

THE METHODS TO IMPROVE THE INTERNATIONAL STUDENT'S ONLINE STUDY QUALITY IN CHONGQING COLLEGE OF INTERNATIONAL BUSINESS AND ECONOMICS UNDER THE IMPACT OF EPIDEMIC SITUATION

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ABSTRACT

Due to the impact of COVID-19 on the education of international students in China, this paper will raise questions based on the current education dilemma and conduct targeted research, aiming to achieve the following goals: 1) To determine the impact of COVID-19 on the increase and decrease in the number and quality of international students, as well as the impact of the resulting differences in international students' learning ability. 2) To determine the impact of rising unemployment on the change of international students' choice of major and the resulting impact on their learning ability. 3) To analyze the influence of teachers who lack online teaching experience on international students' online learning effect. 4) To analyze the influence of all the above factors to international students' online study quality and find out the solution. The main content of this study is to explore the impact of COVID-19 on learning outcomes of international students, and try to find out some better teaching methods to improve online study quality. The guiding ideology of the method is: outcome-based education and advanced online teaching method; contents of method exploration: to find out the reason which decreased the study quality during the epidemic situation and find out the related solution.

Keywords: International Students, COVID-19, Online Study, OBE, Epidemic

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INTRODUCTION

The global outbreak of COVID-19 in 2020 affected Chinese education system. How to efficiently carry out classroom teaching and practical teaching has become a common topic faced by all colleges and universities. Under the guidance of the Ministry of Education, online course teaching has been carried out in colleges and universities all over the country. After the implementation during the epidemic period, the drawbacks of online teaching mode gradually emerged, such as the lack of effective supervision of students' online learning, the inability to understand students' learning status and knowledge points, the inability to carry out experimental practice teaching, the poor interaction between teachers and students in the network teaching, the waste of a lot of time in the interaction process, and even the influence of some students' classroom voice teaching. After the COVID-19 outbreak was effectively controlled, students returned to class, which is called the post-epidemic era. In the post-epidemic era, we still rely on the traditional offline teaching mode. How to make full use of the advantages of online teaching, consolidate the results of online teaching, deeply integrate with the traditional classroom, and seek the organic combination of offline classroom teaching and online teaching has become the only way for the curriculum reform of colleges and universities. Due to the impact of COVID-19 on the education of international students in China, this paper will raise questions based on the current education dilemma and conduct targeted research, aiming to achieve the following goals:

- 1) To determine the impact of COVID-19 on the increase and decrease in the number and quality of international students, as well as the impact of the resulting differences in international students' learning ability.
- 2) To determine the impact of rising unemployment on the change of international students' choice of major and the resulting impact on their learning ability.
- 3) To analyze the influence of teachers who lack online teaching experience on international students' online learning effect.
- 4) To analyze the influence of all the above factors to international students' online study quality and find out the solution.

The main content of this study is to explore the impact of COVID-19 on learning outcomes of international students, and try to find out some better teaching methods to improve online study quality. The guiding ideology of the method is: outcome-based education and advanced online teaching method; contents of method exploration: to find out the reason which decreased the study quality during the epidemic situation and find out the related solution.

The population are all the related 10 teachers who teaches international students and all the 314 international students from year 2016 to 2022. The sample divided into three groups which are 10 teachers, 14 long-term students and 300 short-term students. This paper mainly collected the questionnaire data from the three groups.

LITERATURE REVIEWS

Online Teaching Research

From the technical point of view, online teaching is the product of computer network technology in the 1960s. From the point of view of teaching method, it is a new stage of the development of modern distance education. With the rapid development of network distance technology, educators realize the superiority of online teaching day by day. In the Chinese academic circle, Zhong Zheming is the first to think about the informatization of teaching Chinese as a foreign language. He believes that modern educational technology is better than other media technologies in terms of its theory, technology and function to adapt to the needs of language teaching reform. In the 21st century, Zhang Hesheng et al. believe that although network language teaching has many advantages compared with traditional teaching, it cannot completely replace traditional classroom teaching, but can only serve as a supplement to

