

Toward learning recovery: challenges of international students in China during COVID-19 online learning experience

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Abstract

Purpose – The COVID-19 pandemic has highlighted the vulnerability of international students' education in our V.U.C.A (Volatility, Uncertainty, Complexity and Ambiguity) world. It has challenged higher education institutions to deliver quality and equitable education aligned with Sustainable Development Goal no. 4. However, studies indicate that this pandemic has significantly impacted international students in terms of both policy implementation and academic experiences in online learning. Therefore, this study aims to explore the lessons learned from the online learning experience of international students studying in China during the COVID-19 pandemic.

Design/methodology/approach – This study employed an online survey to explore international students' experiences with online learning during the COVID-19 pandemic. Using Microsoft Forms, it collected 125 responses from international students studying at Project 211 universities. The survey included responses from 67 male and 58 female international students. Among these, 80 students studied online from locations outside China, while 45 participated in online learning from within China.

Findings – The study revealed that international students in China faced significant challenges during online learning, including academic disruptions, technological barriers, financial strain and psychological stress, exacerbated by time zone differences and isolation. Despite these obstacles, students demonstrated learning resilience by employing strategies such as self-regulation, peer collaboration and skill development in technology use.

Originality/value – This study addresses the existing gap in proper support for international students, particularly during times of crisis. It highlights lessons learned from the pandemic and presents

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mitigation strategies based on the participants' perspectives. These strategies aim to address the learning poverty identified by the World Bank.

Keywords International student, Learning recovery, Learning Loss, RAPID framework, Online learning, VUCA world, Challenges, Sustainable development goal 4, Chinese universities, Scholarship, Internationalization, Mitigation Strategies, Learning Resilience, Social Justice, China, Project 211 Universities

Paper type Research paper

Introduction

Online learning has become a new postnormal platform for teaching and learning in higher education in a volatile, uncertain, complex, and ambiguous world brought about by the pandemic (Ghanem, 2020). Online learning became paramount in achieving the sustainable development goals for quality education despite the disruption during the COVID-19 pandemic. Moreover, the COVID-19 pandemic reduces international student mobility, resulting in a decline in both student and teacher mobility in higher education institutions (Lopes *et al.*, 2023; Mason *et al.*, 2023). Changes in immigration policy have limited international students' travel and heightened surveillance of foreigners, disproportionately hurting their postgraduation mobility prospects and generating psychological and financial problems (Firang and Mensah, 2021; Kwon *et al.*, 2023).

International student mobility is aligned with the Sustainable Development Goal Agenda number 4 of "quality education that ensures inclusive and equitable quality education and promotes lifelong learning opportunities for all (UN, 2015)." One of the indicators of SDG 4 is the 4.7 indicator that "expand higher education scholarships for developing countries." Providing scholarships to international students facilitates access to high-quality education via partnerships, such as north-south collaboration (Ashida, 2023; Lockmun-Bissessur *et al.*, 2023) and south-south collaboration (Yuan, 2022). Allocating state funds to noncitizens has sparked debates (Lundin, 2024; Yang, 2022), as it influences brain drain, brain gain and brain circulation, highlighting the need for a balance between supporting domestic and international students for mutual global benefits.

Studies indicate that international students, particularly those enrolled in undergraduate programs in Chinese universities and those pursuing life sciences and medical disciplines, expressed a notable lack of satisfaction with online learning (Ibrar *et al.*, 2023; Tian and Lu, 2022). International students have poor emotional involvement (Tian and Lu, 2022) and adverse effects on their mental and physical health as a result of time differences while studying remotely via online learning (Wang, 2023). Online learning has presented many challenges, including technical difficulties and limited socialization with others. However, it has also provided advantages, such as acquiring new technology skills and easy access to recorded lectures for review (Iskandar *et al.*, 2024). At the same time, neither teachers nor students were adequately equipped to adapt to the transition to online learning during the pandemic (Thapaliya and Hrytsuk, 2023). According to the World Bank (2022), the COVID-19 pandemic has exacerbated learning poverty, impacting the achievement of SDG No. 4, which includes issues related to international students. Thus, this study explores the lessons learned from the experiences of international students studying in China during the COVID-19 pandemic. Specifically, it addresses the following research questions:

- RQ1. What specific impacts has online learning had on international students in China during the COVID-19 pandemic?
- RQ2. What mitigation strategies have international students in China employed to overcome the different challenges posed by online learning during the COVID-19 pandemic?

