

Analysis of Difficulties and Obstacles in the Design and Implementation of Blended-Learning in Public Courses in National University

—Take Inner Mongolia Normal University as an Example

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Abstract: Research at home and abroad shows that compared with online teaching and traditional face-to-face teaching, the blended teaching model has greater advantages. In order to better promote students' learning, and combine knowledge transfer with ability enhancement, and greatly improve the effectiveness and efficiency of teaching, all colleges and universities have actively explored blended teaching and have achieved certain successful experiences. As a nationality university, Inner Mongolia Normal University implemented the teaching of Mongolian and Chinese teaching in parallel. In the exploration of blended teaching, it is necessary to explore and study general blended teaching strategies, but also to explore and study blended teaching strategies meet Mongolian students. Based on the practice of blended-learning design and implementation in Inner Mongolia Normal University, this paper combines interviews and questionnaires to analyze the blended learning platform and resource delivery model, the current implementation status of each model, and the students' blended learning needs. Based on this, the difficulties and obstacles of design and implementation of blended-learning are proposed and some suggestions are made.

1. Questions Raised

As a product of the combination of traditional teaching and online learning, Blended Learning has been in China for nearly 20 years. According to systemic perspectives and performance methods, Blended Learning combines traditional learning methods with online learning methods to complement each other's strengths, making learning easier and more convenient, and ultimately achieving the best learning outcomes. The rise of the MOOC (Massive Open Online Course) in 2012, the quality and open curriculum resources sparked a wave of online learning. At the same time, factors such as poor online learning and lack of certification of learning results have prompted people to explore ways to improve the learning effect by using high-quality MOOC resources. The concept of SPOC (Small Private Online Course) came into being. Small and Private are relative to MOOC. In the case of Massive and Open, Small refers to the size of students generally ranging from tens to hundreds of people. Private refers to the setting of restrictive access conditions for students, and applicants who meet the requirements can be included in the SPOC course. For students in school, SPOC adopts the Blended learning mode combining classroom teaching and online teaching, and uses the MOOC lecture video (or its online evaluation function) in the university campus classroom to implement the flip classroom teaching. Under the promotion and influence of MOOC and SPOC, all domestic universities have begun to actively explore the hybrid teaching reform.

For Inner Mongolia Normal University in ethnic areas, the exploration of mixed teaching reform begins with public classes. The most important feature of traditional public class teaching is the large class. This typical industrialization feature has gradually exposed many defects in the information age: (1) the time and place of teaching is fixed, and the teaching mode is single; (2) the name is spent on class time, not named students. The attendance rate decreased significantly; (3) the one-way knowledge transfer was the main; (4) the classroom activities were difficult to carry out, and the interaction was lacking under the class; (5) the student evaluation method was single and the evaluation efficiency was extremely low. Based on the above-mentioned shortcomings of traditional teaching, the basic idea of the hybrid teaching reform is to adopt the model of flipping

the classroom, transform the knowledge orientation of teaching into the ability orientation, use the online learning method to complete the task of knowledge transfer, and liberate the classroom to improve the ability. In other words, it uses online means to break the limitations of time and space, use online resources to complete knowledge transfer, use online interaction to improve the frequency and quality of interaction, use online evaluation methods to improve evaluation efficiency, and use classroom face-to-face to improve capabilities. Based on the practice of mixed teaching reform in public courses in Inner Mongolia Normal University, this paper analyzes the current situation of mixed teaching reform, and combines the students' Blended learning survey data to propose the difficulties and obstacles in the design and implementation of Blended Learning in ethnic colleges and specific suggestions for the path of the obstacle.

2. Blended Learning Platform and Resource Supply Mode for Public Courses in Ethnic Colleges and Universities

To ensure the smooth implementation of the hybrid teaching reform, the provision of online teaching platforms and online learning resources is a necessary prerequisite. Taking Inner Mongolia Normal University as an example, in order to meet the needs of the mixed teaching reform of various courses, the school provides a “self-built mode + purchase mode + flexible application mode” (as shown in Fig. 1) multi-mode hybrid platform and resource supply mode.

