

Research on the Teaching Reform of Professional Theory Courses under the Background of "Internet Plus"

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Abstract—The rapid development of information technology has brought a tremendous impact on education and teaching mode, especially urban and rural planning which is strong practicality. This article uses the literature survey method and comparative analysis method to explore the teaching reform of the theoretical course of urban and rural planning and planning under the background of "Internet plus", expounds the requirements of "Internet plus" on the teaching reform, and aims at the teaching of theoretical courses of urban and rural planning Difficulties, discussed targeted online and offline teaching strategies. In the end, it came up with suggestions such as building a networked teaching platform, effectively integrating teaching resources, innovating multiple teaching models, and insisting on combining theory and practice.

Keywords—"Internet plus"; urban and rural planning; professional theory courses; teaching reform

I. INTRODUCTION

Urban and rural planning is a highly practical comprehensive discipline. Students need to master solid theoretical foundation knowledge, which lays a foundation for students after graduation to be equipped with urban and rural planning management ability, practical planning and design ability, regional development and urban development decision-making ability.[1] Educational informatization requires us to take the innovation of educational concept as the guide, take the construction of high-quality educational resources and information-based learning environment as the foundation, and take the innovation of learning methods and educational models as the core. Under the background of "Internet plus", it is an inevitable trend of the integration of the Internet and the teaching mode for the course to innovate and reform the urban and rural planning professional theory courses [2].

II. REQUIREMENTS OF "INTERNET PLUS" ON TEACHING REFORM

A. The improvement of teachers' comprehensive skills

According to the survey data, among urban and rural planning teachers, the proportion of teachers with a teaching age of 1-10 years is about 65%. It can be seen that young and middle-aged teachers constitute the leading force in teaching.

Among them, young teachers account for about 63%, which is an obvious advantage of the Internet in teaching. The development of information technology has continuously improved the requirements of professional teachers, teachers should not only actively change their concept of education, learn the advanced education technology, but also integrate it into the daily teaching work, increasingly integrate online and offline teaching resources, strengthen the curriculum design, create diversified education scene for students, and maximize value of education of "Internet plus" eventually.

B. Breakthrough students' learning limitations

In the era of information explosion, the information received by students is not only fast, but also very informative. Teachers should make good use of this opportunity, constantly break through students' learning time and space with the help of Internet technology, make full use of students' fragmented time, allow students to learn flexibly according to their actual situation.

C. Fully integrate effective resources

"Internet plus" bring us a lot of different teaching resources and information data, teachers should make targeted choices and integrate truly effective teaching resources, innovate diversified teaching modes, grab students' attention in a short time, thereby transforming students' external driving force to the internal driving force, exerting its subjective initiative, preparing the ground for follow-up study.

III. THE TEACHING DIFFICULTY OF URBAN AND RURAL PLANNING PROFESSIONAL THEORY COURSE UNDER THE BACKGROUND OF "INTERNET PLUS"

Urban and rural planning major involves a wide range of knowledge, and students need to have professional theoretical knowledge and strong practical skills. Among them, the theoretical course runs through each learning stage in the whole process of cultivating students, but in the actual teaching process, the difference of students brings some difficulties to the teaching.

Firstly, because individual students are more good at imaginal thinking, logical thinking is weak, so the graphic design ability and the project conception ability is strong,

language and understanding ability is weak. This situation leads to bad effects and low quality in theoretical courses. In the end, theoretical knowledge is unstable after entering society.

Secondly, some students don't pay enough attention to the professional theoretical knowledge, thinking that as long as they can design a good program, ignoring the important value of theoretical knowledge, thus limiting the improvement of the later comprehensive ability.

In addition, as the knowledge span of specialized courses of urban and rural planning is large, the complex teaching content covers several subject knowledge points, but teaching time is limited, for the sake of teaching progress, teachers sometimes cannot lead students to have in-depth discussions on learning, and the interaction with students is limited. So that students only focus on the concept and principle of planning and design, more problems of different degrees will appear in the later practical design.

IV. ONLINE AND OFFLINE TEACHING STRATEGY UNDER THE BACKGROUND OF "INTERNET PLUS "

A. Construct network teaching platform

Above all, teachers should combine the actual development of students to build a network teaching platform with the help of "Internet plus " technology. Teachers can make vivid teaching courseware by use Axes-lide software [3], comprehensively use the network learning platform, simulation display platform, true environment training platform, and students are required to conduct feedback on the network platform from the preview before class to the homework after class. Through the background control of the network platform, teachers can effectively solve the problem of course time limitation and timely assign tasks to students, which can not only break the space limitation, but also improve the teaching quality.

Then, on the network platform, students can preview the courses they are going to learn in advance, search information through Internet, and understand the course introduction and teaching schedule. Through watching the micro-class video on the Internet, students have a preliminary understanding of the teaching important and difficult points of this class, and come up with problems based on their own understanding, so as to improve independent learning ability. At the same time, students can make use of the network platform to sort out the knowledge in their spare time, and can repeatedly think about the relevant knowledge points, so that further improve the effectiveness of theoretical teaching.