International students' challenges

Research indicates that international students in China reported poor satisfaction and emotional involvement levels while learning online (Ibrar *et al.*, 2023; Tian and Lu, 2022). Moreover, international students experience mental health challenges and feelings of loneliness (Schartner and Wang, 2022). These challenges are due to the prolonged lockdowns and government restrictions. Rasheed *et al.* (2020) conducted a systematic review identifying five main challenges in online learning:

- (1) Self-regulation Challenges (SRC);
- (2) Technological Literacy and Competency Challenges (TLCC);
- (3) Students Isolation Challenges (SIC);
- (4) Technological Sufficiency Challenges (TSC); and
- (5) Technological Complexity Challenges (TCC).

Additionally, Barrot *et al.* (2021) highlighted two more challenges that students face: Learning Resource Challenges (LRC) and Learning Environment Challenges (LEC) when engaging in online learning. Schartner and Young (2020) argued that international students encounter various adjustment challenges, including academic, psychological and sociocultural difficulties.

Moreover, international students have encountered many challenges during the COVID-19 pandemic, including financial adversity, mental health concerns and difficulties with online learning (Dhaya *et al.*, 2022; Nguyen and Balakrishnan, 2020; Tozini and Castiello-Gutiérrez, 2022). The global COVID-19 health crisis has further amplified the inequalities between international and local students, leading to prolonged study periods and intensifying socioeconomic inequities in higher education (Marczuk and Lörz, 2024; McMorran, 2022). Despite these challenges, international students have exhibited academic resilience and coping techniques during the pandemic (Morgan and Pozzo, 2023; Tozini and Castiello-Gutiérrez, 2022).

Rapid framework for learning recovery

The R.A.P.I.D framework for learning recovery and acceleration was introduced by the World Bank (2022). RAPID stands for **R**each every child and keep them in school, **A**ssess learning levels regularly, **P**rioritize teaching the fundamentals, **I**ncrease the efficiency of instruction, including through catch-up learning, and **D**evelop psychosocial health and wellbeing. According to Alejo *et al.* (2023), the RAPID framework was poorly implemented in low- and lower-middle-income countries, indicating the need for better RAPID adoption to deal with widening. Many countries quickly implemented adaptive measures to mitigate learning losses through emergency remote learning systems and various methods, including television, cell phones, Zoom, social media and Google Classroom (Walugembe *et al.*, 2022).

The COVID-19 pandemic has caused major school interruptions, leading to learning loss and aggravating learning inequality, especially among underprivileged students (Azevedo *et al.*, 2022; Reimers, 2022). The recent crisis has exacerbated the disparities in education, highlighting the pressing need for immediate action to address the impact of COVID-19 on learning inequality and ensure equal opportunities for all (Azevedo *et al.*, 2022; Mok and Zhang, 2022).

Research context

According to Yuan (2022), China entered the game of internationalization by providing scholarships to international students, particularly from the global south, which supports the SGD 4, 4.7 indicators. Nevertheless, this action is driven by a political motive aimed at enhancing global influence and soft power (Latief and Lefen, 2018; Wang, 2022). According to

the Ministry of Education China, in 2018, 492 185 international students from 196 countries were enrolled in 1004 higher education institutions spread throughout 31 provinces. Only 12.81% received funding from the Chinese government scholarship fund, while 87.19% were self-funded. The top three nationalities of international students in China are South Korea, Thailand and Pakistan (MOE China, 2019). In a Sustainable Development Report, China rated 68th out of 167 countries. Furthermore, SDGs 1 and 4 (No Poverty and Quality Education) demonstrated that these goals had already been achieved (SDG Index, 2024).

