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Development and Research of Systematic Course Based on Work Process

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Abstract

Systematization of work processes is a curriculum development model, with the core concepts of work processes and systematization. Systematization of work processes can present work objects in a structured manner, achieving the organic unity of concrete behavior and abstract processes. This method helps students better understand and apply the knowledge they have learned, and lays a solid foundation for their future career development. By defining the concepts of workflow systematization, typical work tasks, action areas, learning areas, and learning contexts, the theoretical characteristics of course development balance, diversity of course objectives, relevance of course content, and course evaluation process were studied. Five basic steps for developing workflow systems were established, providing theoretical basis and practical guidance for the development and application of workflow systematization courses. These improvement effects have important practical significance for vocational college students to engage in safety related work in the future.

Keywords

Systematic work process; course development; definition of Concept; development process.

1. Introduction of Concepts

(1) Systematize the work process

Systematization of work processes is a curriculum development model, with the coreconcepts of work processes and systematization. The work process refers to a series of activities that involve participating in the production process and creating labor results, including the behavior of transforming the objective world and the psychological activities that guide the behavior of the subject.

(2) Typical job tasks

A typical job task refers to a general term for work events that have systematic integrity, representativeness, and comprehensiveness. It is not simply a reproduction of work content, but can reflect the entire process of professional action, as well as the most basic work content and methods in the job. It has the characteristic of presenting professional elements comprehensively.

(3) Action area

The action domain is a very important concept, which refers to having the same job performance in the process of career development.The total sum of typical work tasks in terms of quality and action dimensions [1-2]. Building action domains is of great significance for curriculum development.

(4) Learning Area

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The learning domain is the establishment of a thematic learning unit within the activity domain through the educational process. As the most fundamental unit of a discipline, the learning domain generally includes three aspects, namely the determination of total class hourss [3-4].

2. Theoretical Characteristicst

2.1. Balance in Curriculum Development

The systematic course of development work process needs to be carried out in accordance with approved specifications and standard steps. Firstly, background analysis and needs assessment are required to determine the objectives and focus of the course. Secondly, it is necessary to design a curriculum framework that clearly defines the learning content and teaching methods. Then, course production and implementation are carried out, including textbook writing, selection of teaching resources, and equipment allocation for experiments. Finally, evaluation and improvement are needed to continuously optimize the course content and teaching effectiveness. However, the development of systematic courses on work processes also has strong diversity and flexibility.

2.2. Diversity of course objectives

Traditional subject based curriculum logic often falls short in addressing the objectives of curriculum standards. To achieve multidimensional and diverse learning goals such as knowledge, emotions, attitudes, and behaviors, it is necessary to choose different learning content and use multiple teaching methods, which may be difficult to balance in actual teaching [5-7]. In contrast, applying this research to develop a systematic course on work processes can achieve multiple educational objectives in such a learning environment.

By analyzing work tasks and selecting a set of learning methods, the learning process is organized and regulated, and coordinated with daily work steps, thus achieving dual intervention in learners' learning behavior and psychology. This enables students to meet the expected curriculum standards and further enhance their learning experience through a contextualized learning environment, cultivating comprehensive professional qualities.

2.3. Relevance of course content

Traditional subject courses have certain limitations in cultivating learners' abilities, as these methods often fail to effectively link learners' potential qualities with practical skills, and it is also difficult to integrate the learning process with future career development. However, the systematic course on work processes provides a more effective method for cultivating learners' abilities by emphasizing generative skills [8-10].

2.4. Process Oriented Course Evaluation

Compared to learning outcomes, the evaluation of work process systematization courses places more emphasis on individual learning processes. The core of this course lies in the interaction between universal and typical work tasks, guiding students to achieve teaching objectives through self-learning. This teaching method places less emphasis on the final outcome of activities and more emphasis on the comparison, transfer, and internalization of knowledges[11].

Vocational education is not only about providing labor for society, but also needs to follow the laws of people's career development and learning law. According to P Bemier and S According to EJDreyfus' viewpoint, people's career development is usually divided into five stages in the logical order of "novice" to "expert": beginner, advanced beginner, capable person, technical higher vocational school person, and expert [12]. The specific analysis is shown in Figure1.

