Course development of e-commerce professional web design and production based on OBE concept

Jie Tang
Guangxi Normal University, Guilin 541004, China

Abstract: Based on the concept of OBE education, it reflects the goal of students' main body and ability cultivation. It runs through the systematic thought of the work process, takes the analysis of typical and mainstream e-commerce platforms as the logical starting point of the course, and establishes the final outcome of the course learning. Top-down design, the results are gradually decomposed into tasks, the knowledge and skills contained in the tasks are sorted out, the learning situation is constructed, the two clues of knowledge and skills are formed, the course chapters are organized and planned, the course teaching system is reconstructed, and the implementation is carried out from the bottom up, focusing on the process of experience accumulation and skill cultivation, and the course knowledge, ability and ideological and political goals are gradually realized.

Key words: OBE concept; Web design and production; Curriculum development

Web design and production is an important basic course of e-commerce major, which is the technical basis of e-commerce website planning and design, page planning and production, and shop business diagnosis and analysis. As a front-end course of website, it is always a professional elective course in the professional course planning. The teaching content of the course is mainly knowledge point explanation, and the practical training projects are mostly verification experiments. The lecture-based teaching mode can not well reflect the integration of knowledge system and ability system, and lacks the ability cultivation process in the teaching process. It is difficult to achieve the curriculum ability and ideological and political goals through teaching, and can not meet the needs of application-oriented personnel training. In 2018, the Ministry of Education clearly put forward three basic principles in the National Standards for the Teaching Quality of Undergraduate Majors in ordinary colleges and universities: "First, emphasize the student-centered, second, emphasize the output-oriented, and third, emphasize continuous improvement". In this context, how to take the student as the center, highlight the output-oriented curriculum design, adhere to the idea of continuous improvement, and further improve the teaching quality has become an important content of the new teaching paradigm research.

1. OBE education concept

OBE (Outcome Based Education), also known as output oriented, goal oriented, demand oriented and ability oriented, is today's international advanced education concept, and the development of constructivism and competency-based education. Since it was successfully launched in the United States in the 1980s, it has received extensive attention and promotion in the international community. It is student-centered, ability-oriented, and focuses on students' learning process and final results. It breaks through the "old three-centered" model centered on teachers, classrooms and textbooks, transforms from logical positivism to constructivism, and forms the "new three-centered" model that "focuses on student development, student learning and learning effect". An important paradigm shift in education was achieved by clearly focusing and organizing the curriculum teaching system around the goal of ensuring that students receive experiences that substantively succeed in their future lives. It is a reverse curriculum system design engineering based on the needs of industry and enterprise post ability, and determines talent training objectives, graduation requirements, curriculum system, course content, teaching methods and assessment schemes in turn. It is designed from the macro level, from the top down, layer by layer decomposition, at the micro level, from the bottom up implementation, and gradually achieve the goal of talent training, adhere to continuous improvement, and constantly enrich and perfect the system view of curriculum system construction. Compared with the curriculum, it is designed according to the graduation requirements index points supported by the course teaching objectives, so that the course syllabus, teaching content, teaching methods and assessment plans are designed and formulated around the course teaching objectives, and the final feedback is given by the achievement evaluation mechanism to ensure the teaching quality and continuous improvement of the teaching plan.

2. Design of curriculum objectives under the concept of OBE education

1. Analysis of typical pages of mainstream e-commerce websites

Web design and production is the e-commerce website web front-end design course. The front end of the website is a direct communication with customers of the man-machine interface, is the front of the shop, good design can attract more customers to browse, improve customer stay time, help to increase the conversion rate. Compared with the requirements of enterprise post ability, the analysis and sorting of typical and mainstream e-commerce websites is the logical starting point of course development reflecting the OBE education concept and the systematization of the work process, and helps to generate results-oriented course goals. Analysis of Jingdong, Taobao, Vipshop, Tmall International and other typical e-commerce websites and related pages, from the website entrance to the shopping process, a complete e-commerce online store mainly contains pages are: shop home page, product classification page, product details page, shopping cart page, order confirmation page, order success page and other six fields of action typical pages. From the technical point of view, in these six types of pages, business information, commodity information, customer information through text, pictures, hyperlinks, videos, form



controls and other HTML elements, set structure, performance, behavior and other knowledge and skills, to achieve the front-end design and production of the website page.