Methodology

An online survey was designed to invite international students to share their thoughts regarding their experiences in attending classes online. This survey was conducted during the School Year 2022–2023. The Microsoft forms received 125 responses from international students at Project 211 universities. Project 211 is a group of universities composed of approximately 100 Chinese universities affiliated with the Chinese Ministry of Education, aimed at building a world-class construction for the 21st century. The online survey collected information such as age range, major, discipline, gender, location, devices used for learning, hours of studying, their opinion on the impact of studying online and strategies employed.

Survey design is typically utilized in quantitative design. However, during the pandemic, it became a valuable method for gathering insights among students isolated in their homes. Moreover, this study draws on a broader research project exploring international students' online learning experiences during the COVID-19 pandemic. This manuscript focuses explicitly on the qualitative findings, which provide in-depth insights into the international students' experiences and mitigation strategies. In the survey, the students answered two open-ended questions: What strategies did you employ to overcome the challenges you encountered? And in your opinion, what is the impact of online learning on your studies?

The top three age categories among participants are as follows: 43 participants are aged 26–30, 37 are aged 31–35, and 28 are between the ages of 21 and 25. The online survey included 67 male and 58 female international students. Most of these international students (80) studied online learning from locations outside China, while 45 international students participated in online learning from inside China. Among the participants, 42 were enrolled in a doctoral program, 58 were in a master's degree program, 17 were in a bachelor's degree program and 8 were international exchange/research students. Many of the participants were from Social Sciences and management (67), followed by Arts and humanities (32), Engineering and technology (17), Natural Sciences (6) and Life Sciences and Medicine (3). Eighty participants studied for one to three hours per day, 36 for four to six hours per day and nine for seven to ten hours. Regarding technology, 94 utilized mobile phones, 97 used laptop computers and 26 used tablets or iPads. The online platforms suggested by participants were Zoom, DingTalk, Voov, Tencent Classroom, Slack and Zhumu.

The data were processed, encoded, and analyzed using ATLAS.ti 24. This study did not gather personally identifying information and followed ethical guidelines, including voluntary participation, informed consent, anonymity and confidentiality. There were no anticipated risks connected with participation in this study.

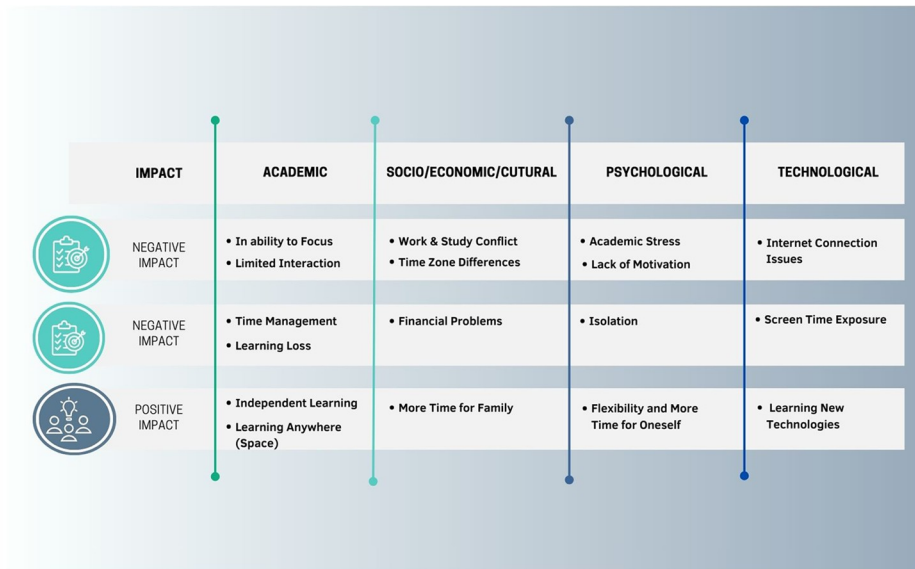
Findings

This study explores the lessons learned from the international students studying in China during the COVID-19 pandemic. It discusses the negative and positive impacts based on academic, socio/cultural/economic, psychological and technological experiences.

