EDUCATION AND TEACHING REFORM OF BILINGUAL COURSES IN MAJOR OF BUSINESS AND MANAGEMENT OF HIGHER EDUCATION IN THE NEW ERA

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Abstract

Teaching and education reform have been topics for researchers, teachers, and practitioners for decades. One of the most important impacts of higher education reform is to meet needs of the promising future. The modern world is influenced by technologies, and so is higher education reform. Online-offline platform with corresponding teaching methods improves both teacher and student satisfaction and promote their teaching and learning motivations. Bilingual courses, as means of meeting the trend of globalization, are benefited from the technologies in the reform. This study takes the bilingual course "International Marketing" in School of Management of Guizhou University in China as an example, reveals a framework of online-offline teaching within the technological platform, and contributes suggestions on effective online-offline teaching with the technological platform.

Keywords: *education and teaching reform, bilingual courses, business and management, higher education, on-line learning, new era*

1. INTRODUCTION

Bilingual course for business and management majors is a bilingual course specially designed for business and management majors. It aims to cultivate and practice the knowledge learning and skills training of international business and management in a foreign language environment, so as to realize the organic integration of students' knowledge, ability and language. The business and management majors are under the background of internationalization. Therefore, bilingual courses offered in the business and management majors could lay a good foundation for adapting to the international business and management docking in the process of engaging in international business and management activities in the international environment. "Bilingual education" is defined as the ability to use a second language or a foreign language to teach professional courses in schools. The bilingual teaching of business and management majors is mainly to teach the professional knowledge of business and management in foreign languages. It aims to train students to think and solve professional problems related to business and management through their listening, speaking, reading and writing skills in foreign languages, so that students can acquire professional knowledge, solve professional problems and acquire professional quality in the human resources management situation in the foreign language environment.

With the development of modern information technology and the continuous reform of enterprise management theory, the traditional business and management methods have become outdated. At present, the content of this course cannot keep pace with the development of relevant technologies, and the dynamic reflection of the subject frontier is not enough. The course system cannot meet the needs of students' development. Under the circumstances of drastic changes in global business and management, the continuous change of management knowledge also requires that college teachers should not stick to textbook knowledge. In the teaching process, they should strengthen the interaction and knowledge system construction in the teaching process, find a new exploration and learning mode that can reflect the student-centered and teaching learning interaction, and organically link knowledge transfer with business and management practice, Realize the internalization of business and management related knowledge principles into the quality and ability of students. Therefore, it is required to build a new three-dimensional teaching target system with knowledge, quality and ability training as the leading role, guided by innovative teaching concepts and by practical teaching.

At the same time, the rapid development of science and technology, represented by information technology, has changed the traditional production and organization mode. Similarly, the new scientific and technological environment has also provided an unprecedented operating space for the reform and innovation of higher education. Based on the bilingual teaching practice and relevant research in the courses of business and management majors in School of Management, Guizhou University, China, this paper attempts to further explore the related issues of the combination of bilingual teaching and teaching mode supported by new technologies such as online classroom, with a view to providing useful reference for the bilingual course education and teaching reform of business and management courses in Colleges and universities.

2. LITERATURE REVIEW

2.1. Reform in higher education

Reform is considered as a process of restructuring (Suyadi, et al., 2022) representing a quick change for improvement. Therefore, reform in higher education means a process of quick change in structuring of higher education, both teaching and education. Changes to meet future needs are the emphasis of higher education reform (Michael, 2018), which might consist a comprehensive and rapid change oriented towards improvements. Suyadi et al. (2018) states that educational reform tends to be inclined to a certain pattern, bottom-up or top-down approach, mostly involves changes in the curriculum and learning with a certain orientation, and the reform is oriented towards synchronizing undergraduate education with the job market (Hijazi & Alfaki, 2020). Moreover, management systems of the higher education might be encouraged or challenged to change with quality standards for some of the reform (Nasser, 2017). Xiong et al. (2022) concludes four stages of China higher education reform. The first stage was between 1978 and 1998, which is the governance change stage. During that time, China was undergoing great economic reform from the planned economy to the market economy, which influenced and challenged China higher education system to meet demands from various industries. Financing, provision, and regulation were three main aspects of the reform during that stage (Mok, 2000). The second stage was between 1999 and 2009, which represented a scale expansion and institutional merger. After such an expansion, the third stage was between 2010 and 2018, referring to quality assurance and improvement while the last stage will be between 2019 and 2035, showing the systematic reform. After more than 40 years reform of higher education, China has developed the largest higher education system of the world with the biggest number in students and higher education institutions although there is still a long way for China higher education to go (Xiong et al., 2022).

