

Analysis on the Teaching Elements and Mechanism of Water Conservancy Law Course based on Work Orientation

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Abstract: As one of the core courses of water conservancy engineering and related majors, the course of water conservancy laws and regulations is of great significance for cultivating students' legal literacy and professional ability. The work-based teaching method can help students better understand and apply water regulations and improve their ability to solve practical problems. Firstly, the paper introduces the job-oriented teaching method and analyzes its applicability in water conservancy education. Then, the key elements of the water conservancy law course are discussed in detail, including course objectives, case analysis, course content updating, and corresponding teaching mechanism. Finally, how to effectively apply these elements and mechanisms to the water conservancy law courses of water conservancy majors to provide students with a more forward-looking and practical educational experience.

1. Introduction

As an indispensable part of the management and practice of water conservancy projects, water conservancy regulations play a vital role in ensuring the rational use of water resources, the safe operation of water engineering and the sustainable development of water conservancy industry. In the education of water conservancy engineering and related majors, water conservancy law course is not only a platform to impart legal knowledge, but also an important way to cultivate students' professional quality and practical ability.

The traditional teaching method of water conservancy law course often focuses on the teaching of theoretical knowledge, but neglects the practical ability and professional needs of students. However, in actual work, the application of water conservancy regulations often needs to be combined with specific water conservancy engineering practice, requiring practitioners to have a

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solid theoretical foundation and flexible application ability. Therefore, the application of job-oriented teaching methods in water conservancy law courses is particularly important [1-2].

The job-oriented teaching method emphasizes the close combination of course content and practical work, and focuses on cultivating students' practical ability and problem-solving ability. Through simulating actual work scenarios, introducing actual cases, carrying out practical projects and other ways, students can better understand and apply water conservancy laws and regulations, and improve their operational ability and adaptability in practical work.

This paper aims to explore the teaching elements and mechanism of water conservancy law course based on work orientation. Through the in-depth analysis of teaching content, teaching method, teaching resources, teaching evaluation and other elements, a set of teaching mechanism meeting the actual needs of water conservancy industry is constructed. At the same time, combining the relevant research and practical experience at home and abroad, this paper discusses how to optimize the teaching of water conservancy laws and regulations, improve the teaching effect and students' learning results, and provide useful reference for cultivating high-quality water conservancy engineering talents.

Through the analysis of this paper, we hope to provide new ideas and methods for the reform and development of water conservancy law curriculum, promote the deep integration of water conservancy engineering education and practice, and provide strong support for the sustainable development of water conservancy industry.

2. Work Oriented Teaching Methods

The job-oriented teaching method focuses on the combination of theoretical knowledge and practical work scenarios, so as to better cultivate students' practical application ability, so that students can be more confident and more competitive to face water management work. A work-based water regulation course can be taught in the following ways:

(1) Case analysis

Through the analysis of real water conservancy project construction and management cases, students have an in-depth understanding of the application of water conservancy laws and regulations in practical work. Cases can include examples of success and failure, and through comparative analysis, students can learn the importance of compliance with regulations and the consequences of violations.

(2) Role play

Simulate the actual scenes in the construction and management of water conservancy projects, and let students play different roles, such as owners, designers, construction units, supervisors, etc., so as to experience how to use water conservancy laws and regulations for decision-making and management in actual work.

(3) Project-oriented learning

Project tasks based on actual water project construction and management are designed to allow students to learn and apply water laws and regulations in the process of completing the project. This method can help students combine theoretical knowledge with practice and improve their ability to solve practical problems.

(4) Field visit and research

Organize students to visit the actual water conservancy project, understand the planning, design, construction and management process of the project, and communicate with the project leaders to understand how they apply water conservancy regulations in practical work.

(5) Special lectures and seminars

Experts in the field of water engineering construction and management are invited to give special

lectures to share their experience and lessons in the application of water regulations in practical work. At the same time, students can be organized to conduct discussions and in-depth discussions on a certain water conservancy law issue to improve students' critical thinking ability and problem-solving ability [3].

(6) Moot court

Simulate the legal disputes in the construction and management of water conservancy projects, and let students play the role of judges, lawyers and other roles to conduct moot court debates. In this way, students can understand the application of water conservancy regulations in actual legal disputes and improve their legal literacy and coping ability.

