

Research on the Mixed Teaching Design Focusing on Golden Class and the Innovative Development of Teachers' Informatization Teaching Ability

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Abstract—With popular "Internet +" , how to cultivate a new generation of college students who have grown up under the influence of information technology. Based on this subject, this paper carries out online and offline hybrid teaching design, actively breaks the instillation teaching mode, and organically integrates traditional face-to-face teaching by means of information technology online platform resources and offline flipping classroom. The implementation of the mixed teaching model enhances students' sense of independent learning, cultivates their innovative spirit, improves the practical ability, and gets twice the result with half the effort through the construction of context, interaction, experience, reflection and integration of deep learning field.

Keywords—Golden class; Internet+; Hybrid teaching; Informationization; Teaching ability

I. INTRODUCTION

On June 21, 2018, bao-sheng Chen minister in the new era of national institutions of higher learning conference of job of undergraduate course education is put forward for the first time, "loading", for college students to be effective to improve students' academic challenge, increase the difficulty of the class, reasonable development course depth, enlarge the optional of course, the real lesson "water" into a deep and the degree of difficulty and challenge "gold". Then in August 2018, the ministry of education issued "about vigorously promotes the new era of national institutions of higher learning of undergraduate education work conference spirit to carry out the circular letter [2018] no. 8 (superior), put forward" universities will comprehensively comb all courses teaching content, to eliminate 'water class, create' gold ', promote reasonable academic challenge degree, increase the difficulty of the class, expand course depth, effectively raise the quality of teaching ". This is the first time that the concept of "golden lessons" has been formally used in the documents of the ministry of education. We will rectify the teaching order in institutions of higher learning, and for the first time include in the document of the ministry of education the policy of "eliminating water courses and creating gold courses".

The creation of the "Golden Lesson" requires both teachers to invest hard and students to value the classroom. Some students have the utilitarian value orientation of pursuing diplomas in the process of learning. They avoid evasiveness

when choosing courses, just to pursue the completion of credits and pursue higher grade points. The "water class" with outdated content, easy assessment and easy grades, and grade points can be favored by students. The "golden class" with deep, difficult and challenging results is abandoned. In this regard, it is necessary to rely on perfect process evaluation to guide students to attach importance to the classroom, rely on a rigid system to strictly close the graduation, so that college students who are confused can not smoothly blend into the diploma, but also need to overcome the utilitarian tendency of arrogance and quick success. The student's internal drive enhances the sense of accomplishment of students' learning, and creates an excellent academic style of striving for progress, being proactive, learning the true skills, and practicing the true skills.

How to create a "golden class"? Director Wu Yan stressed that it is necessary to mobilize the enthusiasm of all parties to provide five major guarantees for the construction of China's "golden class", including policy guarantee, organizational guarantee, mechanism guarantee, evaluation guarantee and funding guarantee. Building China's "golden class", without observers, are builders. The construction of the "Golden Class" should be comprehensive and precise in the fields of literature, science, engineering, agriculture, and medicine. In particular, it must take the lead in the construction of "new engineering, new medical science, new agricultural science, and new liberal arts." We must do a good job in implementing the "Double Thousand Plan" construction of the first-class course, and build a large number of national "golden lessons" and local "golden lessons" with 10,000 national and 10,000 provincial first-class online and offline quality courses.

II. ONLINE AND OFFLINE MIXED GOLDEN LESSONS

Online and offline hybrid teaching is a brand-new teaching mode that integrates information technology and education. It refers to an online online teaching platform built by teachers using modern information technology such as Internet, mobile terminal and cloud computing. Students can use the online online platform to video, micro-courses, animation, teaching PPT, cases, test questions and other resources to complete independent learning and participate in discussions, while offline classroom teaching, teachers based on students' online learning and discussion, targeted Sexually explain in detail,

thoroughly solve the students' learning confusion, help students better grasp the difficult points of teaching, and complete the teaching objectives. Online and offline hybrid teaching combines "online" (online teaching) with "offline" (classroom teaching), which not only reflects the subjective status of students, but also plays the leading role of teachers and becomes the direction of teaching reform in colleges and universities.