traditional classroom teaching. Later, with the continuous enhancement of China's comprehensive national strength, more and more foreign friends came to China to study, so online teaching research gradually entered the field of vision of foreign scholars. For example, Zhaohui Cheng begins to combine her own teaching experience with offline teaching and online teaching to conduct comparative research to explore the learning outcomes of students in the two modes of teaching. After that, Chinese scholar Wang Shuai selected representative online teaching platforms as representative samples to investigate and summarize the status quo of online teaching platforms at that time. It can be seen from the article that at that time, our online teaching platform construction was still in a relatively backward state, and most of the popular platform functions were not perfect. This requires us to pay more attention to the construction of platform functions, so as to be more conducive to online teaching and attract more online learning users. In 2016, Confucius Institutes also published the article "Development of Online Teaching", suggesting that online Chinese courses have a positive impact on the development of teaching Chinese as a foreign language, which can promote the development of teaching Chinese as a foreign language on a global scale. The outbreak of COVID-19 in 2020 has disrupted people's previous modes of teaching and learning. In this context, Language Teaching and Research invites academic colleagues to discuss and exchange "Teaching Chinese to the World under the COVID-19 pandemic". Liu Lening believes that although the popularity of online teaching has certain benefits, online courses lack real interaction, and consume time and energy, and the effect is far inferior to offline teaching. Shi Jinsheng et al. also believe that, in a sense, online teaching cannot completely replace offline teaching, but online teaching also has its advantages -- it breaks the limitations of time and space. Therefore, although there are still many problems in online teaching, its advantages cannot be ignored and it still has great potential for development. From the above studies, it can be seen that scholars timely grasp the development of teaching, at the end of the 20th century began to study online teaching related to the form of teaching, teaching platform, the advantages and disadvantages of online teaching, teaching development and other aspects of online teaching comprehensive research. Especially after the impact of the novel coronavirus epidemic, online teaching has attracted more and more scholars' attention, and up to now, relevant researchers have developed relatively mature. In general, although the academic community holds different views on the merits and demerits of online teaching, it still supports the development of online teaching basically. In the future, it will be beneficial to the teaching of foreign students as long as we keep in mind the fundamental purpose of language teaching, whether it is the parallel development of online and offline, or the online-assisted development of offline.

Online Learning Research

In recent years, the concept of student-oriented and teacher-oriented education has attracted wide attention in the educational circle. Therefore, the research on online learning from the perspective of students is also increasing gradually, and the teaching field of international students is no exception. Research on online learning has developed slowly since 2009. Chen Lifang proposed to set up an online Chinese learning website and systematically introduced the website in the article. This shows that scholars are gradually shifting their research focus to student learning. Lin Yi et al. investigated the online learning behaviors of teenagers, a Chinese learning group, through questionnaires and interviews, and proposed adjustment measures for various behaviors. Chen Wanyu takes primary Chinese learners as the research object, studies their learning self-efficacy and its influencing factors, and puts forward the strategies to cultivate primary Chinese learners' learning efficacy. It can be seen from this that scholars' research on online learning has become more and more extensive, with more and more accurate research objects. They have begun to pay attention to the impact of students' individual psychology and behavior on online learning, instead of only carrying out research from the

perspective of learning platform, learning environment and teachers' teaching. Affected by the epidemic in 2021, research on online learning began to develop rapidly. Chen followed up three MOOCs learners to study their self-regulation process in MOOCs learning. It is suggested that students should become a person with self-learning consciousness no matter in online learning or offline learning. It can be seen from this article that scholars began to narrow down their research from a kind of student group to a case study, and the research became more and more targeted. Xu Lai et al. analyzed students' favorite online learning platforms and their learning experience through a questionnaire survey, found some problems existing in online courses, and put forward relevant countermeasures, aiming at improving overseas students' online learning experience and improving their learning effect. As can be seen from the above studies, the research on online learning is gradually emerging, and the research Angle is gradually changing from external learning conditions to students' personal. Scholars try to help learners improve the efficiency of online learning through research. However, in general, the research on online learning has not reached the level of online teaching research, so the research on online learning still needs to be further promoted.