2.2. Online learning

Interactive digital technologies have influenced the modern education (Malysheva et al., 2022). Professional competencies and skills will be developed thanks to technologies in the classroom. However, due to Covid-19, mobility has been restricted and technologies for online teaching developed a lot while teaching skills development with technologies have become one of the reform of higher education. The shift of higher education to the use of innovative technologies has greatly influenced the reform of higher education while the pandemic has made significant adjustments to the educational process (Raju et al., 2021 & Zhou et al., 2020). In the context of higher education, the application of interactive digital tools to visualize theoretical materials is the great change in teaching methods compared to those of the traditional teaching materials (Yildirim et al., 2018). Interactive learning environments created by online platforms with off-line classroom teaching are one of the most effective learning methods in the modern higher education (Borba et al., 2018 & Ismailova and Ergashev, 2019). The reason that online platform promote higher education reform is that it requires development of various courses, which make it possible to improve not only professional competencies but also increase general skills, which indicates the use of a student-centered teaching approach (Hooshyar et al., 2019). Student-centered is also one of the reforms of teaching and education. Moreover, some of the platforms focus on the practical application of the theoretical knowledge gained as it contains exercises and videos demonstrating theory (Rueda and Rey, 2018). Meanwhile, an interactive learning environment allows students and teachers to create a virtual classroom being accessed by them (Fitriningtiyas et al., 2019).

3. CONCEPTUAL FRAMEWORK

This study employs the bilingual course "International Marketing" of School of Management in Guizhou University of China as an example, and develops a framework of teaching and education based on online-offline class. Due to Covid-19, the mobility has been restricted. Teachers of the course are all applying online teaching when the mobility is restricted and re-start offline teaching when the pandemic finishes. Therefore, even though teachers were applying online teaching, the method was not as mature and developed as now. Both teachers and students are getting used to online teaching and proactively explore functions of the online teaching platform. Thereafter, a framework of online-offline teaching is developed as a model for reform of higher education.

