
Discussion on the Problems and Countermeasures of Online Learning in Senior High School Education During COVID-19

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Abstract – In the context of THE COVID-19 epidemic, in order to effectively carry out the “no school, no school” online teaching, clearly understand the current situation and existing problems of high school students' online teaching. In the survey, it is found that there are some problems, such as the weakening of students' learning guidance, commitment and concentration, and the poor learning environment and independent learning ability. Along with the network teaching in the high school education application scope gradually expands, some problems also gradually appear, therefore must take the reasonable countermeasure, enhances the teaching quality.

Keywords – COVID - 19 Outbreak, Online Learning, Problem, Measures.

I. INTRODUCTION

Since the middle of December 2019, wuhan, Hubei Province, has seen a short period of unexplained pneumonia with fever, fatigue, cough and shortness of breath as the main symptoms. With the spread of the epidemic, such cases have also appeared in other parts of China and abroad. The study found that the culprit was a novel Coronavirus, a pneumonia caused by a novel infection called COVID-19. After the outbreak, the CPC Central Committee and the State Council attached great importance to the epidemic, and the Central Committee set up a leading group on epidemic response. General Secretary Xi Jinping issued important instructions, stressing that people's safety and health should be given top priority, and epidemic prevention and control should be given top priority. All provinces and cities have also launched the first-level response mechanism for public health emergencies and taken effective measures to resolutely win the battle against the epidemic.

As a source of sudden stress, this major epidemic event quickly triggered the general stress response of high school students. To block the epidemic spread to the campus, to make sure the teachers and students life safety, the ministry of education on February 4, 2020, in the response to the ministry of education will be coronavirus pneumonia outbreak work leading group office of common colleges and universities during the epidemic prevention and control of online teaching organization and management guidance “[1], called on every region to schools to carry out the” closed not suspended work. In this context, the Internet provides high school students with additional avenues for learning, enabling them to attend classes as they would at school without leaving home. And access to a wealth of knowledge beyond the textbooks; It can also make the students who cannot understand in class improve themselves and improve themselves after class.

However, as the application of this new teaching mode continues to deepen, many problems have been exposed gradually, making the network learning that should have been the icing on the cake or the icing on the cake become “chicken rib” or even “drag bottle”. Many teachers and parents report that most students' grades have dropped significantly since the school year began. Therefore, it is necessary to deeply analyze the behavior characteristics of high school students when they use network learning and propose solutions from various angles, so as to improve students' learning ability and promote the development of network education.

II. PROBLEMS IN HIGH SCHOOL STUDENTS' ONLINE LEARNING

A. *The Cognitive Level of Students is Low*

The post-00s are growing up in a new era of complex social environment, rapid economic development, diversified cultural concepts, and advanced information science and technology. They have a strong sense of self, but a large gap in cognition. On the one hand, the lack of understanding of epidemic prevention and control knowledge and excessive fear of epidemic infectivity in the early stage of the epidemic led to loneliness, depression and fear among the freshmen born after 2000 ^[2]. After “00”, on the other hand, is in a new thinking and shaping stage of mental development, lack of right from wrong ability and self-control, lack of rational thinking and judgment of epidemic sensitive events, is influenced by the outbreak of all kinds of rumors, false news, and even have the potential to become epidemic spread rumors events “booster” of fermentation.

B. *Students Have Poor Adaptability*

A large proportion of the freshmen born after 2000 are the only children, who are fully cared and cared by their parents. They are very dependent on each other. They have poor adaptability and psychological endurance in terms of independent learning, coordination of interpersonal relationships in life, and adaptation to external environment and resistance to setbacks. In addition, freshmen born after 2000 have only been living and studying in universities for half a year ^[3]. They have not yet established a correct understanding of university life and carried out a reasonable life plan, nor have they formed a scientific and effective way of university learning and living habits. Due to the outbreak of the epidemic, the new students born after 2000 were caught unprepared and had no time to deal with it.

C. *Learning Motivation and Goals are Not Clear*

Many students online autonomous learning, see for a long time do not know what, also don't know their own learning where short, just simply watching video, and take notes mechanically or simply in order to complete the tasks assigned by the teacher, online learning belongs to a waste of time, such as review notes, make mistakes on this topic. This is also the most important problem faced by high school students in the process of online learning.

D. *It's Easy to Lose Yourself in the Network*

Students will face many temptations when they study on the Internet. High school students, under great pressure of study, with weak psychological quality and poor self-control, are easily affected by the unhealthy atmosphere of the Internet, or are addicted to online games and online novels and lose themselves in the Internet. Once addicted to playing online games and reading novels, it will seriously affect students' daily study. It is common for students to turn over the Internet and stay up late reading novels, which will lead to sleepiness in class.