Through the above research on online teaching and online learning in various fields, it can be seen that the current academic research on online learning is not enough, and the research objects are mainly biased towards Chinese students. In addition, the researches on the online learning effect mainly involve only Chinese students, and there is a lack of researches on the online learning effect of overseas students. Online learning for Chinese students is very different from online learning for international students. First of all, due to language differences, overseas students will face language problems in online learning that will not appear in Chinese students' online learning. In addition, there are still many problems to be solved due to the late rise of online learning for overseas students and the lack of relevant researches. Therefore, from the perspective of international students, this paper analyzes the effects of online learning for international students and the problems they will encounter in learning, so as to help improving the results of online learning for international students.

From the literature review, the conceptual framework can be drawn as shown in Figure 1.

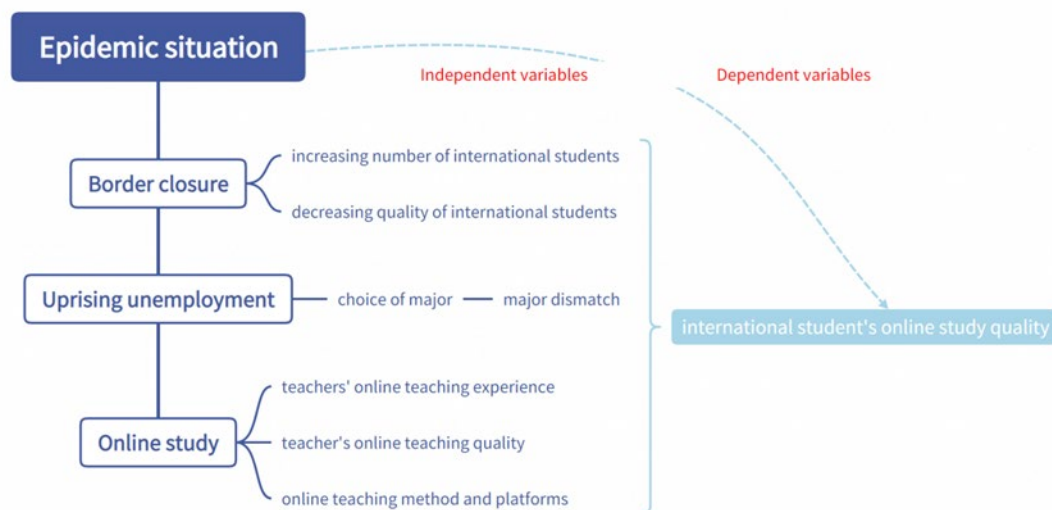


Figure 1 Conceptual Framework

RESEARCH METHODOLOGY

Population and Sample Group

The population are all the related 10 teachers who teaches international students and all the 14 international students from year 2016 to 2022 in Chongqing College of International Business and Economics. The sample divided into two groups which are 10 teachers and 14 long-term students. This paper mainly collected the questionnaire data from the three groups.

Data Collect-Questionnaire

This questionnaire surveyed 10 international teachers and 14 long-term international students. Among the 14 long-term students, all of them are Thai students, including 2 students from grade 2019, 8 students from grade 2020, 1 student from grade 2021 and 3 students from grade 2022. The majors of the 14 long-term students are 4 students majoring in International Chinese Language Education and 10 students majoring in international Economics and trade.

In this questionnaire design, two sets of different questionnaires are designed for teachers and international students.

This questionnaire mainly focuses on 10 aspects of teachers' teaching experience, study abroad background, professional background, teaching experience of overseas students, and study satisfaction of overseas students. Likert five-scale is adopted, including five levels of 1-5, representing: 1-very inconsistent; 2-Does not match; 3-General; 4-Yes; 5-It fits perfectly.

Table 1 The Questionnaire of Teaching Satisfaction for Teacher

The Questionnaire of Teaching Satisfaction for Teacher
Name: Class: Major:
1. How much do you think COVID-19 influenced your working? () A. very inconsistent B. Does not match C. General D. yes E. it fits perfectly
2. Do you think the increasing number of international students decreased your teaching quality? () A. very inconsistent B. Does not match C. General D. yes E. it fits perfectly
3. Do you think the decreasing quality of international student decreased your teaching quality? () A. very inconsistent B. Does not match C. General D. yes E. it fits perfectly
4. Do you think your students' major choices match? () A. very inconsistent B. Does not match C. General D. yes E. it fits perfectly
5. Do you think major mismatch influenced the study quality badly? () A. very inconsistent B. Does not match C. General D. yes E. it fits perfectly
6. Do you have online teaching experience? () A. very inconsistent B. Does not match C. General D. yes E. it fits perfectly
7. How is your ability of using online teaching methods and platforms? () A. very inconsistent B. Does not match C. General D. yes E. it fits perfectly
8. Do you think online class decreased the quality of study? () A. very inconsistent B. Does not match C. General D. yes E. it fits perfectly
9. Do you believe an efficient online teaching method can be benefit for study quality? ()

