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Exploration on the Construction of Mixed Teaching Mode of Environmental Assessment Course

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Abstract

Taking the "Environmental Quality Evaluation" course as the object, a set of online and offline course resources required for the selection of mixed first-class courses has been established, and the integration of students' inner potential and learning motivation, ideological and political education development and professional knowledge learning has been formed. In line with the law of student growth, it is a complete and easy-to-promote, demonstrative and innovative blended curriculum teaching system.

Keywords

Environmental Assessment Course; Mixed Teaching Mode; Online and Offline Course Resources.

1. Introduction

The "Environmental Quality Assessment" course has always been one of the important courses for environmental students. With the continuous integration of information technology into the course teaching reform, this course has also carried out the exploration and practice of the mixed teaching reform. The idea of this teaching reform is to focus on student development, based on the advanced educational concept that professional knowledge learning and curriculum ideological and political education are carried out simultaneously[1]. The teaching content is complete and rich, and the advantages of teacher-student interaction and strong student-student interaction in the teaching process, focusing on new engineering, reflecting the integration of industrial technology and disciplinary theory, the integration of inter-professional capabilities, and the integration of multi-disciplinary project practice, and strive to build innovative and compound talents blended teaching undergraduate program developed.

2. Specific Educational Reform Measures

(1) Further improve the construction of curriculum resources

Enriching the content of curriculum resources is the basis for ensuring the implementation quality of the teaching process of this course and achieving the goals of teaching reform. The construction of online teaching resources for this course has been preliminarily completed, including 10 chapters and 60 subsections of MOOC resources, online chapter tests, online databases, online flipped classrooms, etc., and an attempt has been made to blend teaching.

(2) Further improve the teaching ability of the teaching team

The smooth and effective development of the blended teaching work of this course is inseparable from the joint efforts of the course teaching team. Because the teaching content of this course is closely related to the environmental protection related laws and regulations, policy documents and technical norms that have been continuously released, updated and revised in my country[2]. Therefore, on the one hand, team teachers continuously supplement new course knowledge content and update knowledge structure by participating in training

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and academic exchanges. On the other hand, the process is fully understood and recognized to ensure the high-quality implementation of the teaching reform content.

(3) Implementation of the "student development-centered" teaching reform process

①Online whole process learning

Make full use of this course relying on the online platform. The course MOOC video resources are open to students throughout the course, and students can use the fragmented time through the MOOC resources to repeatedly preview the course content before and after class review. The online MOOC video resources focus on the explanation of the theoretical knowledge of this course, and cultivate students' advanced thinking mode for environmental assessment work[3].

Through the online "course materials" storage module of the course platform, upload the full text of laws and regulations, technical documents, normative guidelines and course ideological and political content related to the course content, supplement and refine the MOOC resources, and highlight the breadth and depth of the course content. Through the online "course discussion" module of the course platform, the whole process of interaction such as daily interaction, teacher-student interaction, student-student interaction, and internal and external interaction can be realized, so as to fully understand students' learning needs in the whole process, and help students solve problems encountered in the whole process of learning.

② Offline "flipped classroom" learning

The offline "flipped classroom" focuses on students' learning based on MOOC theoretical knowledge, by setting up engineering analysis, evaluation case analysis of different environmental elements and other applied course content and course ideological and political content, focusing on heuristic and guided teaching, so that The classroom is alive. Through flexible and diverse teaching methods such as teacher-student mutual aid teaching, students on the podium, group discussions, classroom interactive questioning, classroom assignments, quick answers, brainstorming and other flexible and diverse teaching methods, so that students can deepen their grasp of the theoretical knowledge of this course. The application methods and main contents of industrial practice, cultivate students' comprehensive ability to solve complex problems, at the same time pay attention to the cultivation of students' political literacy, adhere to the organic integration of knowledge, ability and quality, and reflect the cutting-edge and the times.

③ Strengthening and improving after-school homework

According to the course content and course progress, combined with online and offline learning content, arrange after-class homework such as case analysis, course design, data summary, and applied thesis. Homework allows students to experience the learning challenge of “one jump to get it”, and actively guides students to carry out inquiry-based and personalized learning, and cultivates students’ spirit and ability to analyze in depth, question boldly, and be innovative, and breaks through habitual cognition model.

Through the implementation of the above process, the problem of "gender once weak" in the previous teaching process of this course was effectively solved.

(4) Optimization of the whole process assessment mode

Taking stimulating learning motivation and professional interest as the focus to improve the process evaluation system as the starting point, optimizing the original "3+4+3" type whole-process assessment of "online learning progress+offline face-to-face class, discussion and interaction + final exam", the main consideration is that the original model is still lacking in the assessment of reading ability, students' comprehensive ability, ability to solve complex problems, and political thinking[4]. Therefore, it is necessary to further supplement the ideological and political content assessment of some courses, engineering analysis, case improvement and other inquiry-based and thesis styles, report-based comprehensive ability assessment, etc, so as to make the assessment and evaluation of students more comprehensive,

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and at the same time enhance the sense of achievement of students' ability and quality improvement through hard study.

3. Summary

This teaching reform has established a complete set of online and offline mixed teaching course resources for the "Environmental Quality Assessment" course, including MOOC resources, case analysis, course design, and course ideological and political databases. It is committed to unlocking students' intrinsic potential and learning motivation, integrating professional knowledge learning and ideological and political education development, conforming to the law of students' growth, and having a curriculum blended teaching system that is easy to promote, exemplary and innovative.

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