Exploration on Production-Teaching-Study Method of Land Planning Course of Urban & Rural Planning Major

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Abstract. This paper analyzes situations and problems existed on human geography and urban & rural planning major of present land planning course, and builds production - teaching - study method of land planning course from the aspects of teaching objectives, teaching outline, teaching content, teaching platform and teaching methods. The effect of preliminary practice shows the method is of helpful to cultivate versatile planning talents possessing thinking, study, creation and action ability and has important exemplary and referential significance for teaching method of practical course at the undergraduate stage.

Introduction

Resources & environment and urban & rural planning and management major features extensive teaching contents, wide school-running scope and undefined talent training directions; therefore, the major was divided into “human geography and urban & rural planning”[1] and physical geography and resources & environment” by Ministry of Education in 2012. The human geography and urban & rural planning major aims to cultivate senior application-oriented talents engaging in urban & rural planning and design, land planning and management, tourism planning and development, and other fields. At present, urban & rural planning major is in a transitional period of new and old major adjustment. New major must strengthen the reform of specialized course construction on the basis of accumulation of old major to adapt to needs of major adjustment and social and economic development.

In the context of immense demand potential for land planning talents at the current market, training of land planning talents becomes an important task of urban & rural planning major. As for foundation course-land planning course, of urban & rural planning major, launch of a teaching method reform of improving research practice and application skill and sci-tech innovation ability as the guidance is an effective way to enhance major transformation and development. Research results about teaching reform of land planning course mainly includes study on course construction on the basis of land sources management knowledge hierarchy[2-8] and urban & rural planning and management knowledge hierarchy[9] at present, while research on major adjustment and new trend demands for the major is insufficient. This paper develop a study on production - teaching - study integration method reform of land planning course according to major adjustment demands, as well as characteristics of land planning course and main problems existed in old urban & rural planning teaching. As a result, a reform way propelling quick, high-quality and sustainable development of the new major can be obtained.

Analysis for Problems of Land Planning Course Existed in the Construction of Urban & Rural Planning Major

Scarce Support of Relevant Land Management Knowledge Hierarchy

In term of land resource management major, students have a full and systematic grasp for
relevant land planning knowledge and are easy to understand the planning contents. While given urban & rural planning major, because some land management courses related to land planning have not yet set, students can only memorize contents by rote and are difficult to deeply understand connotative meaning of the planning.

Inadequate Connection between Teaching Contents and Knowledge Hierarchy of Urban & Rural Planning Major

Due to wide scope and less targeted teaching direction of old urban & rural planning major, meanwhile, land planning textbooks used at present focus on land management knowledge that lacks connection with knowledge hierarchy of urban & rural planning, students can’t find integrated points between the course and training direction of the major, further influencing their learning interest.

Cultivation for Innovation and Employability of Students Affected by Traditional Teaching Method

Traditional teaching method is a typical one-way teaching from theory to the practice, existing problems: the first is theoretical teaching situation is divorced from reality. The land planning course possesses strong theoretical property, practicality and technicality, while the teaching situation is separated from reality, and students can’t perceive processes and contents of all stages of land planning through classroom learning. The second is there is few practical hours relatively, and type of practical platform based on course design is very single. The third is there are unsound sci-tech innovation system and weak consciousness of self-dependent innovation for students. Sci-tech innovation project is the main platform for students to develop sci-tech innovation. But interdisciplinary background knowledge is weak and innovative methods and training are absent, students can’t have a better understanding for relevant research hotspots and development trends, as a result, innovation foundation is not solid, and project approval and development of some research projects are just only a form.

Traditional teaching method make students fail to obtain knowledge comprehension from planning practices, recall or gain new insights through reviewing old theoretical knowledge, or get deep understanding and thinking, consequently, learning is only a form, and cultivation for sci-tech ability and planning & practice skills will be broken.

Construction of Production - Teaching - Study Integration Method of Land Planning Course

Objective of production - teaching - study integration method of land planning course is to optimize theoretical teaching contents, perfect multi-level and diversified theoretical teaching in classroom, research and production practice and incubation teaching platform of sci-tech innovation, define and improve teaching purposes and methods of the platform, and cultivate versatile land planning talents possessing thinking, study, creation and action ability, as well as interdisciplinary background knowledge, combined with characteristics of new major and development requirements of academic subject, and on the basis of demands of new-type urbanization and other national development strategies to land resource allocation and planning. Specific measures for construction of production - teaching - study integration method include:

Reform Teaching Outline, Optimize Theoretical Teaching Contents and Allocate Teaching Hours Flexibly

Teaching outline, as the head of overall course teaching, will be reformed by optimizing teaching contents, improving allocation margin of theoretical and practical innovation hours, and
strengthening pertinence of research practice and sci-tech innovation, on the basis of keeping stability of the teaching outline of old major, and according to requirements of new-type urbanization and other national development strategies to planning talents, so as to realize a teaching effect of thinking after learning, practice after thinking and achievement after practice for students.

Teaching contents are optimized by enlarging teaching of timeliness and advancement of subject development, on the basis of traditional teaching contents. The timeliness mainly is reflected on teaching, interpretation and discussion for relation between land planning theory and theories of other subjects, between land planning and other relevant planning, and between land planning course and other courses of urban & rural planning major, the latest planning policies and regulations, technical application and planning cases, and problems existed in the practice. With a grasp for timeliness knowledge of subject development, students may have an integrated and comprehensive understanding for land planning knowledge and other relevant courses. At the same time, a condition that knowledge learned in the classroom is out of style once students are graduated can be avoided; advancement mainly shows introduction and analysis for research front and development trends of relevant national and international theories, methods and technology. With understanding for advancement knowledge of subject development, students may hold direction of planning development and obtain solid basic knowledge of sci-tech innovation.