The Questionnaire of Teaching Satisfaction for Teacher

A. very inconsistent B. Does not match C. General

D. yes E. it fits perfectly

10. How confident do you believe that online study quality can be increased under the post-epidemic situation? ()

A. very inconsistent B. Does not match C. General

D. yes E. it fits perfectly

Table 2 Teacher's Questionnaire Data

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10
A	0	1	0	2	0	0	0	0	0	0
B	0	1	0	4	0	3	1	2	0	0
C	2	2	3	3	0	5	7	2	0	6
D	4	4	5	1	5	2	2	5	5	4
E	4	2	2	0	5	0	0	1	4	0

Note: X represents Variables, T represents Values

Through the analysis of the above research status of online learning for middle school students, the current research on learning quality in the academic circle mainly includes learning attitude, response, learning strategy, ability, satisfaction, instructional design, online course, online learning system and so on. In general, the current analysis of learning quality can be roughly divided into individual learner psychology and behavior, as well as the influence of external environment and conditions on learning effect. As mentioned above, the questionnaire design in this paper is inspired by Gagne's classification theory of learning outcomes. According to this theory of learning outcome classification, students' learning quality should include many aspects of learners' psychology and behavior. Therefore, this questionnaire is based on Gagne's classification theory of learning results, and combines the research methods on learning effects discussed by scholars Zhao Juming and Yan Guangcai. The internal psychological dimension is further divided into seven indicators, including knowledge mastery, learning interest, learning motivation, learning attitude, learning strategy, learning satisfaction and self-efficacy. The external performance dimension is further refined into three indicators: homework, learning participation and communicative competence. The questionnaire adopts Likert five-scale for the study of learning effects, including 1-5 grades, which represent: 1-very inconsistent; 2-Does not match; 3-General; 4-Yes; 5-It fits perfectly.

Table 3 The Questionnaire of Learning Satisfaction for Student

The Questionnaire of Learning Satisfaction for Student

Name: Class: Major:

1. How much do you think COVID-19 influenced your study? ()

A. very inconsistent B. Does not match C. General

D. yes E. it fits perfectly

2. How is "don't need to go broad" influenced your studying abroad plan? ()

A. very inconsistent B. Does not match C. General

D. yes E. it fits perfectly

3. Do you prefer to choose an online international undergraduate program? ()

A. very inconsistent B. Does not match C. General

D. yes E. it fits perfectly

4. Does epidemic influenced your choice of major? ()

A. very inconsistent B. Does not match C. General

D. yes E. it fits perfectly

The Questionnaire of Learning Satisfaction for Student

5. Do you prefer to choose a job which is more stable under the epidemic situation? ()

A. very inconsistent B. Does not match C. General

D. yes E. it fits perfectly

6. Do you like online study? ()

A. very inconsistent B. Does not match C. General

D. yes E. it fits perfectly

7. How do you think your teacher's online teaching quality? ()

A. very inconsistent B. Does not match C. General

D. yes E. it fits perfectly

8. How do you rate the quality of your online study? ()

A. very inconsistent B. Does not match C. General

D. yes E. it fits perfectly

9. Do you believe an efficient online teaching method can be benefit for study quality? ()

A. very inconsistent B. Does not match C. General

D. yes E. it fits perfectly

10. How confident do you believe that online study quality can be increased under the post-epidemic situation? ()

A. very inconsistent B. Does not match C. General

D. yes E. it fits perfectly

Table 4 Long-term International Student's Questionnaire Data

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10
A	0	0	1	0	0	2	2	0	1	0
B	2	0	4	2	0	4	4	4	1	0
C	4	6	4	3	5	4	6	7	0	4
D	7	7	5	7	7	4	2	3	10	6
E	1	1	0	2	2	0	0	0	2	4

Data Analysis

This paper mainly adopts the questionnaire method to investigate and analyze the online learning effect of overseas students. Finally, the statistical analysis method is used to make a summary analysis of the survey results.