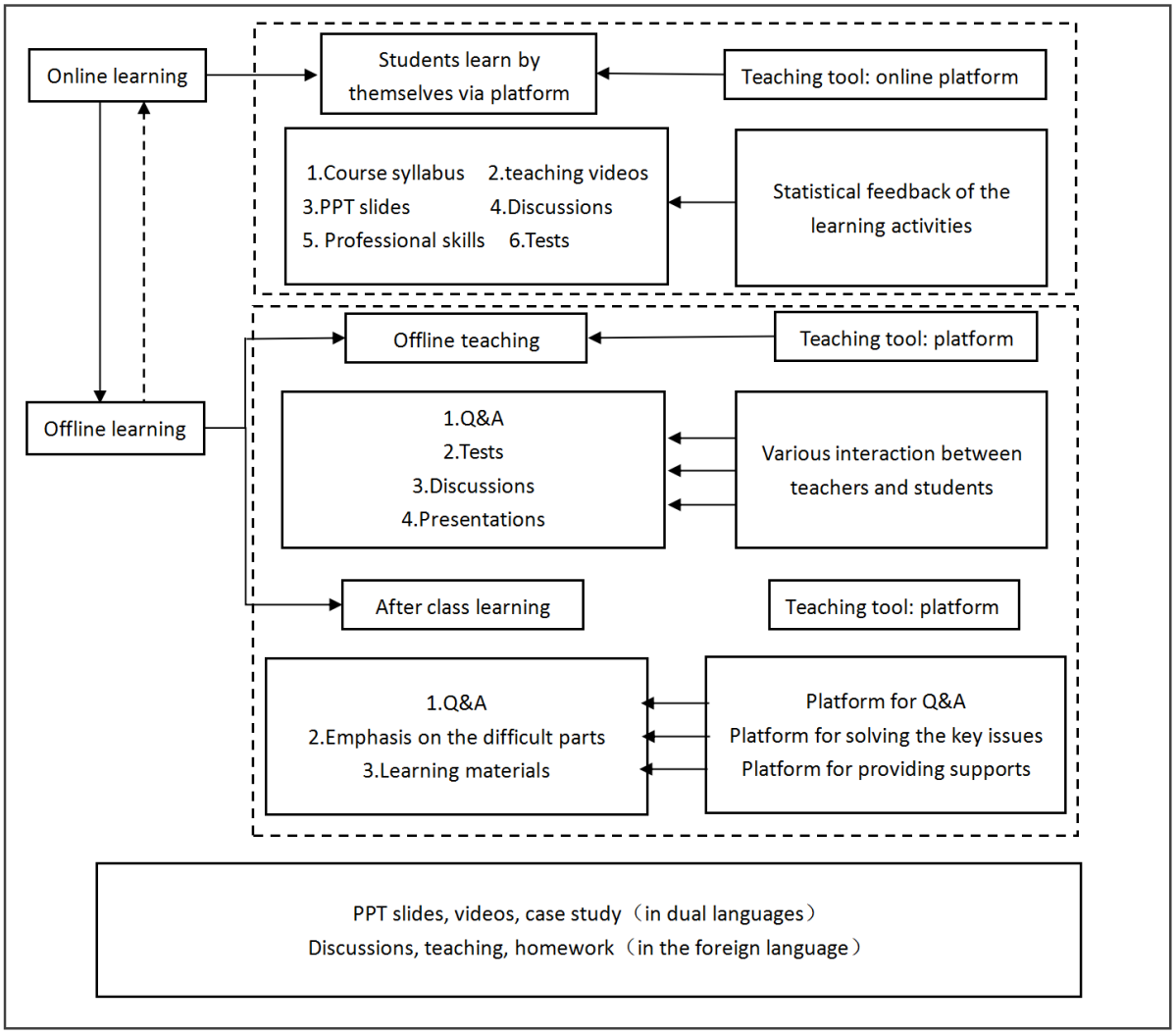

Fig. 1. Reform for teaching and education for bilingual courses within online-offline model

Source: own source

The model shows an example how the teaching of bilingual courses are reformed because of the learning platform. It is necessary to emphasize that not only on-line teaching employs a digital platform, but also off-line teaching. Teachers are using digital platform for off-line face to face teaching process. Bilingual teaching refers to the use of more than two languages to learn subject knowledge or skills in education and teaching activities, so as to achieve the goal of learning and skillfully using the foreign language. The main goal of bilingual teaching is to cultivate students' abilities to think and solve problems in a

context of foreign language or foreign culture, which is not limited to listening, speaking, reading and writing. However, materials based on the combination of foreign language listening, speaking, reading, writing and professional knowledge could help students master professional knowledge and skills in a comprehensive way. Therefore, in the bilingual teaching of business and management courses, attention should be paid to both professional knowledge and skills and the use of foreign languages, which could help students understand the development trend of international business and management. These materials which combine foreign language listening, speaking, reading, writing with business and management expertise could be used for on-line and face to face teaching platforms to promote students' learning, and these platforms could be used either in classroom or on-line learning. The platforms have expanded the capacity of presenting knowledge and adopted more advanced interactive teaching technologies, which is more conducive to teachers to master students' learning process and results, improve the efficiency of teaching and learning, and make students more inclined to choose bilingual courses in their future learning.

The model shows how students and teachers are working together on the platform. The model contains both boxes in solid lines and dotted lines. Boxes with solid lines present activities of learning and teaching, as well as functions of the platform to support learning and teaching. Boxes with dotted lines show the working mechanism of off-line learning and on-line learning respectively. As both off-line and on-line education are applying the platform, on-line and off-line learning interact with each other. Learning materials, teaching methods, and activities are carried out both in on-line and off-line procedures, while on-line and off-line learning give feedback to each other. Therefore, the reform of teaching and education is reflected by the model showing how off-line and on-line teaching and learning are applying digital platforms and how the digital platforms are enhancing the effectiveness and efficiency of teaching and education. On the other hand, the digital platform ensures a bilingual environment both in class and after class. The bilingual environment is important for students learning outcomes and the digital platforms integrate all the resources and materials in foreign language while the platforms give feedback of students' after class learning in a bilingual environment.