Negative and positive impact of studying online

Negative impact. As shown in Figure 1, international students’ perceived negative impact includes inability to focus, limited interaction, time management, learning loss, language barrier, work and study conflict, time zone differences, financial problems, academic stress, low motivation, isolation, internet connection issues and screen time exposures.

Academic experiences. International students expressed concerns about *maintaining focus* while online studying due to numerous distractions, including social media and learning environments. *Limited classroom interaction* between students and teachers is lessened because of online learning; one participant commented, “*I cannot adequately interact with the teacher or work in groups with my classmates.*” Online learning limits the class interaction between students and teachers, especially for large classes. It is also noted that students’ communication with their supervisor is different in an online setup. Students are concerned about having difficulty communicating with their supervisors. One of the students shared, “*My excitement to continue is fading because I have difficulty communicating with my supervisor.*” Most students have difficulty interacting with their fellow students, especially when there is a group activity. Students mixed with Chinese students noted the *need for more interaction* with them while learning online; as one student noted, “*Lack of opportunity to communicate with Chinese students to share thoughts and ideas. Lack of opportunity to communicate with teachers.*” Less interaction in online learning leads to *learning loss* among students’ learning. Participants believe that *social interaction* helps them learn more. As one of the students said, “*Learning outcomes are not so satisfying, and social interaction is lesser than in face-to-face classes.*” Students felt that learning became less because of the changes in the learning outcomes that fit the situation. The student said, “*I feel the knowledge I got was only 30%.*”



Source: Author’s own work using Canva

Figure 1. Perceived impact of online learning

Sociocultural/economic experiences. International students studying online outside China expressed that the *absence of a scholarship stipend* compelled them to seek employment while pursuing their studies. Some noted that they needed to purchase faster bandwidth, and others needed to buy new devices to use for learning, which made them face financial barriers. It made it challenging for students to *manage their time for study and work*. Some complained that it was due to the *time zone difference* that made it difficult to study since the class time is based on Beijing time.

Psychological experiences. Motivation is an essential ingredient in learning. However, students complain of a *lack of motivation* to study online. Limited interaction and other factors hinder students from learning well online, leading them to lack interest. Most students face their screens to be attentive in class, especially when some professors request that they open the camera. Students feel exhausted from keeping their attention for a long time.

In addition to a *lack of motivation*, the psychological impact on students studying online is also associated with *academic stress*, deadline pressure for submitting several assignments, and *feelings of loneliness or isolation*. Online learning induces anxiety in students due to the necessity of adhering to assignments and deadlines. The academic pressure experienced by students induces anxiety and hinders their ability to learn. The anxiousness is also associated with other factors, such as *connectivity issues* and disruptions in learning while studying online from home. One of the students commented, *"It affected me psychologically. I am always anxious when I do not complete my assignment or have a slow internet connection. I fear that my grades will get affected."* In addition, the pandemic caused students to study from home, limiting face-to-face social interaction. Moreover, it leads students to suffer psychological *isolation* due to online learning. One of the students says, *"I think, for me, it is limiting my social interactions and causing psychological isolation."*

Technological experiences. Most participants note that *connectivity issues* lead to problems like academic stress and hindrances to learning. The connectivity problems affect the quality of learning when students fail to listen to the lecture well, especially when the app has a technical problem. One of the participants said, *"Sometimes, due to network problems, I do not hear anything or fail to attend class normally."* The screen time spent online made students feel exhausted from learning online. In addition, students noted that online learning affects their health vision because of prolonged exposure to screens. One of the students said:

No matter how much I try to focus, I still end up losing interest because staring at the computer for too long is boring and tiring, making my eyes in tears. Because of this, I end up not learning much.

Also, learning disturbances due to the space where students are learning are one of the factors why students feel discouraged from studying. One of the participants said, *"The environment in which you find yourself can also be discouraging if it is not conducive to learning."* Students complained that they have difficulty *accessing school resources* such as the library and the laboratory due to online learning. It results in learning loss and a lack of practical activities, especially for students who require experiments inside the lab. One student shared, *"I think online classes are better for those who do not have experimental work. However, those who do experiments cannot do anything with online learning."*

Positive impact. As shown in [Figure 1](#), online learning also positively impacts international students. It includes independent learning, learning anywhere, more time for family, flexibility and more time for oneself and learning new technologies.