"Mixed teaching" is not a complete liberation of teachers to move the classroom to the Internet, nor is it a simple mechanical addition of "online" and "offline", but through pre-class guidance, online self-learning, and key points in the classroom. In-depth discussion and procedural assessment, online and offline, the traditional "teacher-led" model to the "student-based learning" model, to improve students' ability and interest in independent learning, exercise student independence. The ability to think, to develop good study habits, in order to achieve optimal learning results.

"Online" and "offline" are two different teaching methods. The "mixed teaching" mode requires the teachers to combine scientific and reasonable organizational design with the characteristics of the course, and to connect "online" and "offline". Liu Zunying believes that it is this kind of "teaching by class" that is the most energy-intensive and most instructive teacher's wisdom, and the essence of this new teaching model.

The effective integration of information technology and curriculum is a major focus and difficulty of current curriculum reform, and an important indicator of the way of changing traditional teaching and learning. The key to effective integration is teachers, not multimedia tools. At present, the effective integration and application of information technology and curriculum has broken through the simple level of the original courseware production and application. It has been developed to use the network to successfully develop and utilize curriculum resources, courseware production, and informational teaching plan design. How to promote effective and in-depth study of students, after-school teachers use the network to reflect on post-teaching and effectively improve their professional ability to promote students' deep and effective learning.

III. BLENDED LEARNING DESIGN MODE

With the rapid development of information technology in higher education, information technology is changing the learning style of college students at an alarming rate. However, with the retreat of the first round of research and practice, people gradually return to rationality. The online learning method has unique advantages such as rich multimedia resources, convenient collaborative communication, and friendly interaction. However, it cannot completely replace the classroom teaching of teachers, and lacks the deep participation of teachers. The learning effect is not as ideal as expected. How to fully reflect the active participation of online learning, and how to give full play to the guiding role of teachers or experts, the influence of personality, the penetration of learning and research methods, has become a common concern. In this context, the concept of Blending Learning (mixed learning, or hybrid teaching) came into being.

A. Instructional video design

The classroom teaching resources are mainly the learning materials prepared by the teachers for the students. This includes the video of the knowledge points. The video can be a high-quality course video or a teacher-made course video. We can compare video lessons with MOOCs. In video teaching, video accounts for more than 80% of the links. Students can earn credits by brushing videos. In the MOOC, the proportion of videos is greatly reduced. Students need to complete the teaching. Other aspects (practice, discussion, research, collaboration, creation, etc.). For online resource construction, teachers in non-information technology related disciplines often have difficulties, but this kind of difficulty is not insurmountable, because the teaching resources we advocate are not so high-end atmosphere, simple screen recording plus teaching. The hardware investment of less than one thousand yuan, plus two or three hours of editing software learning, is basically capable of recording and editing such micro-classes. The remaining problems are not technical issues, but more of a time commitment. Because there are some modifications to the previous courseware, it is necessary to decompose the course knowledge points, record and edit the micro video, set the learning objectives for the knowledge points and develop some supporting exercises.

B. Teaching courseware design

With the course video, the teacher is required to prepare the teaching courseware that is compatible with the course video. The courseware records the content of the course in more detail than the video, so that the learner can refer to the study while watching the video. We found through actual operational data that students pay more attention to instructional video learning at the beginning, 80% of video learning time, and 70-80% of courseware reading time during the course review period, because the review of courseware is more efficient during the review period. So the teacher can post the courseware during the review period. Put the learning materials on the Web, and learners can access these materials at any time according to their needs. The page includes expert contact information. If the learner encounters a problem or they want to discuss it in depth, they can contact the relevant experts at any time. Face-to-face processing can also be used. Although the role of the Web in the transfer of learning materials and content is very large, it is still necessary for humans to communicate with each other, which is conducive to strengthening their deep understanding. And through the knowledge built by myself, creatively form your own things and share them with others through the Internet.