4. RESULTS

The digital education platform has the functions of recording and broadcasting classroom, smart classroom and multimedia classroom. According to course curriculum and teaching plan, the intelligent recording system is used to realize the direct uploading of classroom teaching content to the cloud. At the same time, it is equipped with multi terminal transmission tools to make the offline teaching resources fast and convenient on-line teaching. AI technology is used to automatically catalog and label resources, so as to realize the comprehensive recognition of voice content, PPT slides and face information. In addition, intelligent retrieval tools are used to help teachers and students efficiently manage teaching resources, conduct secondary learning and improve teaching quality. The digital platforms are equipped with video automatic editing tools to meet the functions of audio and video cutting and merging, and realize automatic title, subtitle, watermark, etc. at the same time, it also provides editing tools based on web pages and mobile phones to realize personalized editing of audio and video resources.

Teaching and education reforms have been realized by applying functions of the digital platforms. The digital platforms are able to realize the whole process of teaching, learning, practice, management and examination on the cloud, move the traditional classroom to the cloud, add interactive live broadcast and intelligent broadcast school, enhance the interaction and experience of teachers and students in the process of distance teaching, provide intelligent tools, translate subtitles, extract gold lessons and AI notes in real time, and make teaching more interesting. The digital platforms play functions of interactive live broadcast provides multi person face-to-face video communication, video and audio connection, desktop sharing and other capabilities, and is the best choice for distance education. The platform also provides small class interactive classes, large class continuous wheat classes, and thousands of people open classes to meet the teaching needs of different scenarios. Meanwhile, digital platforms move the traditional offline laboratory to the online, provide a variety of online experimental modes such as media, new engineering and virtual simulation, support the series connection of course learning tasks and

experimental tasks, realize the dual online of “course + experiment”, and create a new mode of linkage between theoretical teaching and practical teaching.

Core functions of the digital platforms support teaching and learning in dual languages. The digital platforms have the function of smart classroom, enabling the bilingual courses to be broadcast live. This function could automatically connect with the course schedule and the recording and broadcasting system. While teachers are in the classroom, on-line live stream teaching is automatically completed. Moreover, this function supports the switching between mobile live broadcasting and live teaching. In addition, the digital platform has the function of supporting off-line teaching. The content of off-line teaching will be automatically recorded on-line, and the course will be automatically generated according to the course content and sent to the online learning platform. At the same time, the digital platforms are equipped with AI technology. Through artificial intelligence technologies such as PPT slides recognition, simultaneous interpretation, AI notes, pocket class and course refinement enrich the transmission channels and effects of bilingual teaching content and enables bilingual teaching. Thirdly, the digital platform has the function of covering the teaching process, and supports multi-dimensional teaching data analysis such as learning, practice, examination, evaluation and management. Last but not least, the digital platforms have the function of intelligent management of online resources. They use AI capabilities to add smart tags for educational resources that are convenient for management and application, and provide automatic editing tools to enable bilingual teachers to use educational resources and carry out teaching conveniently. Figure 2 shows the working mechanism of digital platforms with functions in teaching and education reform.

5. DISCUSSION

The deepening of globalization has put forward new requirements for the training of internationalized talents in China's higher education. The new scientific and technological environment represented by information technology has created conditions for the transformation of traditional teaching methods. "International marketing" is one of the core courses of business and management majors. The classroom effect of bilingual teaching under the traditional teaching mode needs to be improved. Making full use of the software and hardware environment composed of mobile phones, classroom multimedia devices, social media and other app software, and combining the actual teaching situation to carry out a reasonable online-offline education and teaching design for the course can significantly improve the teaching effect. This study can provide reference for bilingual teaching of professional courses, especially business and management majors. Furthermore, with the further deepening of globalization, economic and trade exchanges between different countries, races and cultures have become more frequent. For enterprises focusing on the international market, cross-cultural management ability has become an essential competitive factor. Similarly, for each individual who will inevitably be involved in the tide of globalization, knowing international rules, being familiar with cultural differences, and having a global perspective and awareness of world citizens will also become an important dimension of personal quality. International talent training is a systematic project, including the joint efforts of the government, society, schools, students themselves and even parents.