Academic experiences. Online learning offers two modes: synchronous and asynchronous learning. Some courses were offered to students via asynchronous learning, like Slack, and others on synchronous learning on Zoom or Tencent Meeting. Online learning allows students to do other tasks like cooking, working, or attending classes while

traveling. The *flexibility of space and time* of online learning allows students to multitask. One of the students said: “*Online learning for me, to some extent, is good to study online because I can study while sleeping or cleaning or cooking or traveling.*” In addition, students have remarked that the flexibility of online learning enables them to *study anywhere*, such as in the office, in the coffee shop, or at home.

Sociocultural/economic experiences and psychological experiences. Online learning *brings families close together*. Some students, especially those with family, consider online learning a blessing because it allows them to keep close to their family. One of the participants said: “*I am not separated from my family, especially my husband and children.*” International students described it as a *sense of freedom* to have the flexibility to be with their loved ones and to work and study simultaneously.

Technological experiences. Students id="324" are forced to *learn new technologies* and adopt a new online learning method. One of the students said: “*On the positive side, I get to know new ways of learning, especially in terms of understanding different technologies.*” In this context, students learn new ways of learning that are delivered entirely online. They learn more about technology while navigating the challenges they face.

Identified mitigation strategies

Access to learning resources. International students overcome these problems by utilizing *online resources and accessing free educational websites*. They often request assistance from teaching assistants for guidance *on class recordings*. Some international students cannot participate in synchronous classes due to differences in time zones and work commitments. The class recordings functioned as their substitute resource for online learning. One of the students said:

I think student support learning services with the social present in online classes would be the solution, and recordings of lecture and classroom materials should be provided timely; the most important is that teaching assistant should be helpful in order to meet the need of the student.

Conducive learning environment. International students perceive that having *conducive spaces, minimizing distractions* and finding *supportive environments* help them deal with learning environment challenges. One of the participants said:

I used to purchase data to be connected during classes. I drive every day a distance away from where I stay to get stable internet and a conducive study environment.

Technological supports. The mitigation strategies comprise *internet stability, technical support, and device upgrades*. International students outside China have observed that they must allocate more money for internet data to ensure internet stability during synchronous classes. However, due to time differences and work conflicts, some needed to view the class recording, forcing them to purchase more costly internet bandwidth to download the video. Furthermore, some international students said they needed to purchase new equipment or software since their current technology needed to meet the requirements for online learning applications. One of the participants stated: “*I updated my technological devices to the latest versions to avoid barriers. In addition, I have bought all the necessary software to help in the online classes.*”

To overcome these challenges, international students should consider *regular practice, having clear instructions and finding user-friendly technology*. As previously reported by the participants, using the Chinese learning application caused them to encounter difficulties. However, with *consistent practice* and becoming acquainted with the technology, more exploration was required, particularly of the app’s functionalities. International students seek

assistance from their peers who possess the technical expertise to help them understand the challenges associated with using the application. Several participants stated they found a *user-friendly app* to help them translate their work into Chinese. One of the participants said: “*I used the app to translate my work.*” In addition, they emphasized the need to receive *clear guidance* from the professor to facilitate the use of the app, particularly for those participants who utilized an asynchronous online platform like the Slack application.

Self-regulation strategy. Seeking help, fostering a positive mindset, prioritization and routine establishment. According to the participants, *seeking help from their classmates* is essential, especially for some of the missed lessons during the class. Several first-year international students sought assistance from their teaching assistant to enhance their fundamental proficiency in the Chinese language. Furthermore, some international students actively seek assistance in acquainting themselves with the Chinese application for online learning. One of the participants said:

I would approach someone with more experience with this kind of thing to help me, especially my classmates or a teaching assistant. Sometimes, I try to learn how to self-learn and use Chinese learning technology in my free time.