To truly strengthen our country's higher education is not only related to the future of the nation, but also to the early realization of the dream of a strong country. Higher education must be strong, and must first be strong from classroom management. Undoubtedly, some college students have such feelings, high school is desperate to work hard to study, just to enter the university's safe, in the university seems to be to enjoy life. What caused this situation was nothing more than the poor management of university teaching. Because of the lax management, in addition to the flooding of the classroom

"water class", it also delayed the great study time of college students.

C. Exchange discussion design

In online learning, teacher participation is still very important for effective interaction, and students still cannot get rid of their dependence on teachers. First of all, teachers should inject emotional factors into the interaction process, even if they are online, they should also reflect affinity. Second, timely feedback on questions or questions raised by students. Again, teachers need to provide different interaction strategies at different stages of the learner's learning. Finally, the online interaction in mixed teaching should be combined with classroom communication. The teaching content of each issue needs to be prepared in advance by the teacher. The discussion topics of the class also need to be designed in advance. These topics should be developed around the teacher's teaching. These topics can be published online in advance, allowing students to prepare in advance and find relevant materials. Let the students warm up online, and the actual class discussion will be warm and avoid the cold.

It is imperative for college students to reasonably increase their burdens. They must not only see "increasing the burden" but also seeing "reasonableness." "Increase the burden" is not "before returning to liberation overnight", simply copying the high school education model; it is not "eyebrows and beards", does not distinguish the subject situation, and generally proposes addition. The purpose of "increasing the burden" is to "revitalize undergraduate education" in order to train qualified students. Therefore, we must accurately grasp the "reasonable", respect the education science, and proceed from the actual reality of the discipline to truly reflect the requirements of high quality.

D. Network environment design

The network environment (especially the network teaching platform and the educational teaching resource library) provides effective support for mixed teaching and learning, extending the teaching behavior of teachers from the classroom to the outside of the classroom. In addition to classroom learning, students, libraries, bedrooms, etc. Places that can access the Internet can occur, which can greatly improve the learning efficiency and learning effect of students. Based on the network teaching platform and excellent education and teaching resources, the combination of teaching and learning can not only play the leading role of teachers, but also play the role of students. Teachers can use online teaching resources to teach in classroom teaching. After class, students can use online teaching resources and network interaction tools to learn and discuss. Coursework also requires the teacher to prepare after the practice. As the coursework is an important part of the student's study assessment, the teacher needs to determine the coursework through the overall design of the course. The homework needs to be oriented towards the teaching goal. This assignment can be post-mixed after the teaching, and the student will complete the self-evaluation and study review after completing the course.

At that time, "Iron Man Wang Jinxi" had a mantra. "People have no pressure and flutter, no pressure and no oil." This sentence is rarely mentioned now, but the truth of the story is out of date, and the reasonable increase of students' ability to maintain stability. Zhiyuan. Moreover, "happy university" depends on how to understand. "Happy university" should not be low-level happiness, nor should it be toxic happiness. Seriously, I really want to go to college, learn the true ability, and grow my talents. Isn't learning a kind of happiness? This is actually a kind of advanced happiness back to the original.

E. Teaching platform design

The intelligent learning platform is a powerful online course platform. Through the construction of online course supermarkets, test centers and learning communities, it can meet the needs of individualized teaching, stimulate students' initiative, help teachers to better carry out teaching activities, and achieve quality teaching. Resource sharing and effective supervision and evaluation of teaching quality are powerful support for the hybrid teaching model. The intelligent foreign language learning platform is oriented to serve all teachers and students, focusing on curriculum construction, taking students' self-learning as the main body, integrating online course learning, teacher-student interaction, online Q&A and teaching management.

The hybrid teaching based on the excellent class platform has been applied well in the teaching of surgical nursing in our school, but it also puts forward higher requirements for us. First, further integrate the curriculum to adjust the irrational or repetitive parts of the teaching content to reduce the burden of nursing students' learning; secondly, optimize the network resources, make the network resources more interesting, improve the teaching effect, and cultivate higher information acquisition. High-level talents with pioneering and innovative, synergistic and practical skills.

