Original Paper

Investigation and Analysis of College Students’ Online Learning Behavior in the Post-epidemic Era

—Take Suqian College as an Example

Luo Youhao & Yang Jianxiang

1 Suqian College of Law and Politics, Suqian, Jiangsu 223800, China

Received: March 9, 2021 Accepted: March 19, 2021 Online Published: March 23, 2021

doi:10.22158/jecs.v5n2p67 URL: http://dx.doi.org/10.22158/jecs.v5n2p67

Abstract

The COVID-19 epidemic broke out in the world in 2020. With the continuous efforts of people all over the world for a year, the development trend of the epidemic was gradually restrained, and countries began to enter the post-epidemic period one after another. With the students from all over the country returning to school gradually, how to strengthen the normal study of young college students and how to restore the normal teaching order in schools is a huge challenge to both schools and students during this special period of epidemic prevention and control. This paper starts with the phenomenon that the learning effect of online education for college students in Suqian University is not ideal, and carries out on-the-spot questionnaire survey to explore the problem. According to the research, some students have cultivated their good learning habits in the home-school environment, but there are still some problems, such as the majority of students lack of inertial thinking of online learning, lack of attention to online learning and unable to find a suitable mixed online teaching model. Schools should select appropriate teaching models to guide students to participate in online learning. Students should also actively cooperate with teachers to carry out educational work, restrain themselves and devote themselves to study within the stipulated time. Finally, I hope that this paper can effectively promote the development of online e-learning by putting forward some countermeasures and suggestions for the construction of high-quality e-learning model in schools.

Keywords

post-epidemic era, e-learning behavior, the actual situation, there are problems, countermeasure and suggestion
1. Introduction
In the special period of epidemic prevention and control in COVID-19, college students across the country have ushered in a climax of online learning with simultaneous online promotion of multiple courses. Although college students are the “main force” of learning among young groups, online learning is the main component. However, according to the relevant teaching data released by the Ministry of Education, there are still a series of problems that need to be solved in the online learning of college students with multiple courses simultaneously. However, the factors that affect the learning effectiveness are very complex, which has aroused the attention and heated discussion from schools, families, society and college students themselves. Therefore, taking Suqian University as an example, this paper conducts an investigation and empirical analysis of college students’ online learning behavior in order to solve the problems of college students’ online learning in the post-epidemic era, help college students to develop good online learning habits and improve the quality of online learning.

2. The Reality of College Students’ Online Learning in the Post-epidemic Era
With the rapid development of information technology and knowledge economy in the world, the network plays a more and more important role in modern people’s lives. People no longer focus on offline learning activities and choose online education model for learning. Online education also follows. Online education activities are characterized by convenience and high efficiency, and teaching resources can flow in a wider range. As long as there is a network coverage area, as long as there is a good will to learn, college students can learn anytime and anywhere (Meng, 2016). Online education is popular with young college students. The main body of online education often uses online education resources for learning, such as postgraduate entrance examination, public examination, examination and compilation, English CET-4 and CET-6, teacher qualification certificate, etc. On the campus of universities, there are plenty of platforms and software for online learning. Universities are also actively seeking cooperation with online learning platforms and software companies, offering some online extension courses to provide students with abundant online learning resources. Through the construction of online courses, the upsurge of online learning has only increased among college students, and has shown an increasing trend. In the post-epidemic era of normalization of epidemic prevention and control, the overall situation of college students’ online learning is very good, but there are still some problems, such as lack of online learning thinking, lack of hybrid online teaching model and lack of online learning concentration. The study thought has not changed, this kind of study method forms the sharp contrast with the traditional face-to-face teaching method; College students are easily affected by the environment, when they use network learning, or affected by the surrounding environment and other factors will become a stumbling block. The students’ learning effect will be biased, so it is necessary to guide and perfect the online learning to ensure that the college students can learn something from the online learning process and develop good online learning habits.

2.1 After the Epidemic Era, College Students Love Hybrid Teaching
Table 1. Favorite Teaching Methods

| Which teaching method do you like | Percentage (%) |
|----------------------------------|----------------|
| Classroom teaching               | 27.9           |
| Online teaching                  | 6.5            |
| A combination of the two         | 63.7           |
| Other                            | 1.9            |

According to the data shown in Table 1, college students’ choice of favorite teaching methods shows that more than half of the students like the combination of classroom and network teaching methods, accounting for 63.7%, a large proportion. Unilateral comparison, college students’ choice of classroom teaching and online teaching two ways, choose the classroom teaching of college students accounted for 27.9%, choose online teaching of college students accounted for only 6.5%. It indicates that college students still like traditional classroom teaching very much and the humanistic environment and interactive communication of offline classroom teaching. By contrast, the advantage of online teaching is relatively weak.

