Analysis on Application of Hybrid Teaching Mode in Higher Education

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Abstract. With the increase of higher education demands and development of information technology, distance higher education based on network teaching has become an important higher education mode like the traditional face-to-face teaching in campus. It is an important aspect of higher education and teaching reform to integrated advantages of distance and traditional higher education and implement hybrid teaching mode. Comprising teaching modes between distance and traditional higher education, this paper probes the meaning of implement hybrid teaching mode, and brings forward its elements and possibilities on the basis of analyzing and integrating their advantages.

Keywords: Hybrid Teaching Mode; Distance Higher Education; Traditional Higher Education.

1. Comparison between distance higher education and traditional higher education

1.1 Distance higher education and traditional higher education

With the development of modern ICT technology and the demand of professional people in society, distance higher education, as a new educational mode, is emerging and developing quickly. It provides higher educational opportunities for the persons who cannot enter traditional college campus because of various reasons. As a kind of educational mode, it is embodying higher education democratization in society and suitable for individual self-study. Taking in-service-staff as main object of teaching, distance high education disseminates knowledge widely and enhances new skills and provides good service for various persons. So that it becomes a strong way by which popularizing of high education should achieved. On the other hand, it is well known that traditional higher education is a campus education mode based on face-to-face teaching.

1.2 Comparison of teaching mode between distance and traditional higher education

Because of the differences of teaching conditions and organization forms, distance and traditional higher education have many differences in various aspects, such as in educational notion, teaching methods and resources, learning methods, learning support, practice teaching, and teacher-student emotional contacts as shown in table 1.

Table 1: Comparison of teaching mode between distance and traditional higher education

	Distance Higher Education (based on network teaching)	Traditional Higher Education (based face-to-face teaching)	
Educational Notion	Student-Centered Teaching	Subject System Centered Teaching	
Teaching Methods	Multimedia	Face to Face	
Teaching Resources	Plenty of Digital Resources	Instructors Teaching in Class, Teaching Resources	
Learning Methods	Self-study	Follow-up Learning	
Learning Support	Space-Time Breaking	Limited	
Practice Teaching	Virtual, Limited	In reality	
Emotional Communication	Virtual, Loneliness	In reality	

Distance higher education based on network teaching is student-centered, multimedia teaching, students' self-study, learning support breaking time and space, as well as other means. However, its practice teaching and emotional contact mostly happen in the virtual space, and it has many limits, for example, students feel lonely while learning alone. In the mean while, traditional higher education based on face-to-face teaching is subject system knowledge teaching and students following-up learning style. It has marvelous advantages compared with other educational mode especially in practice teaching and emotional communication between teachers and students. But, it has limits in learning support service.

1.3 Comparison of advantages between and distance higher education and traditional higher education

From the comparison between distance and traditional higher education above, we can see that differences of these two teaching modes mainly lie in the differences of the syncretism of teachers' teaching and students' learning caused by different teaching environments. The former is under the network teaching environment, and the actions of teachers and students are relatively separate position, while the latter is in face-to-face classes, and teachers' teaching and students' learning are combined process. That is to say, the characteristic of face-to-face teaching is that teaching and learning happen at the same time, in same place, in interactive communication, which

allows full participations understand the course context immediately, so it can get a better learning result. In addition, teachers in face-to-face classes can make their lectures more vivid and detailed during the period of their knowledge delivery. They can control students' passion, direct their interest, answer their doubts, and adjust teaching speed and extend, employ the various methods and styles in time. Thus students' interest can be inspired and their potentials can be exploded, which can drive students to master curricular system frame and new knowledge in a relatively shorter time.

In face to face learning process, students can constantly combine teachers' lectures with their knowledge frame, by refining and abstracting, and integrate knowledge segments into their knowledge system. In the mean while, they can feed back their learning experiences and doubts to their teachers and classmates, which further stimulates teachers' and students' thoughts. Therefore, the quality and quantity of knowledge in student's brain can be continuously improved and proliferated during the course of teaching.

Mr. Hou Renzhi, a famous professor in Peking University, once said, "Professor is like a bell. It does not ring unless you knock it." Face-to-face teaching provides students most precious opportunities of knocking the bell at any time. The bell of professor is ringing while knocking, and students get benefits through the resonant sounds. This teaching mode benefits teachers as well as students and brings out the best in each other. At the same time, face-to-face teaching is the real social environment. It is important way of interpersonal and interactive communication to students' growth. Therefore, this teaching mode can enhance the emotional communication between students and teachers and can promote students' learning motivations. It is not replace by distance education.