"International marketing" is one of the core courses of economics and management. Although different universities and teaching materials have slightly different names and focuses on this course, the core of the course is based on the perspective of cultural differences that enterprises must face in their transnational operations and focuses on the contents of the operating environment of Transnational Corporations. Through the study of this course, theoretically, students should intuitively feel the different cultures of different countries in the world, be able to think deeply about the causes of different behaviors of people in different countries and regions from the perspective of culture, and be able to understand, respect and adapt to cultural differences, so as to lay the foundation for making correct decisions under the multicultural background and further form a true global vision. However, returning to reality, the traditional teaching mode is limited by the teaching materials, teachers and teaching mode, and the teaching effect is not satisfactory.

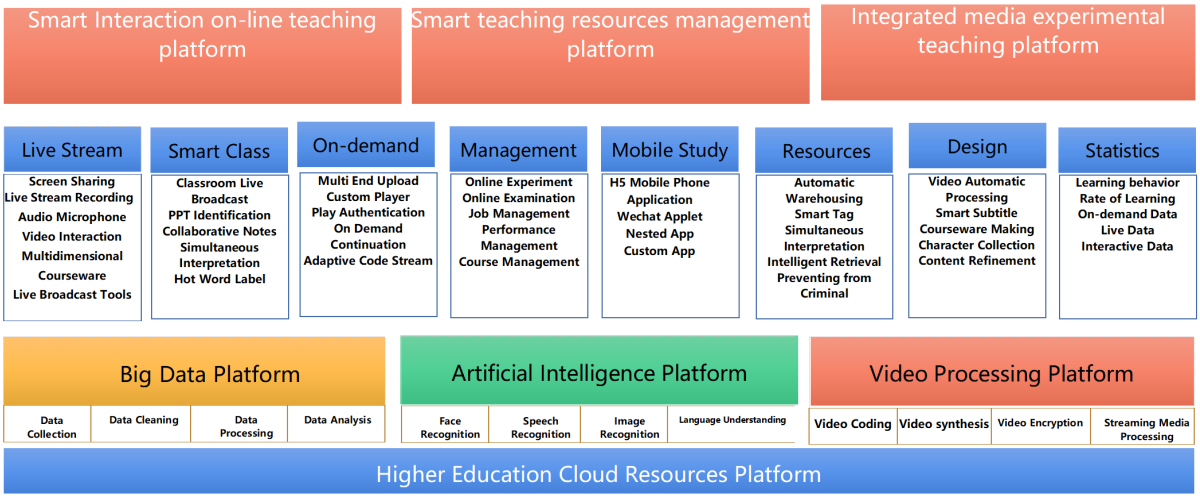

Fig. 2. Diagram of the work mechanism of the digital on-line and off-line teaching platforms

The implementation of bilingual teaching needs a certain social and cultural background, and today's globalization is such a background. As a positive response to internationalization and globalization, it is becoming a popular trend for Chinese universities to implement bilingual teaching in professional courses. Like the emergence of other new things, bilingual courses are also experiencing difficulties such as teachers' low enthusiasm and students' resistance due to increased learning difficulties. Although there are various difficulties in the process of promotion, based on the actual teaching experience of the course group in the bilingual course of "international business management" in recent years, we conclude that the implementation of bilingual teaching in the teaching of professional courses has the following advantages. Bilingual courses can improve students' accurate understanding of knowledge. Due to the introduction of the original textbooks, students have a more intuitive and original feeling of the concepts and theories mainly originating from the west, thus avoiding possible errors and omissions in the translation of Chinese textbooks. In addition, thanks to the unique grammatical structure of English, the original textbook explains the basic concepts and theories more accurately, which is conducive to students' understanding and mastery. Bilingual courses can broaden students' international horizons. When choosing bilingual teaching teachers, colleges and universities usually choose teachers with good English foundation and overseas study experience. This makes it easier for teachers to introduce the latest theories into the classroom during the teaching process. Moreover, teachers with overseas study experience will also have a unique advantage in interpreting the cultural issues often involved in the economic and management courses. Bilingual courses can improve students' foreign language level. Although improving the foreign language ability is not the original intention of bilingual teaching, after a semester of all English teaching materials and teaching interaction with teachers, students will improve their foreign language listening, speaking, reading and writing to various levels.