2. Setting course objectives

According to the OBE education concept, from the perspective of talent training, the final results of the course should reflect the characteristics and technical content of typical and mainstream e-commerce websites, keep up with the development of The Times, grasp the cutting-edge technologies of The Times, and meet the needs of e-commerce platforms. It can stimulate students' learning motivation, allow students to develop gradually in study and practice, master the front-end development technology of mainstream e-commerce websites, and cultivate the overall view and system view of website planning and design. By combing the analysis results of typical pages of e-commerce websites, it is clear that the final results obtained by students through the study of courses are the front-end design and realization goals of typical e-commerce websites. That is to say, through the study of web design and production courses, students should have the ability to plan, design and make the front end of e-commerce websites. The formulation of course objectives should be conducive to the formation of teaching clues in teaching practice, combined with the in-depth analysis of industry development, enterprise research and job recruitment information, and the final objectives of the course should be established according to the graduation requirements index points and class hour allocation in the talent training program. Through the analysis of typical and mainstream e-commerce website rules and pages, extract and integrate the knowledge, ability and ideological and political elements that the course should have, and define the knowledge, ability and ideological and political elements that the course should have, and define the knowledge, ability and ideological and political elements that the course should have, and define the knowledge, ability and ideological and political elements that the course should have, and define the knowledge, ability and

3. Teaching design under OBE education concept

The course construction of working process systematization is not in contradiction with the course construction of traditional knowledge system. The course construction of working process systematization just reflects the targeted and effective reconstruction of knowledge system in the course construction. In the traditional theoretical knowledge system learning, the knowledge system should also serve the needs of ability cultivation, while the working process systematization is only to reorganize and order the knowledge needed for applying the field to the working process according to the working process systematization, and in this process, the knowledge system subset is applied to the working process. On the other hand, students transform knowledge into ability and experience accumulation in the process of learning and practice, so that the systematization of the working process can be well integrated with the knowledge system, and is conducive to the construction and internalization of students' knowledge and ability.

According to the theory of constructivism, the cultivation of students' personal ability requires them to actively construct in a specific activity scenario as the subject, and the organization and arrangement of curriculum teaching content cannot be chosen apart from teaching methods. Based on the OBE results-oriented education concept, teaching design should match the realization of teaching results and the achievement of teaching goals, adhere to the principle of progressive development in the organization and arrangement of teaching content, and gradually break down the final result of the course, namely the design and production of typical websites under specific topics, to the task level from top to bottom, reflecting the typical needs of enterprises in the e-commerce industry. Plan and design the life and learning situations corresponding to the tasks, analyze and comb the elements of knowledge and ability corresponding to the tasks, take knowledge serving the development of ability as the goal, take the analysis, design and production of relevant pages of typical, mainstream and representative e-commerce platforms as the clue, and embody the principle of systematization of work process according to the project-led and task-driven teaching mode. Organize and plan the course teaching content, and reconstruct the course knowledge and ability system. Based on the task analysis results, the knowledge and ability points contained in the tasks are clarified to form the integration of tasks and knowledge in the teaching chapters of the course. According to the course development path, the clear course results and objectives are combined with the knowledge and ability elements supported by the six functional pages of a typical e-commerce website, the course content and expected procedural learning outcomes are reasonably organized and planned. The main contents of the course teaching are sorted out as follows: 7 chapters, including HTML tag, CSS style, box model, list and hyperlink, form application, audio and video processing, Javascript application basis, corresponding to 6 tasks of decomposition and design association, 1 outcome project, according to the course construction idea of web function superposition and progressive development of ability. Embodies the progressive development clues of projects and practical training tasks in the teaching process, and supports the sustainable development of students' ability. Finally, from the bottom up, the course stage tasks and achievement projects are gradually realized to achieve the course goals.