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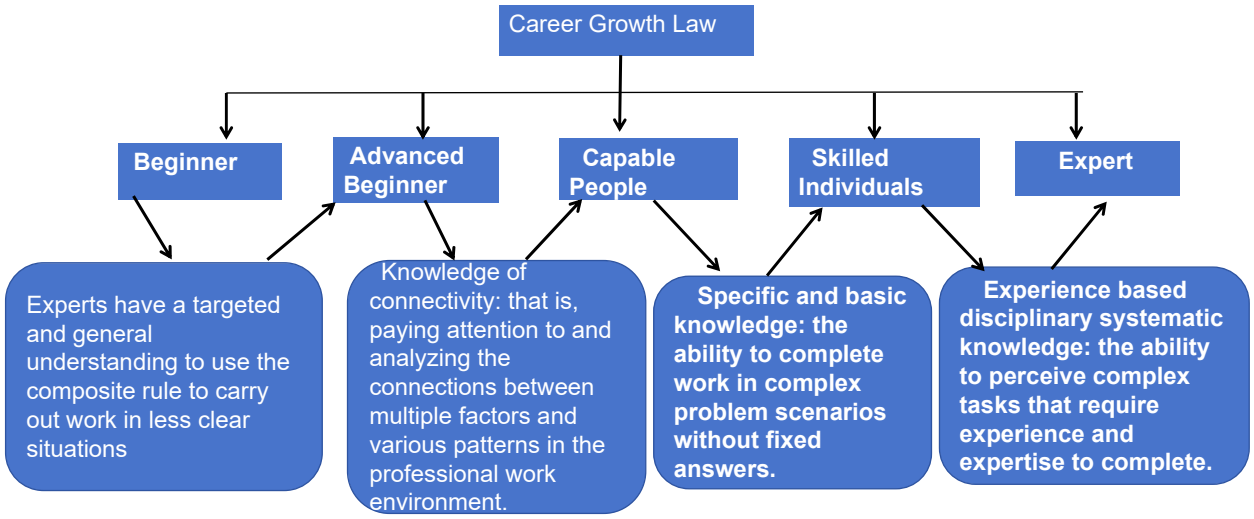

Figure 1. Career Growth Pattern Diagram

By providing scientific teaching to students in vocational schools, they can continuously develop towards higher levels. Understand the general laws of career development, divide learning and work into four different levels of Difficulty, and provide students with appropriate opportunities to help them transition from beginners to experts, and achieve a smooth transition between simple and complex tasks.

3. Development Process

The development of the work process system generally needs to follow the following five basic steps:

The first step is to extract representative work content. The second step is to summarize the scope of the activity. Merge representative work tasks according to their complexity and ability requirements into a complete scope of activities.

Step three, change the research direction.Based on the correlation between the site, equipment, issues, objects, and technology.The specific element transformation and decomposition are shown in Figure 2.

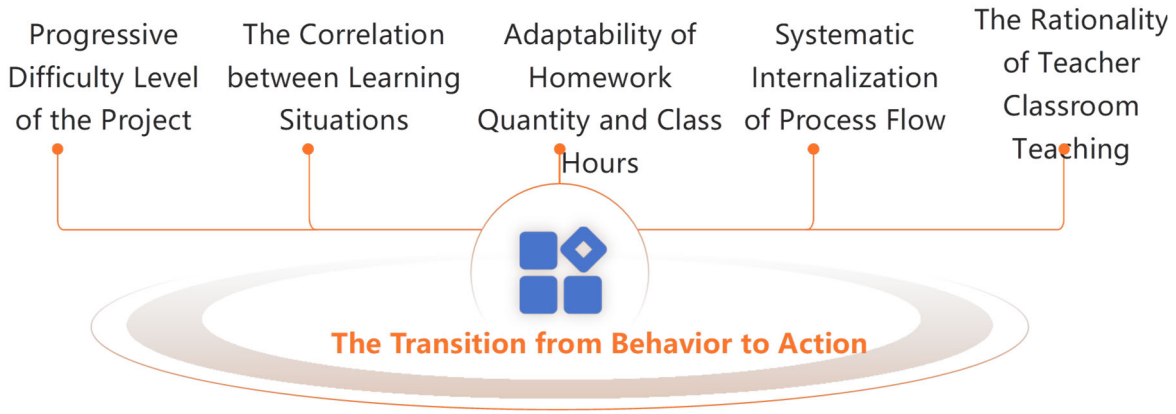

Figure 2. Career Growth Pattern Diagram

Step four, design learning scenarios. After completing the development of the system curriculum system. It should be pointed out that the learning scenario is not just a reproduction

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of work, it is a set of content that can guide students to learn and find ways to learn and work, thereby enabling them to learn lifelong learning.

Step five, establish an evaluation index system. When establishing a workflow based system evaluation system, it is necessary to comprehensively and systematically grasp the correlation and differences between each link, level, and indicator in the system evaluation system [13-15].

4. Conclusion

The manuscript should include a conclusion. By defining concepts such as systematization of work processes, typical work tasks, action areas, learning areas, and learning contexts.Research on the theoretical characteristics related to curriculum development, including the balance of curriculum development, diversity of curriculum objectives, relevance of curriculum content, and the process of curriculum evaluation.Designed evaluation principles based on curriculum systematization: competency based principle and career growth law principle.Five basic steps have been established for the development of the work process system, and representative work content has been extracted; Summarize the scope of the activity; Change research direction; Design learning scenarios; Establish an evaluation index system.

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