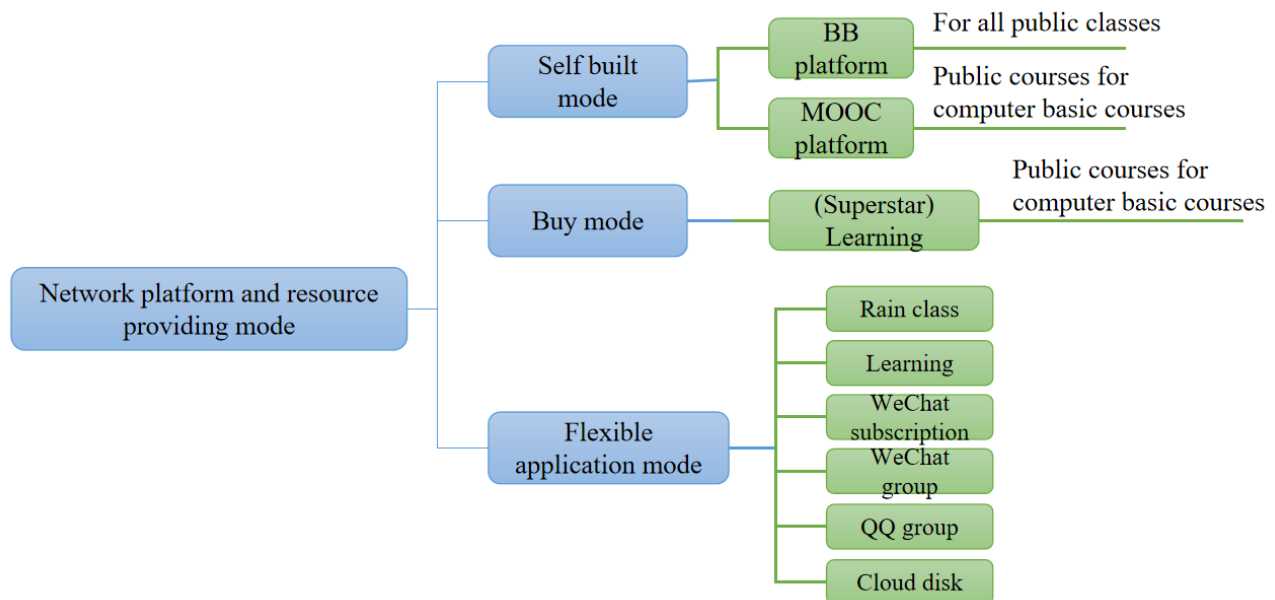


Fig. 1 Network Platform and Resource Provision Mode

(1) Self-built mode

The school first provides a self-built model based on the BB (Blackboard) platform, open to all public classes. The overall design of the course is completed by the course group or the instructor. The curriculum resources need to organize human development by themselves. The other teaching links of the course are designed and implemented by the course group or the instructor. In addition, for the computer basic class public class, the MOOC platform is used for online teaching. The design of all courses, the development of resources and the implementation of mixed teaching are all completed by the course group or the instructor.

The self-built model gives the course group and the instructor great freedom, but for teams and individuals who lack the preparation and experience of e-learning design and development, there is still a huge obstacle to running Blended Learning.

(2) Purchase mode

In response to the shortcomings of theoretical and general-level curriculum teachers in the design and development of network resources, the school has adopted the purchase model, purchased the superstar curriculum, and implemented the hybrid teaching reform with the “Learning” software to

reduce the pressure on curriculum resources development. Let the teachers focus on the design and implementation of mixed teaching.

The purchase model has greatly reduced the resource development barriers of the hybrid teaching reform, but how to “localize” the resources, especially for the Mongolian students, has become a major issue to be solved by this model.

(3) Flexible application mode

In the hybrid learning, the core requirements for online learning are mainly the uploading and downloading of resources (or the sharing of resources), convenient and interactive communication and automated testing. Teachers can flexibly choose or based on the actual needs of the course. Use one or several online learning tools to ensure the smooth implementation of Blended Learning.