RESEARCH RESULTS

Analysis of Teacher's Questionnaire Data

Table 5 Analysis of teacher's questionnaire data

	X1 (100%)	X2 (100%)	X3 (100%)	X4 (100%)	X5 (100%)	X6 (100%)	X7 (100%)	X8 (100%)	X9 (100%)	X10 (100%)
A	0	10%	0	20%	0	0	0	0	0	0
B	0	10%	0	40%	0	30%	10%	20%	0	0
C	20%	20%	30%	30%	0	50%	70%	20%	0	60%
D	40%	40%	50%	10%	50%	20%	20%	50%	50%	40%
E	40%	20%	20%	0	50%	0	0	10%	40%	0

The table above shows the weights of the five options for variables 1 to 10. Variable 1 examines teachers' impact on teaching quality of COVID-19. As shown in the figure, most teachers believe that epidemic situation has a serious or relatively serious impact on teaching quality. Variable 2 examines the impact of the increase in the number of students on the teaching

quality. 40% of teachers think that the negative impact is large, and a few teachers think that the impact is small or no impact. Variable 3 examines the impact of declining student source quality on teaching quality. Different from variable 2, almost all teachers believe that declining student source quality has a negative impact on teaching quality. Variable 4 examined teachers' cognition of the matching degree of students' major choice. 40% of teachers believed that students' major choice was inappropriate, but teachers' response to this problem was relatively dispersed. Variable 5 examines the impact of major mismatch on teaching quality. All the surveyed teachers believe that major mismatch has a serious or very serious negative impact on teaching quality. Variable 6 examines the online teaching experience of the surveyed teachers. The survey shows that younger teachers have more online teaching experience than older teachers. Variable 7 examines teachers' evaluation of their own online teaching ability. Most teachers hold a conservative or even negative attitude towards their own online teaching ability. Obviously, teachers' online teaching ability needs to be improved. Variable 8 examines teachers' attitudes towards online teaching. Most teachers welcome online teaching, but older teachers have a negative attitude towards online teaching. Variable 9 examines teachers' attitudes towards effective online teaching. Almost all teachers are optimistic about the positive feedback of effective online teaching. Variable 10 examines teachers' confidence in online teaching in the post-epidemic era, and the results show that most teachers hold a wait-and-see attitude.

Variables 1, 2 and 3 show the influence of independent variables border closure. As can be seen from the above data analysis, border closure leads to the decrease of admission and graduation requirements of universities enrolling students, which further leads to the increase in the number of international students and the decline in the quality of students. These two changes have a negative impact on the quality of teaching.

Variables 4 and 5 show that under the influence of independent variable uprising unemployment, students' choice of major is not appropriate, and has a serious negative impact on teaching quality.

Variables 6 to 10 show that the independent variable online teaching quality has certain differences between young teachers and older teachers. However, most teachers recognize the positive significance of effective online teaching for teaching, but most teachers hold a wait-and-see attitude towards the future development of online teaching.

Analysis of Students' Questionnaire Data

Table 6 Analysis of student's questionnaire data

	X1 (100%)	X2 (100%)	X3 (100%)	X4 (100%)	X5 (100%)	X6 (100%)	X7 (100%)	X8 (100%)	X9 (100%)	X10 (100%)
A	0	0	7%	0	0	14%	14%	0	7%	0
B	14%	0	29%	14%	0	29%	28%	28%	7%	0
C	29%	43%	29%	22%	36%	29%	44%	50%	0	28%
D	50%	50%	35%	50%	50%	28%	14%	22%	72%	44%
E	7%	7%	0	14%	14%	0	0	0	14%	28%