2.2 Learning Behaviors and Habits of College Students Affect the Quality of Online Learning in the Post-epidemic Era

Table 2. How to Take Notes in Online Learning

| Ways to take notes in online network learning | Percentage (%) |
|----------------------------------------------|----------------|
| Screenshot                                   | 39.3           |
| Take photos and save them                    | 32             |
| Make notes                                   | 15             |
| None                                         | 13.7           |

The data in Table 2 show that the university students’ way of taking notes in online learning is the largest, accounting for 39.3%. The second highest percentage was 32%. The number of people who choose to take handwritten notes is relatively small, accounting for 15%, and 13.7% of the students do not have the habit of taking notes for online learning, because they do not adapt to this novel learning method and do not know how to take notes. After the final exam in the second half of 2020, Suqian University’s big data showed that the students who chose to take handwritten notes had the highest scores, followed by the students who chose to take photos and save them, the students who chose screenshots in the middle, and the students who did not take notes had the lowest scores.

The factors that affect the quality of college online learning are very complicated, and the learning habit of taking notes is only one aspect. The data in Table 3 show that the biggest factor affecting the quality of college students’ online learning is still the students’ individual learning ability, accounting for 50.3%,
including self-control ability and the degree of cooperation with teachers. The proportion of environmental factors is 47.2%. Environmental factors include the problem of unsmooth network, etc. In the special period of normalization of epidemic prevention and control, many college students enter online platforms to learn at the same time, which may lead to problems such as network deadlock and software failure. However, schools and teachers will have corresponding solutions to these problems. Therefore, the factors that affect college students’ online learning are mainly individual learning ability factors.

### Table 3. Factors Affecting College Students’ Online Learning

| Factors Affecting College Students’ Online Learning | Percentage (%) |
|--------------------------------------------------|-----------------|
| Personal element                                 | 50.3            |
| Environmental factor                             | 49.2            |

2.3 The Quality of Teaching Resources in the Post-epidemic Era Affects the Effectiveness of College Students’ Online Learning

During the special period of epidemic prevention and control, teachers and college students do not know much about online learning, and the resources of high-quality online courses in colleges and universities are not fully integrated into the teaching practice, and a complete teaching evaluation and supervision system has not been established, which results in college students’ low love for mass online education in colleges and universities (Zhang, 2019). At the same time, the network teaching resources are constantly improved and integrated to improve the quality in the use process, and it is difficult to form a high-quality network teaching resources bank in the short term. In addition, a large number of courses are taught online at the same time, which also results in the lack of learning energy for college students, which is difficult to adapt to, and a perfunctory learning state appears.

3. The Main Problems of College Students’ Online Learning in the Post-epidemic Era

3.1 Lack of Online Learning Thinking

Because this learning method is in sharp contrast with the traditional face-to-face teaching method (Feng, 2012), and because of the different learning methods, students’ learning thinking will change accordingly, at this time, autonomy is a great assessment for college students. However, for the majority of college students, they often only consider their inner thoughts, but ignore the essence of the subject, and their thinking is easy to break when studying (Jin, Xi, & Wang, 2017). Online courses generally rely on college students’ autonomous learning ability. Without teachers’ face-to-face teaching guidance, there is no lack of emotional communication between teachers and students. College students may be unable to learn in class. In addition, the sudden appearance of online learning makes college students unsuitable for learning in this way, resulting in low learning efficiency.
3.2 Lack of Hybrid Network Teaching Mode

There are many online learning methods to choose from. Common online learning software includes Tencent Conference, Tencent Classroom, Nail, QQ, Rain Classroom, Enterprise WeChat, Learning Pass, Wisdom Tree, MOOC and other learning software. Students usually register to a certain platform for learning at the request of teachers. On different platforms, the functions are different. For example, most of the software has playback function, which enables students to continue learning after class (Chen, 2017). Of course, different courses are studied in different ways. For example, massive open online course and Wisdom Tree Software are mainly recording and broadcasting courses, which are generally elective courses in schools; Tencent’s classroom, nailing and other software have the functions of check-in, punch-in, etc., which is beneficial for teachers to better teach and check students’ attendance. After investigation, it is found that students’ favorite online learning methods are mainly the combination of recording, broadcasting, live broadcast and curriculum resources package. In actual teaching, teachers’ interaction with students can make students better grasp the learning situation of this class.

3.3 Lack of Online Learning Concentration

When college students use the network to study, or are affected by the surrounding environment, the students’ learning effect will be deviated. They will be interrupted by external temptation (Xue & Li, 2020). College students are not active in online learning, their homework is sloppy, and their knowledge is not fully grasped. It can be seen that college students’ online learning is easily affected by the environment, and their self-discipline is also affected by the environment, which makes it easy for them to transfer from learning to other places and greatly shortens their learning time. The advantage of online learning disappears, which makes this new learning method not well used (Hu & Xie, 2020).