(7) Online learning and interaction

Using modern information technology means, such as online learning platforms, social media, etc., to provide students with rich learning resources and interaction opportunities in water conservancy regulations. Students can study anytime, anywhere, and have online exchanges and discussions with other students and faculty.

To sum up, the work-oriented teaching method of water conservancy law courses emphasizes the combination of theory and practice, and emphasizes the cultivation of students' application ability and problem solving ability in practical work. By adopting a variety of teaching methods and means, it can effectively improve the teaching effect and students' learning results, and provide strong support for cultivating high-quality hydraulic engineering talents. This method of education helps to shape hydraulic and hydropower engineering professionals with comprehensive qualities and lay a solid foundation for their future successful careers.

3. Teaching Elements of Work-Oriented Water Conservancy Law Course

The teaching elements of job-oriented water conservancy law course mainly include teaching objectives, teaching contents, teaching methods, teaching materials and so on. These elements interrelate and interact with each other, and together constitute a complete teaching system.

3.1 Curriculum Objectives and Learning Outcomes

Clear teaching goal is the primary link in teaching process. The teaching goal of the job-oriented water conservancy law course should be to train students to have the basic knowledge of water law and administration, establish the concept of water law, enhance the awareness of water law, not only abide by the law, strictly act in accordance with the law, but also actively use legal weapons to fight against various illegal and criminal behaviors, and become water conservancy talents with certain legal quality. The course design of job-oriented water conservancy law course should have clear course objectives and learning results. These objectives should clearly and accurately indicate to students the knowledge and skills that will be acquired by the end of the course [4]. Goal setting usually includes the following aspects:

Teaching goal 1: Comprehensively promote the rule of law by understanding the development history of China's water law, the characteristics, basic provisions and key points of the old and new water law, so that students know the importance of law and clarify the importance of regulating future work according to law.

Teaching goal 2: Through the study of soil and water conservation law, to clarify the harm of soil and water loss, to clarify the treatment methods according to different loss characteristics, and to clarify the important provisions of relevant soil and water conservation law. By learning soil and water conservation law, students can accurately deal with soil and water loss in future work [5].

Teaching goal 3: Through the study of flood prevention method, clear the harm of flood, master the prevention and control methods of flood, clear the relevant important provisions of flood prevention method. By learning flood prevention, students will be able to accurately deal with flood situations in their future work.

Teaching goal 4: Through the study of water pollution prevention and control law, clear the harm of water pollution, master the treatment methods of water pollution, and understand the important provisions of water pollution prevention and control law. By learning water pollution prevention and control law, students can accurately deal with water pollution in the future work.

3.2 Course content and Teaching Elements

The teaching content of water conservancy laws and regulations is designed to closely integrate with the actual work of water conservancy engineering, covering water conservancy laws and regulations, policy documents, technical standards and so on. At the same time, we should pay attention to the latest developments of the water conservancy industry and update the teaching content in time.

(1) Practical cases: Select representative cases of water conservancy regulations that are close to the actual work scene. Guide students to analyze the case in depth and understand the legal provisions and practical applications involved in the case.

(2) Simulation practice, create a simulated actual environment for water conservancy project construction and management, and let students participate in it. Students play different roles, such as project manager, designer, supervisor, etc., to carry out practical operations.

(3) Expert guidance, inviting experts and legal advisers in the water conservancy industry to participate in the teaching. In addition, experts are organized to give lectures to share practical work experience and application cases of regulations.

(4) Interactive learning. Students discuss in groups to analyze and solve problems in simulation practice together. Students are encouraged to ask questions, and teachers and classmates can answer them together to promote the interaction and exchange of knowledge.

(5) Teaching assessment: evaluate students' performance in simulation practice and understand their practical application ability. Through tests, examinations and other ways to test students' knowledge of water conservancy laws and regulations.

(6) Update regulations, pay close attention to the updates and changes of water conservancy regulations, and update teaching content in time. According to the updating of laws and regulations, the teaching strategy and teaching method are adjusted to ensure the timeliness and practicability of the teaching content.

(7) Teaching resources: Select textbooks and reference materials that match job-oriented teaching. Use the online platform to provide rich teaching resources, such as video tutorials, electronic books, etc.