Flexible allocation between theoretical and practical innovation hours is the key link to realize teaching objectives. Its aim is to add research practice and sci-tech innovation hours and perfect innovation and practice platform on the basis of strengthening theoretical teaching in classroom, and make students have a thorough and firm understanding for planning knowledge by two-way feedback teaching method of “primary learning of theory - planning and design - review of theory - project practice - theoretical exploration - sci-tech innovation”.

Improve Teaching Methods in Classroom and Enhance Teaching Quality by Inquiry-Based Teaching

Inquiry-based teaching covers two interconnected aspects: the first is to establish “learning-oriented” teaching environment, that is, students are learned in a relatively free and relaxed atmosphere, and teachers guide students and define exploration direction for students; the second is to establish “thinking-oriented” exploration environment, that is, teachers guide students to extract innovation subject from problems discussed in the class. Specific measures are shown below:

(1) Increase cases and stimulate interest. The theoretical teaching shall get rid of teacher-oriented teaching method resulting in passive learning and memory for students. Different planning scenes and cases shall be established and analyzed in the theoretical teaching according to differences of different stages of classroom teachings. An in-depth interpretation for cases can motivate students’ learning interest; needless to say, a good teaching effect will be obtained.

(2) Group discussion and expansion of thoughts On the basis of case analysis, students can be divided into several discussion groups according to different abilities, characters and cultural background, and a friendly environment shall be supported for discussion groups. So students can study in a mutual cooperation and teamwork atmosphere and expand their thinking by mutual communication and collision of various opinions.

(3) Frontier review and independent exploration. Teachers shall comment on contents concluded by each groups and give an analysis. Meanwhile, they also should guide students to search literatures and works over topics discussed, so as to summarize research status and development trend of relevant subjects. Upon independent exploration, on the one hand, students can grasp learning directions; one the other hand, correctness of original ideas and ways of thinking of students can be verified by scientific research, gradually, students’ research interest for unknown knowledge will be cultivated.
Build Diversified Research Practice and Sci-Tech Innovation Platform and Improve Teaching Quality by Multiple Ways

On the premise of enhancing course design construction, support of research and production practice project, School-enterprise mutual cooperation system, sci-tech innovation incubator and other platforms can provide an opportunity of improving innovation and practice ability of students in the round.

The course is designed in groups and provided with a method of combining procedural and simulative teaching, namely, combat simulation scenes of planning shall be established combined with actual situations of each stages, according to work preparation, data collection and organization, demonstration and making of planning scheme, result review and acceptance, planning implementation and other planning processes, to make students master planning flows and contents in the positions and tasks of different planning scenes.

Research and production practice project is the source of innovation and main practice platform of improvement of planning skill. Planning and innovation detached from practice is like water without a source. Only if one finds actual problems and selects innovation subjects from production practice will he/she is able to realize close integration between the innovation and practical problems. The course shall encourage students to actively participate in land planning research projects hosted by teachers to master ways and processes of projects undertaken, roundly improve planning skill and spark innovation inspiration by actual combat training.

School-enterprise mutual cooperation is a key platform for students to understand an enterprise and adapt to talent demands of the market. Strategic mutual cooperation system established between school and enterprise is defined that an enterprise provides project practice platform for students, and a school transports planning talents to the enterprise. In addition, the enterprise and school jointly implement evaluation on practice process and effect for students. School-enterprise mutual cooperation system can increase training of professional quality of students at school, and ensure the knowledge and skills learned at school will not go out of style. Students can be familiar with employment market and environment before the graduation and hold and grasp employment directions, therefore, learning positivity and initiative of students during school hours can be fully aroused, and their learning belief will be firm.

Sci-tech innovation incubator mainly is composed of sci-tech novelty retrieval system and innovation incubation platform, which is major route to cultivate students’ innovation ability. Sci-tech novelty retrieval system puts graduate innovation training model into undergraduate innovation practice. And it can complete research of frontier review and report and strengthen theory and method foundation of scientific works by independent research on literatures and works. On this basis, students can be guided to exploit their scientific research potential, think innovation subjects deeply, declare sci-tech project by national and provincial undergraduate innovation and entrepreneurship training plan project, undergraduate scientific research project and other sci-tech innovation incubation platforms, and publish academic achievements.

Conclusion

From initial practice effect of production - teaching - study integration method reform of land planning course:

(1) By revising teaching outline and preparing land planning textbooks, teaching contents have been optimized, a good teaching effect have been generated with two-way feedback teaching method and inquiry-based theoretical teaching method, theoretical basis of students have been consolidated, and their ability of flexibly applying planning knowledge have been enhanced;
(2) On the basis of improvement of teaching method and significant teaching quality, the course has designed to arrange multi-batch students to take a practice in the enterprise or participate in research and production practice project of land planning hosted by teachers, as a result, planning practice skill of students has been improved to quality level and been highly praised by the employers, and employment rate of the major is significantly enhanced;

(3) With the support of sci-tech innovation incubator, students have a keen study interest, and a batch of excellent academic theses and provincial and municipal excellent undergraduate theses are generated, meanwhile, enthusiasm of scientific research and further study have been increased further.

Production - teaching - study integration method reform of land planning course is in favor of compressive and concerted development of thinking, study, creation and action ability of students. The teaching method can provide a template for teaching reform of human geography and urban & rural planning major and other undergraduate practical courses. In the future, major course construction in regular institutions of higher learning must keep pace with social economy and subject development trend to find deficiency timely, pinpoint the direction, combine the practice and reform teaching method continually, so that versatile undergraduate talents possessing characteristics of the times and adapting to social demands can be cultivated, and sustainable development of the major can be accelerated.

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References