① Cloud disk: Cloud disk is the most convenient way to share resources. Teachers only need to share the link of the cloud disk to the students, and the process of resource sharing can be completed quickly. It is already available for courses that only need one-way resource transfer. Meet the needs;

② WeChat public number: For courses pursuing the breadth of teaching information dissemination, WeChat public number is an ideal choice, and can be used as an effective auxiliary means of classroom teaching to create or reproduce content that is valuable for course teaching;

③ Social software (WeChat and qq): For the courses that need to communicate and interact in time, social software (WeChat and qq) can provide very convenient services. At the same time, WeChat group and qq group also have shared resources, live broadcast, Intuitive online interactive functions such as offline on-demand, the qq group's homework function has also taken a big step in evaluation, and can support the general evaluation of many courses;

④ Rain class and learning pass: Rain class and learning pass are professional mixed learning tools, full coverage before, during and after class. Compared with learning pass, the test type supported by rain class is relatively better. Less, can not support direct video upload (only can insert network video), ppt-based editing mode makes the application flexibility limited, but the rain classroom barrage allows students to share ideas in the classroom in real time, for the classroom The organization of the event has great advantages, and its application method based on WeChat is also very convenient. The learning pass is very powerful in meeting the needs of online learning. The teaching video can be purchased or uploaded by itself. Diversified online name, diversification The interactive design, diverse test types, and especially the mutual evaluation function can support a more diverse and diverse evaluation of learning activities, which is helpful in the implementation of multiple evaluations.

For the flexible application mode, teachers are more spontaneous in their choices, and they are more active and active when using online methods. They have more personalized and in-depth thinking about the design of Blended Learning.

3. Analysis of the Status Quo of the Implementation of Blended Learning in Public Courses of Ethnic Colleges and Universities

Since the implementation of the network teaching reform in 2014, all public compulsory courses at Inner Mongolia Normal University have been conducting online courses. By combing the results of online course research, teacher interviews and student interviews, the author summarizes the Blended learning model and implementation status of each course.

(1) Self-built mode implementation status: The self-built mode of the school is mainly based on the implementation of the BB platform. There are two mature Blended learning modes formed under the self-built mode:

① Traditional resource supply + automated evaluation mode: teaching documents and ppt-based resources are provided on the platform. Although the class time is reduced, the face-to-face mode is unchanged, and the teaching is still the main function. The biggest function of the platform is to provide automated testing. Unit test scores are included in the total score.

② Flipping classroom mode: represented by “computer foundation” and “modern educational

technology application”. The resources provided by the platform are mainly teaching video (micro-course). All teaching activities are based on pre-school video learning, and the focus is on the classroom. Coaching and task promotion. The survey results show that because there is no bb platform mobile phone client at the same time, it is difficult to interact, which has caused great hindrance to teachers and students and students' interaction after class.

The online course survey and interview results show that in the process of “enhanced ability-oriented” Blended learning mode, the practice of flipping the classroom mode is mature and successful, but the current successful courses are computer-based courses. Compared to theoretical courses, computer-operated courses have the following conveniences when implementing the flip classroom mode:

①The teaching video is mainly based on software operation, the production technology is relatively simple, the production process has few interference factors, and the production cost is low. Usually, the course group can develop it by itself;

②The evaluation design of computer operation courses is mainly based on the evaluation of works. The matching between the tasks and the teaching videos is high, which can encourage students to study the teaching videos seriously.

③Based on pre-class video learning, the classroom teaching activities of computer-operated courses are usually focused on key coaching and task promotion, and classroom learning activities are relatively easy to design;

④Computer operation class The class capacity is usually less than 80. Each student has a computer. The teacher is controlled by broadcast during the lecture. The teacher is also easy to monitor and guide when the student completes the task.

For the “traditional resource supply + automated evaluation model”, although the platform is used as a support, the platform is still a supplementary teaching method, and the teaching thought and mode of “transfer with knowledge transfer” has not changed substantially. It can be said that the network has not been reached at all. The goal of teaching reform. Network research, teacher interviews, and student interviews show that the reasons for this result are as follows:

①The course group does not form the “enhanced ability-oriented” Blended learning design idea. It is difficult to complete the integrated teaching design of the course, and it is difficult to complete the Blended learning design of each class.

②The adoption of this model is usually a theoretical course. The relevant teachers have relatively few online learning experiences and do not master the technology of making teaching videos. Without the support of professional teams, it is impossible to develop the supporting teaching videos.

③The bb platform itself is complicated to operate, the editing of the course module is cumbersome, the platform interaction is not convenient, the video viewing progress cannot be monitored, and the teacher has great obstacles to the use of the process evaluation data.

④ The course group and the instructor have less time to spend on the construction of the online course, which can not meet the time requirements of the course construction, and the school's financial support, all-round online teaching support service, and college and school incentives. These are not enough to ensure the smooth progress of the online course reform.