Web design and production course is a strong practical course that tends to cultivate skills. The integrated teaching of science and practice can further improve its teaching efficiency. In teaching design, teaching is carried out according to the four steps of basic theory, comprehensive application, stage task and project implementation, so as to realize the integrated development of knowledge system and working process system. Teaching method, visual demonstration method, task-driven method, project teaching method and other teaching methods are the main teaching methods to efficiently organize teaching and implementation. The basic theory is taught by teachers as the main body; Comprehensive application in the form of cooperation between teachers and students, through the analysis, design and production of successful cases of mainstream e-commerce websites, complete typical application practice and strengthen students' application experience; The stage task is based on 6 major tasks, takes students as the main body, and reflects the needs of progressive development of ability by task driving; Finally, through the team project, the group to achieve the design and production of typical e-commerce website, to achieve the knowledge, ability and ideological and political goals of the course. On this basis, I completed the preparation of the course outline, teaching plan design and material preparation, in order to reflect the advanced relationship between the course teaching

content and stage tasks.

4. Course assessment under the OBE education concept

OBE results-oriented education concept curriculum teaching mode, reflects the stage task and the final learning goal achievement requirements. In the course assessment, it matches the course teaching mode and adopts the combination of stage assessment and course final results, that is, project assessment. Based on stage tasks and course project mode, it tests students' learning effect and ability cultivation, which is an objective evaluation of the process of students' ability cultivation. Stage tasks are the basis for ability advancement and stage standard testing. The concept of OBE clarifies the assessment of the degree of achievement of stage goals, and continuous improvement is made according to the degree of achievement of stage goals to promote the realization of course goals. The stage tasks should form a task report, which is the basis for evaluating the evolution and development of students' knowledge mastery and ability, so as to evaluate whether students have achieved the stage goals through systematic learning and process-based skill training, and give an objective evaluation through the review of the report. The final result can be carried out through the course design, in the form of team project, project demonstration + on-site defense for assessment. In the demonstration and defense process, students will explain in detail the problems encountered in the project development process, solutions, cooperation process, project characteristics, content to be improved, etc., combined with teacherstudent communication, questioning, defense and other links. Teachers are deeply involved in student projects, can clearly distinguish students' emotional attitude, knowledge and ability level, and further understand the situation of team cooperation. Combined with the description of the content from design, production to project summary reflected in the personal project report, objective evaluation is made according to the situation of meeting the graduation requirements index points. At the same time, it provides a reference for continuous teaching improvement.

5. Conclusion

OBE results-oriented curriculum design plays a great role in promoting the change of students' learning attitude, improving students' learning ability and promoting the development of students' vocational ability. The implementation of project tasks requires teachers to spend more time preparing lessons, reviewing students' stage tasks and project results, and giving constructive suggestions. At the same time, in the process of students' vocational ability training and experience accumulation, teachers also need to spend more time outside the classroom, answer questions in time, and help students solve the problems encountered in the development process.

References:

- [1] Heng Zhao, Lixia Zou. Construction of Ideological and Political Demonstration Course of "Web Design and Production" [J]. Journal of Henan Radio and Television University, 2022, 35(3):104.
- [2] Tianen Shen, Chongxin Xia. The conceptual connotation, theoretical origin and development trend of results-oriented Education Concept [J]. Education and Culture Forum, 2021(4):51.
- [3] Xiongchun Duan. Curriculum Design and Development of Applied Undergraduate Education [J]. Journal of Dongguan Institute of Technology, 2017,24 (6): 104.
- [4] Wenchao Cui, Junjie Zou. Research on project-driven digital image Processing teaching under OBE Concept [J]. Journal of Graphics, 2019,41(6):1033.

About the author: Tang Jie 1968.4 Guangxi Normal University Lecturer/Software designer Research direction: Software Engineering vocational education

Fund Project: Guangxi Vocational Education Teaching Reform Research Project in 2023, "Research and Practice on Results-Oriented Teaching of Information Technology Courses for E-commerce Major (Vocational Education Teachers) in the Age of Digital Intelligence" (GXGZJG2023B108)