汉语综合课中的应用 (The Implementation of Online Blended Teaching in Elementary Chinese Comprehensive Courses). *Data of Culture and Education, 3*, 211-212+230.
Qingli, T., Yingyan, G., & Yu, L. (2020). 新型冠状病毒肺炎疫情下大规模在线视频教学存在问题及对策 (Problems and strategy of large-scale online video teaching under the epidemic of new coronavirus pneumonia). 学周刊 Xuezhou Kan (Learning Weekly), 21, 173–174.

Rui, Z. (2019). 互联网时代下汉语网络教材研发初探 (A Preliminary Study on the Research and Development of Chinese Online Teaching Materials in the Internet Era). Education Modernization, 6(25), 233–236.

Tomlinson, B., & Whittaker, C. (2013). Blended Learning in English Language Teaching: Course Design and Implementation. British Council. www.britishcouncil.org

What are the top 200 most spoken languages? | Ethnologue. (2022). https://www.ethnologue.com/guides/ethnologue200

Xiuqin, L., & Linlin, W. (2020). 关于线上国际中文教学的调查与思考 (Investigation and Reflection on Online International Chinese Teaching). Journal of International Chinese Teaching, 4, 39–46.

Yanli, L. (2016). 混合式教学效果影响因素研究——以内蒙古民族大学文学院国外汉学研究课程为例 (Research on the Influencing Factors of Blended Learning Effect——An example of the study of foreign sinology in the Faculty of Literature, Inner Mongolia University for Nationalities. Research On Higher Education Of Nationalities, 4(6), 70–74. https://doi.org/10.14045/j.cnki.rhen.2016.06.016

Yumeng, R. (2021). 疫情背景下对外汉语线上教学的调查与思考 (Investigation and reflection on online teaching of Chinese as a foreign language in the context of the pandemic) [Shenyang Normal University]. https://doi.org/10.27328/d.cnki.gshsc.2021.000999

Yumeng, R., & Shumei, Z. (2020). 后疫情时代对外汉语教学的思考与转变 (Reflections and Transformations in Teaching Chinese as a Foreign Language in the Post-pandemic Era). Journal of Liaoning Educational Administration Institute, 37(6), 78–82.

Yuming, L., Bing, Z., Hui, S., Yuesang, B., Lening, L., Yongyi, W., Quan, L., Xiaohong, W., Wen, C., Ying, R., Yingxia, S., Rongyan, L., & Mo, C. (2020). 新冠疫情下的汉语国际教育:挑战与对策”大家谈(上). Language Teaching and Linguistic Studies, 4, 1–11.