The figure above shows the weights of the five options for variables 1 to 10. Variable 1 examines the impact of COVID-19 on students' learning quality. Half of the students think it has a certain negative impact, some think it has a limited impact, and some think it has a small impact. Variable 2 examines the impact on students' study abroad plans under the condition of "no need to go abroad". Half of the students think it will have a certain impact, and a large part of the students think it will have a moderate impact. Variable 3 examines the tendency of students to choose undergraduate study programs with full-line teaching. The survey shows that students have a relatively average choice of whether to choose online undergraduate study

programs. Variable 4 examines the impact of the epidemic on students' choice of major, and the data shows that 64% of the samples believe that the epidemic has an impact on their choice of major. Variable 5 examined students' job-hunting tendency under the influence of the epidemic. The data showed that 64% of the samples believed that students were more willing to choose relatively stable jobs under the influence of the epidemic, while no student thought that they should choose unstable jobs. The data was highly consistent with the result of variable 4, which was in line with the goal of this study. Variable 6 focuses on students' preference for online learning. Except for value 5, the selection weights of the other four values in the 14 samples are basically equal. Variable 7 focuses on students' evaluation of their own teachers' online teaching ability. Based on students' "respect" psychology for teachers, most of the samples make a moderate choice, but the proportion of those who recognize teachers' good online teaching ability is 14% less than that of those who disapprove 29%. Variable 8 focuses on students' evaluation of their online learning effect. Based on the modesty of most Southeast Asian students, half of the 14 samples make a moderate choice, but the proportion of those who think their learning effect is poor is higher than that of those who recognize their learning effect. Variables 9 and 10 are consistent with variables 9 and 10 of the teacher questionnaire, and the focus of the investigation is also consistent. However, the survey data are quite different. In variables 9 and 10, the sample of students generally hold an optimistic attitude, and most of them recognize and are optimistic about the future development of online learning and its positive significance to their overall learning effect.

Variables 1, 2 and 3 show the effect of independent variable border closure on students' propensity to study abroad. The data shows that under the influence of the epidemic, most students have a strong interest in online undergraduate programs that "do not need to go abroad", which reflects the potential reasons for the increase in the number of overseas students with degrees during this period.

Variables 4 and 5 show the impact of the rising unemployment rate of the independent variable on students' choice of major. The data show that under the influence of the epidemic, the unemployment rate has soared, resulting in more students' recognition of relatively stable occupations such as civil servants, teachers and doctors. Therefore, more long-term students and students with academic degrees tend to choose corresponding majors.

Variables 6, 7, 8, 9 and 10 show the influence of independent variables on online teaching in student groups. Compared with the data of the teacher sample, the performance of the students in the first three variables is relatively moderate, and the data reliability is low, while the reliability of the last two variables is higher than that of the teacher sample data.

DISCUSSION & CONCLUSION

The findings of this study align with previous research on the impact of the COVID-19 pandemic on international students' online learning experience. Several studies have highlighted the challenges faced by international students and the need for targeted interventions to improve their learning outcomes.

One study by Liansong and Xinrong (2021) examined the convergence management of international students from "the Belt and Road" in the post-epidemic era. They found that the pandemic had a significant impact on international student mobility and highlighted the importance of implementing effective strategies to support international students' learning needs. This aligns with the findings of our study, which identified the impact of COVID-19 on the increase and decrease in the number and quality of international students.

Another study by Qiguang and Jiameng (2022) analyzed the impact of the COVID-19 outbreak on international student mobility in China. They emphasized the need for response strategies and highlighted the importance of addressing the challenges faced by international students.

Our study supports these findings by identifying the impact of rising unemployment on international students' choice of major and its resulting impact on their learning ability. Furthermore, a study by Tinggui et al. (2020) examined the user experience with online education platforms in China during the pandemic. They highlighted the importance of improving the online learning experience for students. Our study aligns with these findings by emphasizing the need to improve teachers' online teaching abilities and provide support and resources to enhance students' engagement and motivation in the online learning environment. Additionally, Ningjing et al. (2022) explored the mixed teaching mode based on SPOC (Small Private Online Course) in the post-epidemic era. They found that a combination of online and offline teaching can effectively improve learning outcomes. Our study supports this approach by emphasizing the importance of integrating online teaching methods with traditional classroom teaching to enhance the quality of education for international students. Overall, the findings of this study are consistent with previous research on the impact of the COVID-19 pandemic on international students' online learning experience. The results highlight the challenges faced by international students and the need for targeted interventions to improve their learning outcomes. By considering the findings of these relevant studies, universities can develop effective strategies to enhance the online learning experience for international students and mitigate the negative impact of the pandemic on their education.

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