International students observed that the drawbacks of online learning resulted in them finding it hard to manage the many tasks they had to complete. They observed that *possessing a resilient and positive mindset* is essential for thriving in the online learning environment. Furthermore, international students have expressed the significance of *establishing an organized routine* and *knowing their priorities* for tasks to effectively manage their time between family, studies, and work while grappling with feelings of loneliness. They work hard to manage all their priorities.

Collaboration and involvement. The solutions employed by international students to manage isolation challenges include *student-student collaboration, receiving support from family, communicating with instructors* and *participating in virtual social activities*. Engaging in social interactions with peers, teachers, and close relationships is crucial for alleviating feelings of isolation and sadness. One of the participants shared: “*I asked my friends to study together at a cafe.*” International students collaborate with their peers in person or online to work on a particular assignment. Some students participated in online activities, such as free webinars, to acquire training and certificates needed for their annual scholarship review. These activities help students cope with isolation during the COVID-19.

Discussion

This study examined the lessons learned from the international student’s experiences in studying online during the COVID-19 pandemic. It highlighted the impact of the online learning experience and the mitigation strategies they used to confront the challenges they faced during the online learning experience.

The findings reveal that international students impacted negatively on their academic, psychological, socio/economic/cultural and technological experiences while studying online during the COVID-19 pandemic. Challenges such as time zone differences, limited classroom interaction and supervisor communication barriers reflect the unique positionality of international students. However, the study also identifies opportunities for independent learning and skill development in technology use. This finding supported the study of [Mekonen and Adarkwah \(2023\)](#) that international students in China suffered from homesickness during the extended lockdown, which affected their social and academic wellbeing. In the Canadian context, in a study by [Chen \(2023\)](#), international students preferred taking classes in asynchronous mode due to the time difference and internet issues.

The study highlights significant psychological stressors, including isolation, lack of motivation and anxiety related to academic performance and connectivity issues. These findings are similar to the study of [Conteh et al. \(2024\)](#), which explored international students' experiences of anxiety and depression due to isolation. The social isolation resulting from lockdowns and travel restrictions has exacerbated feelings of loneliness and homesickness among international students. The absence of social connections and support networks has adversely affected their mental wellbeing ([Al-Oraibi et al., 2022](#); [Koo, 2021](#)).

International students mention numerous mitigation strategies during their online learning experience. In the findings, it could be summarized that international students' mitigation strategies are collaboration with peers, seeking support from their teachers and family, finding a conducive learning environment for studying, and securing access to academic resources. Studies ([Yu and Xu, 2022](#); [Yu and Huang, 2022](#)) confirmed similar findings that international students overcame obstacles by using resilience techniques like independent learning to succeed academically. Moreover, to address obstacles, students adopted multiple strategies, including seeking social and family support, engaging in athletic activities and enhancing the quality of online instruction ([Bahtilla et al., 2022](#); [Luo and Mohammed, 2023](#)).

From a theoretical perspective, the study expands on the concept of "learning resilience," illustrating how students adjusted through self-regulation, resourcefulness, and collaborative strategies. In this study context, learning resilience is the capacity to adapt and excel academically while encountering many challenges and hardships linked to studying abroad. The results contribute to the existing body of work on resilience in higher education ([Bala, 2016](#); [Sabouripour and Roslan, 2015](#); [Yu and Xu, 2022](#)) by offering a detailed perspective on the lived experiences of international students during a crisis. In addition, according to [Hartnett et al. \(2023\)](#), most students reported a decline in learner agency, including diminished control, focus, motivation and confidence.

Implications for higher education institutions

In the findings, international students noted the challenges faced while learning online due to many circumstances, such as location, financial and technology issues. In this study, most participants were studying online from outside China. Furthermore, most international students voiced their concerns about learning loss. After the COVID-19 pandemic, [World Bank \(2022\)](#) calls for action to address the issue of learning poverty. However, the RAPID framework was primarily designed for basic education. However, it is clear from the findings how international students were affected by COVID-19, which requires attention for recovery and a future direction on how international students be handled in times of crisis. The following are the implications for higher education institutions.