Let's look at distance education based on network teaching. Although we can provide much of course content via course delivery software and instructional tools, there is seldom students' feedback and teacher's responses during the virtual classes. Because of no real–time and face-to-face communication, students can not deeply understand teachers' detailed and vivid lectures. Although simulating the face-to-face teaching in some degree by means of some technique tools, distance learning can not provide the real atmosphere where teachers' personalities can influence students and teaching and learning could be interacting with one another in time.

Advantages of distance higher education lie in its special learning style, by which student can use a lot of learning resources and tools, like multimedia teaching resources, convenient online communication, and various interactive contact channels. Those learning resources and tools provide students with option of taking some courses fully online in anywhere and anytime.

Hence, both distance and traditional higher education have their own advantages. In order to achieve better teaching results, we need combine the strongpoint of these two and implementation hybrid teaching mode is a good choice.

2. The definition and meaning of hybrid teaching mode

2.1 The definition of hybrid teaching mode

Hybrid teaching is not a new concept. It has been widely applied in training fields. But it is a new question for higher education.

We define hybrid teaching mode in this paper as a way that it integrates the advantages of traditional face-to-face teaching and modern distance network teaching and blends many of teaching elements such as teaching context, course contents, teaching methods and media etc. It can satisfy various teaching needs, improves teaching quality and as well as get economic benefits.

Hybrid teaching is a kind of advance teaching notion in which there many changes in teaching tactics, content and methods based on deep understanding of students' cognition styles. This change is not only an external, but a process to improve students' cognitive competence by taking advantages of both distance and face to face class education on the basis of analyzing student needs, designing teaching contents and simulating real teaching context.

2.2 Elements of hybrid teaching mode

Blended teaching mode can be implemented by two ways: face-to-face teaching and network teaching. Generally speaking, in campus education, face-to-face teaching is normal way (the percentage of face-to-face teaching is more than online in course delivery), and in distance education, network teaching is more popular (the percentage of face-to-face teaching is less than online). These two ways involved in hybrid mode focus on different teaching elements and means as shown in table 2.

2.3 Meaning of hybrid teaching mode

Hybrid teaching mode is optimization of traditional face-to-face and network teaching modes. It has an important meaning to the progresses of higher education.

Hybrid mode can provide the new ways of education to meet the various learning demand in society. For traditional campus education, employment of hybrid teaching mode still highlights face-to-face teaching parts, at same time it can deliver many practical course contents by means of network teaching, like judgment materials in videoconference in law school, real surgical operation materials in medicine school etc.. Hybrid teaching mode can extend course contents to the outside world, field practice. Students listen to lecture in class time and communicate, discuss and join to other learning activities by means of network after class time, which greatly increase students' learning interests and efficiency, as well as making students perceive teacher's personality. For distance education, employment of hybrid teaching mode has large extension of students and course subjects, in addition face-to-face communication to some extent; it can enhance the enthusiasm of students and harmoniousness in distance higher education.

Table 2: comparison hybrid mode based on distance with campus education

	Teaching elements	Hybrid Mode based on Distance Education	Hybrid Mode based on Campus Education
Face-to- face Part	Course Contents Teaching		Instructors class teaching
	Experimental and Practical Course Contents	Experimental and practical course contents in local learning centers	Experimental and practical course contents at main campus
	Tutorship of course Contents	Tutorship of the difficulties and important parts in learning center	Instructors' tutorship in class
	Discussion	Among tutors and students in learning centers	Class discussion among instructors and students
	Evaluation	Organizing exams in learning centers	Class exams
	Teaching Resources	Network learning resources and printed materials	Course contents and resources by instructors
Network Teaching Part	Course Contents Teaching	Teachers and teaching by courseware Instructors distance lecture delivery by real communication system	
	Experimental and Practical Course Contents	Virtual experiments	
	Tutorship of Course Contents	Synchronous tutorship by real-time tutorship system Asynchronous tutorship, BBS discussion area, Email and others	Asynchronous tutorship, BBS discussion, Email and others
	Discussion	BBS, Email and others	
	Evaluation	Process and development evaluation	Process and development evaluation
	Teaching Resources	Courseware, database of FQA, test, case, reading materials, documents and other network resources	Digitizing materials and other supplements

Combining face-to-face and network teaching together, discussion and intercourses can be fully and efficiently actualized. In fact, even in campus face-to-face course, the opportunities of talking between students and teachers are seldom appeared after class because of teachers' heavy research works or other reasons. Network context of course can provide teachers and students with much more interactive channels in Internet, which greatly supply a gap of face-to-face teaching. And for distance education, it is good way to organize face-to-face discussion among teachers and

students in local learning centers to share knowledge and give intellectual insight each other so as to gain better teaching results.

In addition to, with the preconditions of quality assurance of teaching, hybrid teaching mode can saves students time of face-to-face course and teaching costs by delivering adequate course contents by means of suitable digital tools. This can achieve optimal education efficiencies and cost-benefits.

