

Remarks on the Quality Management Standards of Online Higher Education

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ABSTRACT. Due to its inherent advantages and urgent social demands, online higher education has achieved rapid growth in the past decade. Especially during the epidemic period of COVID-19, online higher education has received global popularity, resulting in a mature industrial chain. However, online higher education still has a few shortcomings and defects. If the scale of online education is blindly expanded without the consideration of quality management, it may eventually lead to the chaos of education order and the retrogression of education level. Therefore, it is necessary to investigate quality management standards and put forward corresponding suggestions.

KEYWORDS: Higher education, Online education, Quality management, Standards

1. Introduction

In 2015, the Chinese government proposed to formulate an “Internet +” society, instantly various scenes in our life were filled with the Internet, e.g., “Internet + taxi”, “Internet + finance”, “Internet + fresh food logistics”, etc. Consequently, “Internet + education” is emerged as well in such a big environment.

In 2020, due to the epidemic of COVID-19, compulsory online education was carried out for the first time in human history. Although its impact has not yet fully appeared, it is undeniable that with the stimulation of COVID-19, online education has achieved global popularization, including a large customer base and the mature industrial chain.

With its large scale, wide scope, and deep strength, the online teaching carried by the Chinese Ministry of Education in 2020 is an unprecedented initiative in the history of global higher education and the first experiment in the world. It not only successfully dealt with the crisis of suspension brought about by the epidemic, but also stabilized colleges and universities all over the country. During this period, a new practice of online teaching was explored, a new paradigm of online teaching was formed, and a new peak of online teaching was achieved. It is of great significance to the reform, innovation, and development of higher education in China and the world.

Since the contemporary realistic needs can be partially met by its unique advantages, online education has made rapid development in the COVID-19 epidemic period. However, it is far away from a perfect teaching method, as there are still a few shortcomings and defects [1]. In this case, if we blindly expand the scale of online education and ignore the quality, it may eventually lead to the chaos of the education order and the retrogression of the education level. Therefore, it is necessary to think about the quality management standards of online higher education, and put forward corresponding suggestions.

2. Features and Advantages of Online Education

With the rapid progress of information technology, especially from the Internet to the mobile Internet, a way of living, working, and learning that can break the traditional time and space restriction has been created. Accordingly, the way of knowledge acquisition has been fundamentally changed, i.e., teaching and learning can be free from time, space, and location constraints, and knowledge acquisition channels are flexible and diverse [2]. To name a few, the features and advantages of online education include:

2.1 Free of Space Restriction

The Internet enables teachers and students to be distributed across the country, allowing you to start learning at home or even anywhere without going to a fixed educational place, such as the training building or university campus. The Internet is a technology that puts students in a virtual space to receive education, and better techniques such as

hologram classes may be developed in the future to further improve the user experience. The de-materialization of learning sites enables the flow of high-quality educational resources from rich areas to indigent regions, providing more education chances for local students.

2.2 Flexible and Timely

As long as they have access to the Internet, everyone can start online learning at any time according to their individual necessity without waiting. The learning progress and materials are also stored in the cloud and can be retrieved at any time without worrying about backup and synchronization issues. The convenience stated above actually reduced the time cost of learning, so one doesn't have to spend time traveling and waiting.

2.3 Repeatability

Online education can be either a live broadcast or a replay. Once the course is recorded, it is permanent and can be watched countless times by massive students. Students can listen or relearn part of the content according to their own desire, so as to better grasp the content and fully consolidate the effect. In terms of important and difficult parts, repeated study and thinking are beneficial to thoroughly understand and master. If you still cannot understand, then go to the teacher for advice. This process not only saves the teacher's time but also exercises the students' exploration ability.

2.4 Personalized Learning

Online learning can achieve personalized learning very well. One can arrange the learning progress according to his/her own time schedule and decide whether to consolidate the existing knowledge or move to the new parts. One can also choose learning content according to his/her own demands, knowledge background, personal preferences, and learning style, which can effectively enhance the pertinence of learning. Usually, the self-selected content has a higher learning initiative, thus the learning efficiency is naturally higher.

2.5 Cost-Effective

Students can study online at home, thus there is no need to build or rent accommodation and learning places for them, saving a lot of expenses, such as travel, accommodation, teachers, classrooms, materials, and so on. On the other hand, recorded courses can be used repeatedly, resulting in a reduction on the number of lecturers. Therefore, compared with traditional learning, the cost of online learning is relatively low, which means one can learn more at the same cost.

3. Defects and Shortcomings of Online Education

Although online education has many advantages and has been widely verified during the COVID-19 epidemic, there are still some shortcomings compared with traditional education. They are mainly summarized in the following aspects:

3.1 Interaction between Teacher and Student is Insufficient

Excellent teachers know the power of interaction, they always encourage students to ask questions and collect feedbacks in time, then the pace and content of teaching will be constantly adjusted to fit with students [3]. However, due to the lack of feedback on facial expressions, actions, movements, and other detailed information, implementing interactive teaching is very difficult for online education. In addition, teachers' emotional injection and communication between teachers and students are also a major difficulty in online education. Unless virtual reality technology makes a major breakthrough and is cheap enough, high-quality teacher-student interaction will always be the exclusive advantage of traditional education.

3.2 Mandatory Force is Weak

In traditional education, a teacher corresponds to a fixed number of students within a certain period of time, and he/she should be responsible for the academic work of these students, thus the work includes not only course teaching, but also learning supervising. However, online education has no restriction on students, e.g., users can terminate learning at any time. In a network environment dominated by leisure and entertainment, it is difficult to guarantee the

persistence of learning based on students' self-discipline. The mandatory system can also be used in online education, but how to maintain the authority of teachers and realize the effective supervision of students under the condition that there is no physical contact between them is still to be addressed.