(2) Purchase mode implementation status: The purchase mode is to purchase the Super Star course directly, and cooperate with the “Learning” mobile client to carry out mixed teaching. Online course research, teacher interviews and student interviews show that the current implementation status of this model is “face-to-face and online parallel mode”, that is, students accept traditional face-to-face teaching and complete corresponding tasks. At the same time, through the learning pass to complete the network video learning, and complete the supporting tasks, the two systems independently teach and evaluate. The main reasons are as follows:

① At present, the learning pass is in the trial stage, and the course group has not yet carried out the integrated learning design of the course as a whole, so the superstar course and the face-to-face teaching have not yet been complemented;

② Learning Communication also supports the uploading of self-built resources. In order to

“localize” the course, teachers need to supplement certain resources to meet the needs of local students. Especially for Mongolian-speaking students, the provision of Mongolian teaching resources will greatly solve their learning difficulties, but at the same time it will put a lot of pressure on the curriculum construction;

③For the public classes of large classes, the design of classroom activities is still difficult. However, the use of small class seminars places great demands on the equipment and seminar rooms. The course group needs to actively explore the curriculum requirements. Form of classroom activity.

Learning-enabled Blended Learning supports powerful functions, especially for classroom activities. Diversified naming methods can help teachers quickly understand the situation of students, and can effectively prevent cheating. Free discussion, fun-shaking selection and answering, automated mutual evaluation of classroom activities, and flexible assessments such as quizzes and voting can make classroom activities deeper and more efficient. The instructor needs to be proactive in familiarizing with the software functions, so that the classroom can be revived and created.

(3) Flexible mode implementation status: Flexible mode is not only an auxiliary means of large-scale courses (such as the use of cloud disk and WeChat public account), but also the main means of Blended learning in small-class courses such as public optional courses and professional courses.

Teachers who use flexible models are usually spontaneous, active, and active. The embedding of online learning methods is to directly solve the curriculum requirements, so the use efficiency is relatively high. Teachers will actively apply for teaching research topics to conduct mixed learning. Practice and research, but hybrid teaching based on social software such as WeChat group or qq group is generally only used as teaching exploration. Teaching research is mainly based on special tools such as rain classroom and learning communication.

Blended learning with flexible models usually rarely receives relevant support services, but since it is usually initiated by teachers, the design and development of the courses are completed by the teachers themselves or smaller teams, and the development cost is lower. However, due to the relatively small curriculum and flexible transformation, it is easy to achieve results in the process of mixed teaching reform.

4. Analysis of Blended Learning Needs of Ethnic College Students

A survey of 103 students (40 in Han Dynasty and 63 in Mongolian) who participated in online courses in many courses. In the Q&A of “What kind of teaching method do you choose under the premise of achieving the teaching goal?”, their favorite teaching method is mixed teaching, accounting for 68%; 26% for pure face teaching, accounting for 4%. One; only 6% of pure network teaching is selected (as shown in Fig. 2). Interviews with students who choose pure online teaching show that although they have the ability to achieve teaching goals through pure online teaching, they still do not want to be completely out of the teacher's face-to-face. It can be seen that students do not welcome complete online teaching, but traditional face-to-face teaching cannot meet the learning needs of most students. The transition to mixed teaching has become an inevitable trend.