3. Implementation of hybrid teaching mode

The implementation of hybrid teaching mode needs to reconstruct new teaching environment on the basis of investigating existing conditions of teaching mode.

3.1 Reconstructing necessary conditions

Necessary teaching conditions are the foundation of implementation of hybrid mode.

To distance higher education, the key part of implementing hybrid education mode is to provide necessary teaching resources of face-to-face course, like teachers and classrooms. Nowadays the teaching activities in china distance higher education are mainly restricted in large geographical areas in provinces, because there are abundance of students, limited classrooms and poor economic condition, it is difficult for students to listen to lecture in the host institute's campus. In this way, many learning centers must be built in local cities and many teachers and tutors of face-to-face courses are from local universities and colleges. The qualities of face-to-face courses in distance higher education mainly depend on the course contents and competence of teachers provided by local learning centers. Therefore, integrating teacher resources provided by local teaching center and course resources by host universities is crucial for implementing hybrid teaching mode, which is the basis of adequate quality of distance high education at present.

However, the key points of traditional higher education to implement hybrid teaching mode is to create information infrastructure and ITC technology employing in universities, including proper network teaching platform, computer applications, network teaching resources etc.. High-quality and plenty of course resources are the important basis of hybrid teaching in traditional education environment. Based on the face-to-face teaching, traditional higher institutes will further develop digital teaching resources for students learning and teachers teaching and tutorship like well-organized teaching courseware base, databases of FQA, tests, cases, materials, references, and other resources of supporting self-study, autonomous research and cooperative communication etc.

The implement of hybrid teaching needs a network teaching platform to support itself. The platform should be multifunctional and support teachers' hybrid teaching and students' learning like issuing and managing course contents, online tutorship, online teaching and learning interaction, collaborative study based on projects, developing teaching evaluation and teaching management and so on. If hybrid teaching mode is adopted by universities in campus, it is also important to encourage

professors to upload their teaching materials to online teaching platform, participate in network teaching activities.

3.2 Fulfilling the education notion of teacher-directing and student-centered

After establishing fundamentals of network teaching facilities, the key part comes to perform new teaching nation of teacher-directing and student-centered. For distance higher education, hybrid teaching mode should emphasize teachers' dominant function and focus on the shift from learning-centered to balancing both teaching and learning. And for traditional higher education, hybrid teaching mode should strengthen the student-centered, construct new teaching environment and change traditional teacher-centered teaching projects and structures. Hybrid teaching under these two modes will realize the educational notion of teachers guiding and student-centered. While learning, students are the main body but they can not ignore and neglect teachers' guidance. And in any learning environment, the responsibilities of control, management, help and guidance in teaching should be taken. Teachers are the organizers and tutors of teaching process and promoters of meaning construction. Teachers should organize learning activities, offer helps and directions and make students to correctly employ recognition facilities.

3.3 Optimizing teaching program

Hybrid teaching mode emphasizes to deliver suitable contents by reasonable means so as to meet various learning demands and achieve optimal teaching results. Efficient implementation of hybrid education must have some appropriate hybrid programs that provide students with an option of taking some courses fully online and some in class, or hybrid. In principle the programs should be scientific, instructive and economic, and it should both follow the educational and teaching rules and meet students' requirements. It should combine basic teaching contents and elements with teaching means and methods harmoniously.

3.4 Improving traditional teaching support service and teaching management system

It is important for implementation of hybrid teaching mode to provide suitable teaching support service and teaching management system. Which include, for example, adequate resources of teachers and administrators, evaluation of their working quality and quantities, indispensable learning resources and teaching and learning facilities used by teachers and students and so on.

4. Conclusion

Considering the characteristics of face-to-face and network teaching modes, hybrid teaching is not a substitute education but a new form of integrating traditional teaching mode into new merging technology, which take advantages of face-to-face and network education. While network teaching has become an important means of distance higher education, it is not only means to distance education; it will be employed widely in traditional campus teaching.

Because of employing network teaching, hybrid teaching mode has played an important role both in fields of campus and distance education, which displays different features in their respective fields. Not a substitute of traditional face-to-face education and distance education, but hybrid teaching mode is a result of impact and combination of face-to-face and distance teaching each other. With improving of people's cognition and progresses of teaching technology, fully taking advantages of traditional and digital education will obtain better teaching results so as to satisfy various learning needs in society at present.

Hybrid education will end the debate of distance education substituting campus education and afford a basis for expectation to these two education modes. In the mean while, we can see that hybrid education mode is still a new topic both to distance and campus education. Wherever the educational notion, conditions construction and teaching content design, quality guarantee and others, a plenty of works of investigating and practice should be done in hybrid mode. In a word, hybrid education mode will bring new vitality and energy in high education, both campus and distance teaching mode.

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