3.3 Social Skill Training is Inadequate

Concentrated offline learning enables students to develop their own social networks and cultivate social skills. The convenience of online education not only makes learners independent but also reduces group activities. People need a real social occasion to cultivate their teamwork ability, but online education is not a way to provide this scene. Currently, ranking is widely utilized in online education to motivate learners, but this kind of design cannot build friendships and promote collaboration. In addition, it is currently impossible to simulate real scenes online for learners to do instrument practices.

4. Exploration on the Quality Management Standard of Online Higher Education

Although there are still many defects and shortcomings to be overcome for online education, 56.2% of the respondents in a survey implemented by iiMedia Research are optimistic about the development prospects of online education in the post-epidemic era, and only 2.8% holds a pessimistic attitude [4]. Analysts at iiMedia Research believe that the online education market has ushered in a key point of development due to the special impact of COVID-19 epidemic. Currently, with the development of online higher education at an unprecedented speed, the control and improvement of online education quality have turned to be very important. In order to guarantee the quality of online higher education, an evaluation and certification system that can regulate the quality of online education should be established and continuously improved.

4.1 US Quality Management Standards for Online Higher Education

Due to the early start of online education, the US published “Quality Online the Line Benchmarks for Success in Internet-based Distance Education” in 2000 by the Higher Education Policy Research Institute [5]. The standard proposes seven principles to evaluate and supervise online education activities to guarantee the quality, including 1) School support; 2) Curriculum development; 3) Teaching and learning process; 4) Curriculum structure; 5) Student support; 6) Teacher support, and 7) Evaluation and assessment.

In addition, the American Federation of Teachers also released a report “Distance Education: Guidelines for Good Practice”. This guide includes 14 guidelines [6]. 1) Teachers must maintain academic control. 2) Teachers must be prepared to meet the special requirements of distance learning. 3) Course design should be adapted to the potential of the media. 4) Students must fully understand the course requirements and prepare for the successful completion of learning tasks. 5) Close interpersonal interaction must be maintained. 6) Class size should be set through normal teacher channels. 7) Courses should cover all materials. 8) Courses of different subjects should be encouraged. 9) Students must be provided with equivalent research opportunities. 10) Student assessments should be comparable to face-to-face courses. 11) The same learning consultation opportunities must be provided. 12) Teachers should retain the creative right to use and reuse of materials. 13) Undergraduate degree courses should include courses at the same time and place. 14) The evaluation of distance education should be carried out at all levels of the federal district and professional evaluations and schools.

4.2 Principles for the Quality Management Standard of Online Higher Education in China

Although China's online higher education is booming, quality management has not received great concern as it is only in the exploratory stage. When formulating online higher education quality management standards, we must not only refer to advanced foreign practices on the one hand, but also consider our national conditions and characteristics on the other, so as to make the final standards are operational and instructive. In general, the establishment of China's online higher education quality management standards should refer to the following principles:

4.2.1 Consistency between Online Courses and Face-to-Face Education

China's higher education has a long history of development, and its quality management system is also relatively mature. Therefore, the quality standards of online higher education should emphasize the comparability with face-to-face education, especially in terms of curriculum content, curriculum development, student evaluation, and student support. In addition, online education is required to achieve the same effect as face-to-face education and provide students with the same opportunity and experience of learning and consulting.

4.2.2 Consistency between Curriculum Design and Learning Objective

There is always one principle corresponding to learning goals in the majority of published standards, that is, the knowledge, abilities, and values that students should acquire after completing courses and professional studies. All learning activities should be designed and implemented in accordance with learning objectives. For example, 6 of QM's 43 specific standards are Alignment Standards. The course content and activities of this type of standard must be responsive to each other in order to help students achieve the expected learning effects and goals.

4.2.3 Interaction and Feedback in the Teaching and Learning Process

Research indicates that two-way interaction and feedback between teachers and students are of great significance in education. The types of interaction can be divided into teacher-student interaction, student-student interaction, and student-content interaction. The effective implementation of these three interactions can enable students to successfully complete their learning tasks and fulfil their desired learning goals. Thus interactions, especially the effective and constructive feedbacks on students' assignments, should be included in online courses to guarantee the teaching and learning quality.

4.2.4 Completeness and Accessibility of Support Service

Students may not be on campus when taking online courses, and their ability to use modern educational technology and online learning experience is also different, thus it is very important to provide timely and effective support services for online learning students. These services generally include technical training, online learning method tutoring, and technical troubleshooting, etc. When teachers are new to online education, they may not know much about instructional design and available technical methods. Completely moving the content within the face-to-face classroom to online will not achieve the desired teaching effect. Therefore, teachers should receive training services when designing online courses. These services generally include online course design training, online teaching skills training, online student learning evaluation training, and timely support for the troubleshooting of technical failures, etc.

5. Conclusion

In 2020, the COVID-19 epidemic has accelerated the online development progress of traditional education, resulting in a huge user base and mature industrial chain. Furthermore, social surveys indicate that the development trend of online education will keep increasing in the next ten years. On the other hand, with the application and popularization of 5G, VR, AR, and artificial intelligence technologies, the experience of online education will be greatly enhanced, leading to a further expansion of its coverage breadth and depth. However, with the maturity of platform technology, the final competition in online education is still knowledge products and services. Therefore, it is necessary to seriously consider the quality management standards of online education. Based on the analysis of the advantages and disadvantages of online education, combined with foreign advanced practices and specific national conditions, this paper sorted out the principles that should be followed in the construction of quality management standards for online higher education in China, so as to provide a decision-making basis for improving the quality and level of education.

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