B. Effectively integrate teaching resources

The knowledge points in the textbooks are often lagging behind the actual industry development. Teachers can integrate knowledge points to enrich the teaching content and continuously promote the teaching content systematization. Using Internet technology and thinking to integrate all kinds of resources on the Internet for teaching content, so as to build a learning environment with high information quality for students and maximize the use-value of teaching resources.

At the same time, the main emphasis of Internet thinking also includes openness and collaboration, which is the combination of high-quality teaching resources and advanced teaching concepts with the characteristics of decentralization and de-marginalization. Normally, the ways to integrate teaching resources are as follows:

- Integrating the same topic. Arranging and integrating the knowledge points in the textbook and the knowledge points of other disciplines.
- Integrating the same methods. Through the process of personal experience and independent inquiry, the teaching methods are overlapped, so as to help students obtain the transfer of knowledge and learning methods.
- Integrating the same idea. Many places and other knowledge contain the same idea in learning, through integration to improve the effectiveness of teaching[4].

C. Innovate diversified teaching mode

Innovative and diversified teaching modes will stimulate students' desire to learn. Teachers should design and implement from three links: pre-class, middle-class and after-class (Fig.1). Before the class, teachers should focus on different teaching contents, clarify the teaching objectives and choose teaching resources. You can use screen recording software to make the entire teaching process into a micro-class, let students grasp the difficulties of learning, and solve the pre-class problems. In the class, teachers should actively build a network teaching platform, from the introduction of the classroom to the summary and other links, we must strengthen the organization and teaching ability. Fully highlight the student's subjectivity, so that students can obtain professional knowledge and ability in the form of independent discussion and group cooperation. In addition, teachers can use the teacher-apprentice teaching model during the theoretical lesson to provide targeted guidance to the individual needs of different students. In the consolidation session after class, using homework, online tutoring, answering questions, and testing systems to examine students' theoretical knowledge, they can also have a feedback on their own teaching status from the side. By answering questions and quizzes online, we can solve problems that students do not understand in time, and break through the limitations of teaching methods [5].

D. Adhere to the combination of theory and practice

The practicality of urban and rural planning major determines the organic integration of theoretical knowledge and practice. Teachers should increase the interaction of practice through teaching design, so as to enable students to understand the knowledge points and expand the application of practical engineering project cases, and improve their professional abilities in theoretical decision-making and planning practice[6]. Meanwhile, teachers can also pay attention to the form of the combination of production, learning and research, use extracurricular time, combine with social practice services to organize students to investigate and personally experience the theoretical knowledge and the professional characteristics of urban and rural planning. This way can not only improve students' learning ability, active

professional learning atmosphere, improve students' practical operation ability and problem solving ability, but also cultivate comprehensive talents whose knowledge and ability coexist,

and they can meet the needs of social development and industry.

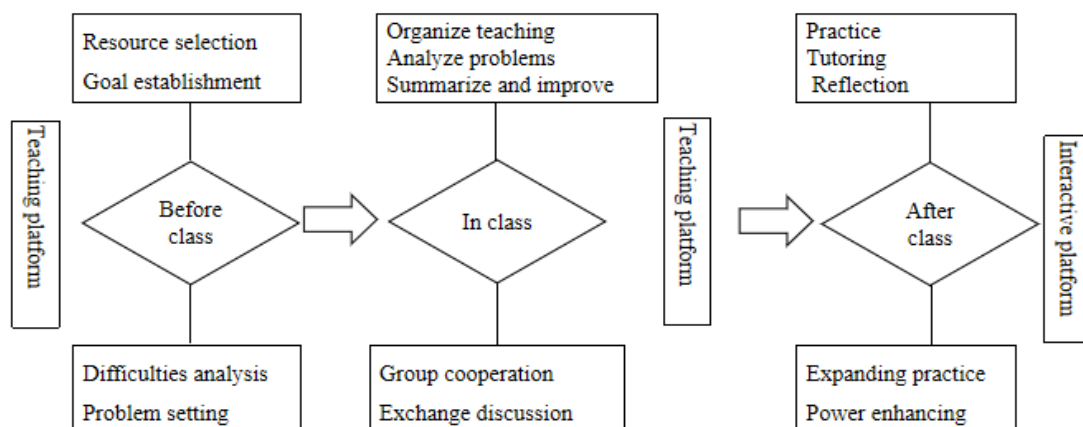


Fig.1. Teaching model under the background of "Internet plus "

V. CONCLUSION

The development of education and teaching under the background of "Internet plus " must innovate and reform constantly, teachers should incorporate the Internet technology, through the construction of network teaching platform, integration of teaching resources, diversification of innovative teaching mode and adhere to the combination of theory and practice, continually improve teaching skills, perfect the teaching system, break through dilemma of the professional theory course teaching, meet the personalized needs of students, adapt to the needs of industry development, raise students on theoretical knowledge and practical ability to obtain a more comprehensive development eventually.

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