The digital platforms provide reform of teaching and education of bilingual courses with solutions. The digital platforms have professional cloud intelligent teaching integration solution created by the digital platforms and the characteristic "cloud + video" technology is designed to provide on-line on-demand learning, interactive live stream broadcast, on-line examination, job management, mobile learning, online experiment, resource management, resource production and teaching data analysis and other cloud teaching applications for teaching units, educational institutions, enterprises and related industries, and help users realize on-line off-line teaching shift and off-line resources on-line presentation, and realize off-line experiments online, and new technologies such as big data, artificial intelligence and 5G are combined to realize intelligent and data based for cloud teaching. These digital platforms could be applied to either bilingual courses or non-bilingual courses, while they could work for either business and management major or other majors. However, the functions of digital platform make understanding learning materials in foreign languages easier with the help of the function for real time translation and the function of presenting business and management cases in videos.

6. CONCLUSIONS

The rapid development of science and technology represented by information technology has changed the traditional production and organization mode. Similarly, the new scientific and technological environment has provided unprecedented imagination for the reform and innovation of higher education. The bilingual course uses the original English teaching materials and English teaching aids. There is also a considerable part of the foreign language in the classroom teaching, which is not a small challenge for students. A great disadvantage of adopting the traditional teaching method to carry out bilingual teaching is that no matter how hard teachers try to mobilize everyone's enthusiasm for class and let more students participate in the interaction with teachers, there will still be a large number of students in the end. It is a kind of "free riding" way of listening in class, and it does not need to pay too much effort. However, bilingual teaching requires more efforts of students in class and after class. This will inevitably lead to unsatisfactory classroom teaching results. The student-centered online classroom teaching makes every student have to participate in the preparation before class and actively participate in the interactive display in class, which fundamentally avoids the disadvantages of the traditional teaching mode and greatly improves the teaching quality and effect. It could be said that online classroom is the most suitable teaching mode for bilingual teaching at present.

It is meaningful and interesting to understand the cultural differences of different countries and explore the cultural logic behind people's thinking and behavior in different countries. Then, this is only for students who like this course. Under the traditional teaching mode, the students' learning effect of this course is largely restricted by their original interest in culture. The interested students listen carefully and actively interact with each other, and their cross-cultural literacy has been significantly improved in one semester; The students who are not interested will be affected by the superposition of teachers' teaching and their own efforts, and the learning effect will be significantly different. However, the intervention of flipped class can eliminate the above drawbacks to a large extent. Students study in preview, display, discussion and interaction in groups assigned before the start of the class. Teachers take the final course evaluation as the key to grasp students' performance in all aspects to supervise their learning. Practice shows that students who are interested in culture continue to show positive performance, and students who are not interested in culture at first will also seriously learn knowledge under the double pressure of team and individual assessment. Good learning results will also be achieved at the end of the course. It is also found in the teaching that many students who are not interested in culture at first discover and cultivate their interest in the unique connotation of culture in the process of flipping learning.

In recent years, the progress of science and technology, especially the rapid development of information technology, has had a subversive impact on the traditional operation of human society. From the overall social division of labor, the organization and management of enterprises, and even the behavior of everyone, all corners reflect the great impact brought by new technology. Classroom teaching is no exception. The software and hardware environment developed based on information technology has added more variables to traditional teaching methods, and new teaching methods have emerged. Here, we only discuss how to combine and use new technical means to realize the design of online and offline integration of bilingual courses for business and management majors. New technologies provide more possibilities for changing teaching methods. In the teaching process, the course group mainly uses software and hardware resources such as online offline education and teaching platform and classroom multimedia as auxiliary tools for classroom teaching. However, teachers still need to carefully design and organize teaching links. Careful design is required in the pre class preparation stage. New technical tools can provide great convenience at this stage. Teaching preparation mainly includes three links: changing teaching syllabus, setting up study groups, and issuing self-study task lists. In the class, teachers have become one of the participants in the teaching process from the dominant role in the classroom, from the sole disseminator of knowledge to the supervisor and organizer of the classroom, and become one of the disseminators of knowledge by participating in the discussion in the classroom. In the aspect of after-school evaluation, timely, objective and accurate evaluation of students' performance is an important measure to urge students to learn and ensure the teaching effect to achieve the established teaching objectives.