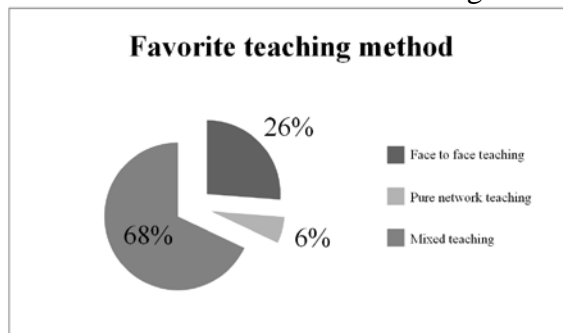


Fig. 2 the Teaching Style That Students Like

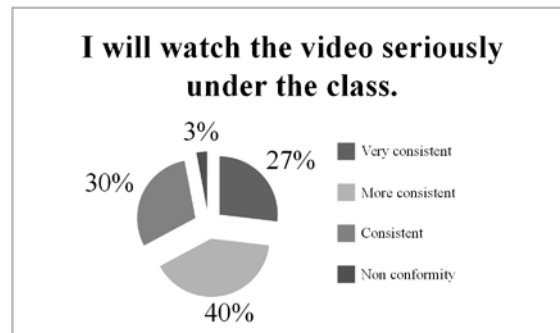


Fig. 3 the Status of Watching Videos under the Class

For the students to watch the teaching video under the class, the data display (as shown in Fig. 3), the students will still seriously watch the teaching video, but in the same interview with the students, the students said that the video is mainly determined by the video content. The degree of matching with the learning task, the higher the degree to which the teacher's assigned learning tasks match the video content, the better the student's learning video. But students also said that for theoretical courses, learning tasks are usually test questions or texts that can be solved by search engines, and students will also give up watching instructional videos. For courses like computer operation, the evaluation of works is usually used. Students can't complete tasks without watching videos, so they will watch the teaching videos more seriously.



Fig. 4 the Effect of Monitoring Video Progress on Video Learning

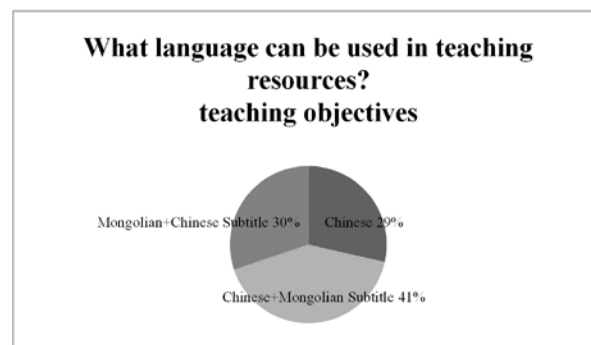


Fig. 5 Language of Teaching Resources

For the promotion of video progress on the student's learning video (as shown in Fig. 4), most students (39% chose not to have much effect, 47% chose a general effect, a total of 86%) thought that the effect was not. The interviews with the students show that the time spent under the class is relatively free, the students will feel that it is free time, and the informal study time, lack of learning atmosphere, and many interference factors, even if the progress of monitoring the study, students will not And study hard.

Due to the large number of Mongolian-speaking students in ethnic colleges and universities, many courses in the school are taught in Mongolian. However, since the reform of online teaching, there are basically no Mongolian resources. In the survey of Mongolian-speaking students (as

shown in Fig. 5), 29% of Chinese students indicated that using Chinese resources can achieve the teaching goals, while most students have a demand for Mongolian resources, and 41% of students believe that they can pass Adding Mongolian subtitles to Chinese resources to achieve teaching goals, 30% of students need Mongolian teaching resources. Chinese subtitles need to be added to help students better connect and correspond to Mongolian and Chinese. When asked which language to study, 70.6% of Mongolian-speaking students choose Mongolian teaching resources, it is obvious that the development of Mongolian teaching resources is imminent.

In summary, students need Blended learning. In order to make hybrid teaching effective, it is necessary to carry out integrated design of classroom activities, network resources, learning tasks and learning evaluation, and must develop high-quality Mongolian teaching resources. Fully meet the overall needs of students in ethnic colleges and universities.

5. Analysis of Difficulties and Obstacles in the Design and Implementation of Blended Learning in Ethnic Colleges and Universities

According to surveys of teachers and students, teachers have a higher acceptance of online teaching, especially young teachers. But to make the hybrid teaching effective, you need to break through the following difficulties and obstacles:

(1) The curriculum group's mixed instructional design of the course

It is necessary to solve the assignment and cooperation of face-to-face and online teaching content and tasks. Clearly locate the functions of network teaching and determine the types of network teaching resources. Focus on the design and development of instructional video, online interactive programs, classroom activities and Blended learning evaluation programs.

The hybrid teaching design of the course should implement the learning-centered thinking and completely get rid of the traditional face-to-face teaching habits. For teachers who have no mixed learning experience, it is very difficult to change habits and concepts. In addition, the overall transformation of the course requires a long period of time, and the course group needs a lot of time to invest, which makes many teachers have a fear.

(2) Improve teachers' information technology literacy, familiar with online teaching platform or app function

The development of hybrid teaching needs to rely on certain online teaching platforms, tools or software. Only teachers who are familiar with the functions of platforms, tools or software can better carry out mixed teaching design and achieve effective coordination and connection under the class.

However, most theoretical teachers are afraid of information technology. Even if the school provides relevant training, the platform design and development curriculum cannot be used smoothly.

