Brief Analysis of the New Challenge in Teaching Management in Colleges and Universities under Internet Education

Bingxin Wu[1,a,*]

[1]*Academic Affairs Office, Beijing International Studies University, Beijing, 100024, China*
[a]*wubingxin@bisu.edu.cn*
[*]*Corresponding author*

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Abstract: The development of Internet education marks the beginning of the era of MOOC, and the process of education informatization in China has been advancing with each passing day. The combination of online and offline teaching has become the new normal of teaching mode. The construction of online education resources is not only the result of teaching reform in colleges and universities changing with the times but also the new challenge facing teaching management in colleges and universities. Colleges and universities must scientifically study and analyze the key issues in the construction of online education resources and the organization and management of online teaching, so as to ensure the high-quality talent cultivation and its development.

1. Introduction

With the development of education informatization in the world, China entered the stage of Internet education in the 1990s. Internet and information technology developed rapidly during the first decade of the 21st century and have been widely used in China since then. The popularization and construction of Internet education infrastructure and platforms in China have been further accelerated, which has greatly promoted the rapid growth of national Internet education. In 2013, China's MOOC construction showed an explosive growing trend, which was also called "the opening year of online education in China" by the media[1]. The development of Internet education opens the era of MOOC. The flat cyberspace makes it possible to share resources. Information technologies such as the Internet and big data have broken the time and space boundaries of traditional education, sending educational resources to all countries and regions around the world, thus bringing unprecedented opportunities and challenges to the development of higher education. Countries around the world have begun to rely on the Internet to build open and shared high-quality public education resources. Higher education has gradually begun to focus on the deep integration of information technology, artificial intelligence, and education and teaching, as well as the reform and innovation of new education modes and teaching methods such as MOOC, micro-class, and flipped classrooms[2].

Internet education provides boundless possibilities to break the bottleneck in solving problems,

such as regional differences and resource shortage, that have plagued the development of education for a long time. It also injects sustained impetus into the practice of higher education reform. However, it is undeniable that online teaching relies heavily on information infrastructure and network hardware facilities, as well as network technology and its application. At the same time, due to space-time limitations, network environment, and many other factors, the online teaching mode and learning experience differs from the traditional ones in its classroom organization, teacher-student interaction, testing, and evaluation. Teachers and students need to adapt to this informatized and digital method of teaching and learning faster and better. The environment, both internal and external, and factors, both subjective and objective, also impose higher requirements for the operation and management of the whole process of online education, such as teaching, course selection, examination, performance, credit recognition, and class hour calculation. Therefore, in order to better and truly serve the talent cultivation, the teaching management of colleges and universities requires the institutionalization of the development and utilization of online educational resources, as well as achievement identification and transformation of online teaching[3].

2. Status quo and Challenges

2.1 Teaching Organization and Process Management of Online Class

Online education makes teaching activities no longer limited to time and space constraints, and usual class delivery has moved from traditional classrooms to the online "cloud" platform, giving birth to new teaching methods and learning modes, and the dominance and class interaction among teachers and students have also changed qualitatively, which poses a new challenge to the teaching organization and process management of online classes. First, the virtualization of classrooms: traditional teaching classes are turned into virtual classes or "clone classes", and the teaching process is no longer a "one-man show" delivered by a single teacher but a collective team, and the source and number of students are no longer fixed; Secondly, students have high autonomy in both the course selection and learning: students will choose and plan their own learning packages independently from the online curriculum resources provided by the colleges and universities according to their interests and future development goals, and independently arrange and allocate their time for learning according to their own situation. At the same time, the dominance of the classroom is also transferred from teachers to students. Thirdly, the boundary for management is vague: the management and quality control of a class cannot be as effective as a traditional one as the geographical boundary of the classroom disappears, and the teaching evaluation tends to be more personalized and diversified instead of being unified. Therefore, the traditional means of organization and management in offline teaching can no longer be fully applicable, while new management models, monitoring mechanisms, and evaluation systems need to be explored.

2.2 Support of Network Technology Support and Teaching Facilities for Online Education

Large-scale and organized online teaching activities cannot live without strong and stable support of network technology and modern teaching facilities, which set higher standards and impose more requirements for the network technology, equipment, and resources in colleges and universities, including network, classroom multimedia facilities, modern teaching equipment, other educational information resources, as well as their informatization and application. Firstly, under the new normal of online teaching, the dependence of the whole teaching operation on the network is increasing, especially when classes are relatively condensed in a certain period of time, posing great challenges to the carrying capacity and speed of the campus network. Secondly, due to the limitation of modern teaching resources, online teaching needs the support of multimedia equipment. At present, there are

not many recording and broadcasting classrooms specially used for recording online courses and smart classrooms suitable for flipped classrooms in colleges and universities, and some facilities and equipment need to be updated urgently. Thirdly, the informatization of the teaching operation and management. At present, colleges and universities have established their own educational administration system or teaching information management platform, but in the face of the new online teaching organization and management. It is necessary to study and expand the functions of the original system or platform, so that it can effectively connect with the introduced online education platform or social online learning platform, and transmit data from the server or the intermediate computer. In this way, it can realize the real-time monitoring, evaluation, and analysis of the online course operation and teaching situation through the interface interaction.