Reach all international students. According to the findings, some participants studied online from locations outside of China. Universities should proactively engage with international students to assess their wellbeing and understand their challenges. Such will enable a better understanding of how to address these issues effectively. Nevertheless, because of the high number of international students, the International Student Office (ISO) faces challenges in offering personalized assistance. Therefore, universities may want to explore the possibility of implementing a platform or adopting new technology to track student progress and effectively address their needs.

Assess learning. The findings revealed that international students possess various identities beyond their role as students, including being employees and fulfilling parental or other responsibilities. International students often need help to assess their learning due to the challenges of juggling multiple identities and a lack of focus on their studies. Furthermore, they encountered various challenges, including time zone differences and internet connectivity problems. Professors working with international students should

consider the importance of using various assessment methods, delivering feedback in different formats, including audio, and ensuring a user-friendly interface.

Prioritize the fundamentals. From a curriculum perspective, every course has specific learning competencies that international students must acquire. Unfortunately, the COVID-19 pandemic has significantly altered the way we approach education. Therefore, universities should incorporate “core literacy competencies” into every course. University teachers may want to consider incorporating “core literacy competencies” and “supplementary literacies” into their curriculum guide. Through this approach, international students understood the essential criteria for success in their course while ensuring that their overall learning experience was not compromised.

Increase the efficiency of instruction. Universities may find this study useful for enhancing their teaching instruction through the identified impact and mitigation strategies. In general, institutions are advised to continue providing online learning to students even after the COVID-19 pandemic has passed. Universities may consider developing a new platform that is accessible to students from diverse backgrounds and is affordable in terms of internet data usage. Furthermore, it is crucial for university teachers to regularly attend seminars or engage in professional development opportunities that focus on the latest trends in technology-enhanced teaching. Continuous training will ensure the teachers’ preparedness to navigate potential challenges.

Develop psychosocial health and wellbeing. The International Students Office (ISO) should prioritize enhancing its support for international students’ mental and emotional wellbeing. Based on the findings, it is evident that international students often experience feelings of isolation, which can result in loneliness, academic stress, and a lack of motivation. To address this issue, universities should consider offering psychological support in the language students are comfortable using for free counseling. Creating a platform for students to express their concerns could assist them in overcoming the obstacles they face.

The pandemic has tested the government policies on producing policies aligned with social justice for international students. For this study, most international students are “*stuck*” in their home countries, waiting for travel restrictions and minimal travel costs. Universities might consider providing financial support for scholarship students with an agreement that secures their continuity in the program despite times of crisis and facilitates support for visa regulations for international students. In addition, concerning online learning, the university should create a guiding policy for all teachers that online learning resources are equitable and inclusive, enabling students to continue their education without significant disruptions, regardless of their location.

Limitation and future research directions

The study presents both methodological and theoretical limitations. Methodologically, it utilized an online survey to capture multiple perspectives on the challenges faced by international students, particularly regarding geographic location differences. Unfortunately, this method limits the depth to expand the context of the phenomenon. Future researchers might consider conducting a key informant interview or focus group interview with deeper insights based on the impacts and mitigation strategies identified in the findings and further explore international students’ wellbeing, focusing on academic, socioeconomic, cultural, technological and psychological aspects. Theoretically, this study focused on online learning for international students, enhancing our understanding within traditional higher education institutions, where online learning is often associated with open universities. Future research could compare students’ experiences in open universities with those in traditional universities to understand how their learning experiences differ, especially in times of crisis.

Conclusion

As we deal with achieving Sustainable Development Goal number 4, this study explored the lessons learned from the online learning experiences faced by international students in China. The findings reveal that international students have impacted their academic, socio/economic/cultural, psychological and technological aspects while learning online. It also offers mitigation strategies as a “lesson learned” from international students on addressing the challenges. Moreover, universities are advised to adopt the World Bank’s RAPID framework to address learning poverty, as this study contextualizes its application specifically for international students. Exploring the experiences of international students during the COVID-19 pandemic is vital to address their unique challenges, as identified in this study, that could improve their wellbeing and enhance institutional support systems. This research can provide valuable insights for developing effective strategies to support international students in times of crisis and beyond. Unquestionably, international students live in a VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) world, necessitating further exploration, especially in China (Mainland), where most international students are from the global south.

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