4. Countermeasures and Suggestions to Improve the Quality of College Students’ E-learning in the Post-epidemic Era

4.1 Cultivate Students’ Autonomous Learning Ability

College students should change their learning thinking appropriately and make corresponding changes to the traditional teaching methods and the “face-to-face” classroom model. College students are generally accustomed to the traditional teaching mode, if you want to keep up with the times to adapt to online network learning, it mainly depends on the ability of autonomous learning (Yang et al., 2020). Online network learning needs teachers to guide college students to learn independently. College students should choose appropriate learning methods according to their own situation and look for learning skills in learning. College students should also acquire knowledge through a variety of ways. In online learning, as long as there is a computer or a mobile phone, a variety of online courses can be seen anytime and anywhere, and their access to resources is very wide, not affected by the border. College students should make full use of convenient resources (Li, 2019), enrich their knowledge through multiple channels, and also take the initiative to participate in network learning.
4.2 To Establish a Professional Network Course Development Team

The core of network lesson is to record network lesson video, which requires a special network courseware development group to research and develop network lesson. If the research group wants to have a deep understanding of the professional courses in colleges and universities, it also needs to have sufficient first-line teaching experience and make a reasonable teaching plan according to the teaching objectives. The research group is usually led by the professional teachers of the first-line colleges and universities, and assisted by assistant students. The design of teaching materials, video recording and video editing modules are the responsibility of relevant specialized personnel. Before recording the online course, we should deeply understand the students’ requirements, select the appropriate recording scenarios, and record the online course with high quality. Lectures, lectures, homework assessment should be in line with the actual needs of students. After the online lesson recording is completed, a trial operation process is added, and the online lesson content is further optimized and adjusted according to the actual feedback result of the trial operation. The research group should also track the students’ learning effect, update the online course content in real time according to the learning data, and modify and perfect the course in time according to the trend of the times.

4.3 Rich Teaching Resources

In the information age, a large number of free teaching videos, electronic lesson plans, question banks, case libraries and other course resources are provided on each major course platform on the Internet. Before class, teachers can recommend students to watch some targeted video materials about the course to learn and understand the basic knowledge of the course. In the online courses, teachers explain the difficult points of knowledge, in order to consolidate knowledge and deepen students’ understanding of knowledge. After class, teachers can recommend high-quality courses suitable for students’ self-study to students according to their majors, and enrich teaching resources, such as video materials from platforms such as Learning English, Knowledge Tree, and massive open online course of Chinese University. Under the network environment, make full use of the teaching resources of each platform, online teaching, online answering questions, online homework correction, etc., and constantly enrich the teaching resources, for teachers in preparing lessons, classroom organization, teaching, interactive learning and answering questions and other aspects to provide related technology and reference.

Under the background of information age, the teaching mode should also be reformed. As a new teaching mode, network teaching will become more and more universal and the scale will become increasingly large. We should vigorously promote the network course, enrich the diversity and practicality of the network course, and arouse students’ interest in learning the network course. Generally speaking, in order to achieve a better teaching effect, we need the support of software and teachers’ active guidance. Each major teaching platform should reflect on and improve the problems in the platform, strengthen the anti-cheating system, and let students learn in good faith. Teachers should guide students positively to improve their learning enthusiasm. College students should have the consciousness of self-discipline, deepen the understanding of autonomous learning, correct learning
attitude, and make full use of the rich public learning resources of each major platform to improve learning efficiency.

Foundation program
Suqian University’s innovative and entrepreneurial training program “Analysis of online learning behavior of college students in the anti-epidemic period-taking Suqian University as an example (2020XSJ002)” phased results.

References
Chen, Y. (2017). Research on Hybrid Teaching Mode of Ideological and political theory course in Colleges and Universities under the background of MOOC (p. 45). Wuhan: Wuhan University of technology.
Feng, G. (2012). Focus on Cultivating College Students’ socialist core values. Theoretical front of colleges and universities, 9, 4-8.
Hu, X. P., & Xie, Z. X. (2020). Analysis of the advantages and challenges of online teaching in Colleges and Universities under the epidemic situation. China higher education research, 4, 18-22, 58.
Jin, Y., Xi, Z. W., & Wang, W. M. (2017). Status quo and reflection of flipped classroom research at home and abroad. Chongqing higher education research, 5, 78-87.
Hu, X. P., & Xie, Z. X. (2020). Analysis of the advantages and challenges of online teaching in Colleges and Universities under the epidemic situation. China higher education research, 4, 18-22, 58.
Jin, Y., Xi, Z. W., & Wang, W. M. (2017). Status quo and reflection of flipped classroom research at home and abroad. Chongqing higher education research, 5, 78-87.
Hu, X. P., & Xie, Z. X. (2020). Analysis of the advantages and challenges of online teaching in Colleges and Universities under the epidemic situation. China higher education research, 4, 18-22, 58.
Jin, Y., Xi, Z. W., & Wang, W. M. (2017). Status quo and reflection of flipped classroom research at home and abroad. Chongqing higher education research, 5, 78-87.
Li, H. (2019). Online course construction in Colleges and Universities under the background: Reality, key propositions and construction ideas. Exploration of higher vocational education, 2, 36-42.
Meng, W. J. (2016). Positive mental health education provides spiritual support for moral education. China moral education, 4, 10-13.
Xue, C. L., & Li, W. (2020). Experience and Enlightenment of online teaching in three foreign universities. China higher education research, 4, 12-17.
Yang, S. Y. et al. (2020, April 29). On line education and practice in China.
Zhang, F. F. (2019). Exploration on the path of moral education in mental health education. Course teaching research, 8, 93-96.