(8) The teaching team shall conduct regular training and further study for teachers to improve their teaching level and professionalism. Strengthen cooperation and exchange among teachers, and jointly design and improve teaching programs.

By integrating these teaching elements, the job-oriented water conservancy law course can provide students with a learning experience closer to the actual work needs, cultivate their legal literacy and practical ability, and lay a solid foundation for their future career development [6-7].

3.3 Teaching Materials and Resources

The teaching materials and resources of job-oriented water conservancy law course mainly include teaching materials, courseware, cases, teaching videos and network resources. These resources cooperate with each other and support each other, which together constitute a complete teaching system and provide a guarantee for training water conservancy talents with practical working ability. In the course of job-oriented water conservancy law, it is very important to choose the appropriate teaching material for the course of job-oriented water conservancy law. The material should have the following characteristics:

(1) Practicability: The textbooks should have real cases and examples of water conservancy laws and regulations, so that students can fully apply theoretical knowledge to practical situations.

(2) Diversity: Diverse teaching materials, including case studies and professional literature, can provide different levels and styles of learning experience.

(3) Update: Water law is constantly evolving, so teaching materials need to be updated regularly to reflect the latest water regulations and practices.

Auxiliary teaching resources are also essential. In addition to teaching materials, job-oriented water conservancy law courses can also use various auxiliary teaching resources to enrich teaching experience. Experts and practitioners in the field of water conservancy are invited to give lectures to provide students with practical experience and industry insights.

4. Teaching Mechanism

The teaching mechanism of water conservancy laws and regulations is a set of systematic and normative teaching arrangement and management system to ensure the effective teaching of water conservancy laws and regulations and students' learning results. The following are the key aspects of building a teaching mechanism for water laws and regulations:

(1) The teaching method mechanism should first satisfy the diversified teaching and adopt a variety of teaching methods, such as case teaching, simulation practice, role playing, etc., in order to improve students' learning interest and practical ability. Second, interactive teaching encourages students to participate in classroom discussions, questions and interactions to promote knowledge exchange and sharing. Third, practical teaching, strengthen practical teaching links, such as field visits, simulation operations, etc., so that students can personally experience the practical application of water conservancy regulations.

(2) Teaching resource mechanism, in terms of teaching facilities, perfect teaching facilities should be provided, such as classrooms, laboratories, simulation practice places, etc., to ensure the smooth progress of teaching. In addition, online resources should use online platforms to provide rich teaching resources, such as video tutorials, electronic books, online question banks, etc., to facilitate students to conduct independent learning and consolidate knowledge.

(3) Teacher training mechanism, using teacher training, regular professional training and teaching ability improvement training for teachers to improve their teaching level and professional quality. In addition, teachers can be organized to exchange teaching experience, teaching discussions and other activities to promote cooperation and sharing among teachers.

(4) Teaching evaluation mechanism: For student evaluation, students' learning results can be evaluated through tests, exams, homework and other ways to understand students' learning situation and needs. By collecting feedback from students and teachers, the teaching content and teaching methods can be continuously improved and optimized.

(5) Cooperation and collaboration mechanism: school-enterprise cooperation is adopted to establish cooperative relations with enterprises and research institutions in the water conservancy industry to jointly carry out teaching and research on water conservancy laws and regulations. In addition, cross-disciplinary integration with other related disciplines, such as environmental science, civil engineering, etc. is strengthened to broaden students' knowledge vision and comprehensive quality.

The construction of these teaching mechanisms can ensure the effective teaching of water conservancy law courses and the learning results of students, cultivate high-quality talents with solid knowledge and practical ability of water conservancy law, and provide strong support for the sustainable development of water conservancy industry [8].

5. Conclusion

To sum up, the work-oriented teaching of water conservancy laws and regulations should focus on the combination of teaching content and practical work, adopt diversified teaching methods and means, make full use of industry resources, establish a sound teaching mechanism and evaluation system, and promote the organic combination of theory and practice with the goal of improving students' legal literacy and professional ability. In practice, educators need to constantly innovate and improve teaching methods to meet the changing needs of the industry, which has positive significance for training future professionals in the field of water conservancy and promoting the development of the national water conservancy industry.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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