(3) Familiar with teaching video production methods, flexible development of teaching videos to meet teaching needs

Subject teachers usually do not have the ideas and techniques of instructional video design and development. It is difficult to start the design and development of instructional videos without adequate support services. However, the use of off-the-shelf public open resources or purchased resources can not be well connected with their own classrooms, so the development of teaching videos has become a barrier that many teachers can hardly overcome.

(4) Classroom design with the goal of empowerment

Most teachers have a certain understanding of the flipping classroom, but there is a lack of thinking and exploration in the organization of classroom activities, usually based on discussion and reporting, and can not be combined with effective evaluation. In the case of a large class size, students often have low classroom participation and disordered classrooms, which ultimately leads to a decline in teaching effectiveness. As a result, many teachers gave up exploring and maintaining the status quo.

The classroom activities of flipping classrooms are aimed at improving the ability. This requires teachers to get rid of the knowledge-oriented target system, sort out the ability goals of the

curriculum, and seriously consider and explore the forms of activities that can enhance the ability, thus effectively guaranteeing the realization of teaching objectives. .

(5) Design an effective Blended learning evaluation program

Under the existing teaching system, teachers are better at designing knowledge-oriented evaluation programs, while the evaluation of ability improvement is inexperienced. Teachers should change the concept of learning evaluation, enrich evaluation methods and means, and gradually improve the Blended learning evaluation program with equal emphasis on knowledge acquisition and ability improvement by means of information technology (such as the evaluation function of learning communication).

(6) Explore ways to adjust student learning status

The survey found that the learning status of students in online learning is a key factor affecting the learning effect. How to change the passive learning state of students under the class into the active learning state is an important topic that teachers should solve in the process of teaching research. Teachers need to continuously explore and research in terms of improving the value of the curriculum and the attractiveness, in-depth interaction, and effective evaluation of teaching videos, and find effective methods suitable for the characteristics of each subject.

6. Conclusion

From the perspective of the development of the times and the needs of students, the hybrid teaching reform has become a huge project that colleges and universities urgently need to complete. Although there are successful experiences in practice, it is necessary to conduct in-depth teaching exploration and research based on the actual situation of schools, disciplines and students. In the process of effectively promoting the hybrid teaching reform, the author puts forward the following suggestions based on teaching practice and investigation and research:

(1) Enrich the online learning experience of teachers, and continuously accumulate experience of Blended learning, thereby improving the design ability of Blended Learning. It is possible to establish a combination of teacher education MOOC course learning and continuing education or continuing education courses, and require teachers (especially new teachers who have just entered the job) to complete a teacher education MOOC study every semester, and get a certain amount of Teacher education curriculum certificate.

(2) According to the characteristics of the school, subject and students, the content of the course can be modularized and decomposed, and the module can be used as a small step to promote Blended learning. The experience of the individual modules in the mixed teaching reform will be gradually extended to the whole course.

(3) Blended learning design and teaching resource development must first be heavy, and then pursue the volume. The appeal of instructional videos helps to increase student interest in learning, while also allowing teachers to build and improve the confidence of making instructional videos and engaging in Blended Learning. But don't blindly make instructional videos. You don't have to make instructional videos for the problems that graphic documents can solve. In addition, we must pay attention to the provision of resources to meet the diverse needs of students, rather than equating resource development with instructional video production.

(4) Flipping the classroom is a relatively mature Blended learning model, but due to the differences between disciplines and content, Blended learning design should not adopt the flipping classroom mode all stereotypes. Not only should we pay attention to the pre-class application of teaching videos, but also pay attention to the great role of teaching videos in the consolidation and expansion of after-school teaching.

(5) In the context of Blended learning, teachers should be guided by the ability to enhance, actively innovate the form of classroom activities, enrich the means of learning evaluation, and enhance the initiative of students through adequate classroom participation and effective evaluation methods. For teachers who cannot design effective classroom teaching activities, determining the core value of teachers and finding the irreplaceability of teachers is a question that needs to be seriously considered.

(6) Establish a comprehensive network teaching support service system, optimize support service strategies, and provide convenient and fast support for teachers' needs. Management departments should carefully select the appropriate network teaching platform, provide training in mixed instructional design, platform use and teaching video production, and provide adequate funding guarantee. And set up a special organization to provide professional guidance and help to the problems encountered in the process of mixed teaching implementation. For the design and development of Mongolian resources, it is recommended to set up a special Mongolian teaching resource production department.

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