China is in the new era. China higher education institutions innovate and reform education and teaching models in accordance with adult cognitive laws, professional development needs and discipline and specialty characteristics, give full play to the advantages of information technology, and carry out mixed teaching combining online teaching with face-to-face teaching, autonomous learning and collaborative learning in combination with reality; According to different professional requirements and student characteristics, the proportion of online and offline class hours shall be reasonably determined. In principle, offline teaching (including practical teaching) shall not be less than 20% of the total class hours specified in the talent training program. It is encouraged to improve students' learning enthusiasm and participation through participatory, discussion, case and project-based teaching, and pay attention to learning experience. China's colleges and universities continue to strengthen the construction of a contingent of academic continuing education teachers who combine full-time and part-time education. They are well equipped with keynote teachers, tutors and management personnel. The ratio of the number of keynote teachers to the number of registered students is not less than 1:200, the ratio of tutors to the number of registered students is not less than 1:100, and the ratio of management personnel to the number of registered students is not less than 1:200. The part-time teachers and tutors employed should be integrated into the development planning and management of the school's teaching staff. The host higher education institution is encouraged to employ its outstanding retired teachers to participate in continuing education and teaching.

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REFERENCES

1. Suyadi, Nuryana, Z, Sutrisno &? Baidi 2022, “Academic reform and sustainability of Islamic higher education in Indonesia”, *International Journal of Educational Development*, vol. 89, 102534.
2. Michael, D 2018, *Educational Reforms, Incentive Schemes, and Their Impact on Academic Achievement*. Universitat Konstanz.
3. Hijazi, R & Alfaki, I 2020, “Reforming undergraduate statistics education in the Arab World in the Era of information”, *J. Statist. Educ*, vol. 28, no. 1, pp. 75–88.
4. Nasser, R 2017, “Qatar’s educational reform past and future: challenges in teacher development”, *Open Rev. Educ. Res*, vol. 4, no. 1, pp. 1–19.
5. Xiong, WY, Yang, JL, & Shen, WQ 2022, “Higher education reform in China: A comprehensive review of policymaking, implementation, and outcomes since 1978”, *China Economic Review*, vol. 72, 101752.
6. Mok, KH 2000, “Marketizing higher education in post-Mao China”, *International Journal of Educational Development*, vol. 20, no. 2, pp. 109–126.
7. Malysheva, O, Tokareva, E, Orchakova, E & Smirnova, Y 2022, “The effect of online learning in modern history education”, *Heliyon*, vol. 8, e09965.
8. Raju, V, Javaid, M, Ibrahim Haleem, K, Vaish, A & Iyengar, KP 2021, “Significant role of modern technologies for COVID-19 pandemic”, *J. Ind. Integr. Manag*, vol. 6, no. 2, 1226769.

9. Zhou, L, Wu, S, Zhou, M & Li, F, 2020, "School's Out, but Class's On', the largest online education in the world today: taking China's practical exploration during the COVID-19 epidemic prevention and control as an example", *Best Evidence in Chinese Education*, vol. 4, no. 2, pp. 501–519.
10. Yildirim, G, Elban, M & Yildirim, S 2018, " Analysis of use of virtual reality technologies in history education: a case study", *Asian J. Educ. Train*, vol. 4, no. 2, pp. 62–69.
11. Borba, MC, de Souza Chiari, AS & de Almeida, HRFL 2018, "Interactions in virtual learning environments: new roles for digital technology", *Educ. Stud. Math*., vol. 98, no. 3, pp. 269–286.
12. Hooshyar, D, Kori, K, Pedaste, M & Bardone, E 2019, "The potential of open learner models to promote active thinking by enhancing self-regulated learning in online higher education learning environments", *Br. J. Educ. Technol*., vol. 50, no.5, pp. 2365–2386.
13. Rueda, K & Rey, M 2018, "The learning of differential calculus mediated by the platform Khan-academy", In: *J. Phys. Conf. Ser.*, IOP Publishing, no.1, 012047.
14. Fitriningtiyas, DA, Umamah, N & Sumardi, S 2019, "Google classroom: as a media of learning history", In: *IOP Conf. Ser. Earth Environ. Sci*., vol. 243. IOP Publishing, 012156.