E. *Lack of Constraints on Students' Online Learning*

Under the current educational environment, online learning is mainly carried out by students independently, lacking supervision from schools, families and corresponding online platforms, and the implementation of supervision is also very difficult. As a result, the efficiency and effectiveness of online learning of students with

poor self-control are extremely low, and even have negative effects.

III. ANALYSIS OF STUDENTS' LEARNING STATUS

A. *Learning Autonomy is Enhanced, and Learning Guidance, Engagement and Concentration are Weakened*

According to the statistical survey, 32.56% of students choose “lack of guidance”, 31.77% choose “poor environment”, 31.59% choose “no influence”, 26.97% choose “lack of investment” and 22.23% choose “relatively independent”. It can be seen that home-based learning strengthens students' autonomy in learning, but affects students' guidance, engagement and concentration in learning^[4]. Strong autonomy is due to the lack of supervision by teachers, less environmental regulations and self-subjective initiative as the center of online courses. However, there are obvious differences in learning environment, teaching and technology, organization and management between traditional learning and online learning. This means teachers are less able to direct and manage their students. Students have different learning foundation, weak theory, strong hands-on ability, weak individual foundation students less questions and interaction, affecting teaching interaction and input. Because of empty space teaching, the learning state of students cannot be controlled, and it is easy to pretend to attend class, pretend to be engaged, pretend to cooperate and pretend to interact. Focusing screen of online learning can easily lead to visual fatigue. Most students said that online learning is easy to be attracted by mobile phones, new media and hot information, which makes it difficult to focus their attention.

B. *Learning Efficiency Can Ensure that Some Students Worry about the Effect of Online Learning*

Under the impact of the COVID-19 epidemic, whether students can ensure good learning efficiency is an important issue. According to the survey, 44.54% of the students “very” and “comparatively” agree that home study can guarantee study efficiency, while 29.46% of the students “not” and “very not” agree. It indicates that most students agree that home study can ensure learning efficiency. This is mainly because the network learning has the characteristics of rapid, personalized and repeatable, and students have a stronger dominant position. It creates conditions for teachers and students to interact with each other across time and space, which is conducive to the construction of students' knowledge significance. However, some students worry about the effect of online learning. According to the interview, many students said that there were many uncontrollable factors in online learning and the learning effect was not ideal. This is mainly due to the high self-discipline requirement of online learning, the weakening of teacher-student interaction, the lack of teaching materials, and the inconsistent design of some course contents in accordance with the professional teaching mode, which leads to the unstable teaching quality and effect. Uneven network conditions, large amount of information, easy to appear delay, system crash, lag and dropped lines and other problems affect the students' knowledge acceptance rate. The cross-space and time-space characteristics of spaced teaching virtually cause obstacles in the communication between teachers and students, which is not conducive to teachers' recognition of students' knowledge reception, more difficult to accurately analyze the learning situation, and difficult to ensure students' learning effect.

C. *The Learning Environment has Great Interference, and the Students' Independent Learning Ability is Not Strong*

According to the survey on the disturbance of students' home environment and poor independent study,

47.51% of students agree with this “very” and “comparatively”. It shows that most students' home learning environment is not ideal and their independent learning ability needs to be improved. On the one hand, home is a highly decentralized environment, which weakens the binding force of school teaching management and has diversified interfering factors. On the other hand, home-based learning mainly relies on autonomy, but autonomous learning is difficult to be realized naturally. It needs to be formed through learning target orientation, habit formation and method and strategy traction. Analysis of survey data shows that, first of all, most higher vocational students lack clear academic and employment goals, learning confusion, lack of motivation, in a passive state of domination. Secondly, most students are used to the traditional teaching mode and the learning environment of mutual help and mutual learning. They have not developed the habit of independent learning, are not good at planning time and seldom carry out self-study. According to the home-based lifestyle survey, 68% of students choose rest, entertainment and chatting, while only 16% study knowledge, skills and reading on their own^[5]. Finally, most students' information operation ability needs to be improved.

IV. MEASURES TO SOLVE THE PROBLEMS OF NETWORK LEARNING IN HIGH SCHOOL TEACHING

In view of the above problems in high school students' online learning, comprehensive measures must be taken to solve these problems from the aspects of students and schools, so as to promote the all-round development of students.