2.3 Construction of Online Courses for Special Types

Each university has its own unique talent training mode, and there are different teaching rules and characteristics in different majors under different disciplines. Therefore, not all types of courses can naturally be perfectly combined with online teaching forms, which requires universities or educational institutions to reflect on the problem of the construction of online courses for special types and how it can be solved. First, there are many teaching sessions such as pronunciation exercises, pronunciation correction guidance and situational dialogue in oral courses and simultaneous interpretation courses in foreign language majors. In traditional offline teaching, teachers can demonstrate students' mouth shape and intonation face to face, but when it comes to online teaching, they may face problems such as the platform not supporting the original relevant software for language teaching or evaluation, and the teaching effect will be reduced as a result. Second, experimental or practical courses, as well as courses with a high proportion of experimental or practical hours, also have difficulties in the construction of online courses. Some majors or courses in colleges and universities can use the online resources of virtual simulation experimental teaching projects at all levels for experimental teaching, but on the whole, the construction of online teaching platforms for experimental practice is insufficient, and most online education platforms and teaching methods can only meet the demand of teachers' lectures, experimental demonstrations, and practical operation demonstrations, while students' participation is relatively low. As it cannot offer hands-on operated by students themselves as exactly in the scene in the offline teaching environment, the teaching effect and learning experience are not good enough, and the quality of online and offline teaching cannot be guaranteed to be substantially equivalent.

2.4 The Organization and Management of Online Courses Examination

Online teaching brings not only the transformation of classroom time and space and the change of teaching methods but also the change of the assessment system and examination form of the whole course. The diversified examinees, the electronized examination forms, and the criteria to make an assessment through the whole process all pose new challenges that the examination management and organization of online courses need to deal with. First, compared with traditional offline teacher-led classroom teaching, the proportion and requirements of students' autonomous learning in online teaching are higher, so the process evaluation of students' whole learning state is particularly important, which needs to adjust the original content and focus for assessment to a certain extent, and strengthen the management and identification of the usual performance. Second, due to the limitations of online examination forms and technology, completely copying the setting ideas of original offline examination is not suitable for some course examinations, and new forms and assessment criteria suitable for online examination need to be explored from the very beginning, so as to achieve the goal of assessment. How to ensure the effectiveness of online examinations is a major problem to be solved

urgently, especially for oral and interpretation courses in language majors and courses requiring a large number of experimental and practical sessions. Third, the daily assessment of online courses and online examinations are different from offline examinations, which are comprehensively visualized. In addition to the changes in the assessment mechanism and examination form, there is also a key issue that cannot be avoided, that is, the fairness and justice of the examination organization. Moving the examination from the offline classroom to the online platform has brought great uncertainties and risks to the whole organization, invigilation, cheat prevention, and identification of violations of discipline.

2.5 Credit Recognition for Online Courses

The credit recognition of online courses is an important way to integrate open educational resources into the teaching reform of colleges and universities, and also a key stage in the closed-loop management of online education. A set of scientific and comprehensive credit recognition and management mechanisms plays a key role in standardizing the systematic and meticulous management of online courses, which is directly related to the effectiveness of online learning and the qualification of its results, and is the basis of the relevant credit transfer and certificate authorization. However, in practical work, there are still some difficulties and problems, such as different curriculum standards, inter-school barriers, and diversification of online credit recognition. In fact, although the development of online education in China is becoming more and more mature, there is so far no standard and authoritative guidance document for the credit recognition and management of online courses at the national level. Some colleges and universities have explored and formulated their own regulations for the credit recognition and management of online courses according to their own conditions, and put forward requirements for credit recognition in some regulations of online course construction and management. However, it cannot completely eliminate the phenomenon of "paying to get high scores and choosing the course just for the credits" without learning.

2.6 Workload Accunting and Achievement Consolidation of Online Teaching

Online courses not only supplement and enrich the curriculum resources of colleges and universities but also force the reform of teachers' teaching methods. A large number of teachers use MOOC to actively explore the use of flipped classrooms where online and offline teaching are combined and blended teaching, and some teachers have undertaken the teaching and organization of online courses such as remote guidance, counseling and answering questions. It is undeniable that the recording, construction, and use of online courses have all posed higher requirements for teachers' teaching design, teaching ability, teaching mode, teaching organization and examination arrangement, as well as new assessment criteria for the quality and effect of courses taught. Therefore, whether it is self-recorded online courses or blended teaching with the help of imported courses, the work of teachers is more complicated than that of traditional simplex offline teaching. In fact, when calculating the overall workload, neither the weighting nor the separate accounting of the online teaching component was taken into consideration in most colleges and universities.

3. Conclusion

The construction of online educational resources is the result of teaching reform in colleges and universities changing with the times. On the one hand, through the construction of online educational resources, we can force the innovation of educational concepts, further promote the reform of philosophies, technology and modes of teaching in colleges and universities, better adapt to the

learning interests and habits of the new generation in the digital era, and promote the development of digital education. It can meet the diversified and personalized needs of students to acquire knowledge and make their own learning plans. On the other hand, through the sharing of online educational resources, we can expand the coverage of high-quality educational resources, increase the benefit received by learners, and build a gridded, digital, personalized, and lifelong education system of "everyone can always learn everywhere"[4].

Some scholars believe that online education is a kind of "future-oriented" education. In order to keep up with the rapid educational informatization and actively adapt to the trend of higher education and teaching reform, colleges and universities in urgent need to change their teaching philosophies rapidly. We can proceed from helping to improve the reform and innovation of talent cultivation, continuously and thoroughly promote the reform of education and teaching, which need deeply integrate information technology with education and teaching to vigorously promote the transformation of educational and teaching philosophies. Meanwhile we can upgrade the information technology, accelerate the systematization of intelligent education, and finally gradually improve the construction of teaching management systems and mechanisms in colleges and universities under Internet education in the era of MOOC[5].

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