The rational use of information-based teaching tools in the classroom can not only save teachers time for teaching, teaching time, but also improve the teaching level of teachers and help students quickly master knowledge points. The micro-instructor is a multi-functional teaching device that includes software and hardware. It is an integrated micro-course production solution that integrates micro-class recording, video editing, course assembly, and learning tracking. It meets high-volume, low-cost development. The needs of quality micro-courses, teacher preparation, classroom recording, student learning, corporate training can all be supported.

IV. INNOVATIVE DEVELOPMENT OF TEACHERS' INFORMATIZATION TEACHING ABILITY

In the information-based teaching environment, teachers should have many abilities, such as teaching cognitive ability, teaching operation ability, teaching monitoring ability, educational exploration ability, innovative teaching design ability, teaching implementation ability, teaching guidance ability, and information information teaching ability. Under the guidance of modern teaching theory, the ability to use educational technology to support teaching is supported by information technology. It requires teachers to design and

innovate in a series of teaching related elements such as concept, organization, content, model, technology, evaluation, environment, etc., and promote the professional development of teachers. Teachers' informatization teaching ability is multi-dimensional, dynamic, staged and different. Literacy, teaching and research, lifelong learning, etc. In general, informatization teaching requires teachers to at least master the ability requirements of media technology, information application, teaching practice, evaluation research and so on.

Teachers should be proficient in informatization teaching. In addition to working hard in technology and practice, they must also be familiar with and rationally apply the relevant theories of informational teaching. Classical teaching theories include behaviorism, cognition, constructivism, mastery of learning theory, situational learning theory, cognitive load theory, cognitive conflict theory, primary teaching principles, learning pyramid theory, recent development zone theory, social learning theory, Learning motivation theory and so on. Digital learning theory includes connectivity, new constructionism, multimedia learning theory, mixed learning theory, and the recent flip learning, mobile learning, micro with small lessons, MOOCs, cloud computing, big data, mobile Internet. Learning, personalized learning, and individualized learning theory. Teachers should clarify the essential connotation, basic characteristics, concepts, principles, models, methods and approaches, misunderstandings and countermeasures of informatization teaching, and constantly summarize the relevant experience and skills of informatization teaching.

In the era of education informatization, what practical performance should teachers have in educational practice? First of all, we must establish a modern educational concept. Teachers should change from traditional knowledge transferers to learn organizers and coordinators, that is, guide, plan, organize, and coordinate students' various learning activities, and focus on cultivating students' self-learning and access to information and knowledge. Second, there must be the ability to apply modern information technology. An important aspect of education informatization is the use of computers for assisted instruction. This requires teachers to master relevant computer knowledge and related operational skills, understand and learn the necessary software, and develop their ability to design and produce courseware. Stand-alone teaching and online teaching.

To realize the integration of information technology and other courses, we must strengthen the study of educational theory, especially the training of modern educational technology and instructional design theory. Curriculum integration does not mechanically impose information technology on the content of the course. Instead, it must consider the specific content of the course, the characteristics of the students and the characteristics of the media to achieve an optimal combination. Really integrate information technology into the teaching of various disciplines.

V. CONCLUSIONS

Therefore, under the background of the mixed teaching of the Golden Course, teachers should have the following five information literacy skills.

(1) A keen sense of information: Be aware of the important role of information in the information society, know what kind of information can promote teaching, and have the awareness to integrate these effective information into teaching.

(2) Noble information ethics: as the producer of information, resolutely resist negative information and use positive information for processing; as the sender of information, first filter out the mixed information and then pass it on to students; guide students to learn to choose and judge information. Bad.

(3) Basic information knowledge: know the application of different information sources in teaching, familiar with the classification knowledge of library resources; master the knowledge of information retrieval; master the use of several teaching software.

(4) Skilled information ability: Information ability refers to the ability of teachers to judge, collect, criticize, process, generate and transmit information.

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