A. According to the Characteristics of Students' Online Learning Behavior, the Online Course is Designed Reasonably

The above analyzes the characteristics of online learning and the problems exposed by students' online learning, which can be summarized in the following aspects: (1) Difficulty in supervision; (2) Low efficiency; (3) Poor self-control. Among them, the first point is from the perspective of school or platform, and the second and third points are from the perspective of students. For poor students self-control and study the problem of short time fragmented and need to work in compression network teaching class, the emphases and difficulties in ensuring knowledge class hour quantity, on the basis of study on spare capacity and foundation for students with lower additional respectively set up the development course and review, basis to meet different students' learning needs.

B. Construct the Mental Health Protection Network for Post-00s and be the “Guide” of Freshmen's Psychological Recovery

Colleges and universities should actively formulate psychological assistance programs for new students during the epidemic prevention and control period, and actively play the guiding role of positive education. According to the special psychological characteristics of “post-00s” freshmen, the publicity of epidemic prevention knowledge was intensified, and the publicity of psychological health prevention and psychological self-adjustment of freshmen was actively enhanced through the official website of the university and WeChat public number to improve the awareness rate and self-protection awareness of epidemic prevention and control of freshmen. Actively use forms such as “A Letter to all Freshmen”, “A Letter to parents of freshmen” and online visits to university campuses to care for new students who are separated at home, and strive for support

and understanding from parents of new students, so as to shorten the distance between school and new students and between school and parents. To meet the needs of psychological support, it has actively opened a 24-hour psychological assistance hotline, QQ online consultation, E-mail and other ways of “one-to-one” network psychological counseling services.

C. Control the Boundary of Online and Offline Learning, and Implement “Two-Line” Teaching

The particularity and importance of high school teaching determine the distribution principle of online and offline teaching: the “double-line” teaching mode is based on offline teaching (classroom teaching), supplemented by online teaching and combined online and offline. In addition, the online teaching mode does not necessarily require students to complete independently in their spare time, but can also implement “online classroom” teaching by organizing students to adopt inquiry-based learning, so as to improve teaching efficiency and quality by taking advantage of the immediacy and repeatability of online learning. In the design of collective “network classroom”, the relationship between “network teacher” and classroom teacher should be well coordinated, the teaching content should be supplemented, the teaching method should promote each other, and the teaching depth should be reciprocal.

D. Change the Role Orientation of Parents of “Post-00s” Freshmen, and be the “Companion” of Freshmen's growth and Development

Family is the warmest support. A good handling of family relations will better help the post-00s freshmen to tide over the epidemic. Parents of new students born after 2000 should actively adjust and change their role orientation, and strive to become listeners of psychological troubles of new students born after 2000, guides of college adaptation, and companions of growth and transformation. The new students' study at home tests the students' independent study habit and ability. Parents of new students born after 2000 should strengthen their understanding of the rules and characteristics of university study and fully believe in the self-management ability of new students born after 2000. They should pay more attention to art and methods in communication, encourage and affirm positively, understand more about freshmen's confusion and confusion, give freshmen more autonomy and initiative in study and life, understand and trust each other, communicate on an equal basis, and be freshmen's “intimate friend” instead of “supervisor”. In their words and deeds, they should set up good family traditions, inherit Chinese virtues, pay attention to their self-cultivation and behavior, set an example and teach by example, and strive to create a good learning life and a warm family atmosphere for the freshmen born after 2000 to grow up healthily [6]. In the face of the epidemic, parents will also have psychological anxiety from all sides. Parents themselves should actively adjust themselves, not transmit negative emotions to new students, establish a good psychological state, and jointly do a good job in epidemic prevention and control.

E. Students Should Make Good use of Positive Psychological Hints and Incentives to Enhance their Study Perseverance and Concentration

Students should strengthen the positive psychological suggestion and motivation, actively look at the problems in the network learning, to solve problems to improve learning ability and sense of achievement. Springer believes: “people's behavior is stimulated, self-motivation will form a strong internal drive.” Therefore, in a major epidemic period, vocational students can use positive psychological incentives, such as adjusting learning goals, optimistic understanding, establishing crisis awareness and other ways to activate learning

momentum, so as to minimize the loss at the receiving end of course learning [7]. At the same time, students develop their own learning will and concentration. First, strengthen the training of learning purpose and tenacity, preset learning tasks, time, and standards, overcome difficulties, and resolutely complete the preset learning tasks; Second, focus on learning and growth, consciously filter mobile phones, social software and game interference, focus on learning hard and software preparation, complete online teaching tasks and assignments, self-study information retrieval and processing methods, and summarize and summarize online learning results.

V. CONCLUSION

Network learning is auxiliary way to learn, should be effective extension and complement of classroom learning as a student, but students in using this way but exposed many problems, the need to school, parents and related network platform and management of combined together, the students as a network of active side and the participants should also consciously assume responsibility, responsible for their own learning.

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