

Curriculums Reform of E-commerce and Advanced Language Program Design Based on Heuristic CDIO model

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Abstract. Heuristic teaching is to use a variety of teaching methods, and fully mobilize the students' motivation to learn, the enthusiasm a teaching type. The purpose of CDIO model is to build a set of curriculum system to train students to conceive, design, implementation, and operation of engineering systems, mainly students of complex system application ability, teamwork skills, the ability to control the complete life cycle of the project. The paper proposes the application of Heuristic CDIO model in E-commerce and advanced language program design curriculum reform. The practice of the method shows that the method has achieved good teaching results.

Introduction

Heuristic teaching is to follow the teaching of law, the use of a variety of teaching methods, and fully mobilize the students' motivation to learn, the enthusiasm a teaching type. Its essence is to inspire and guide students to think about the problem, the use of the scientific way of thinking, to analyze problems, to solve problems, to encourage students to positive thinking, made their views.

With the rapid development of the technology of computer programming, computer programming accordingly proposed new requirements, requires a computer programmer to master mainstream computer programming language. Course "Advanced Programming Language" as an undergraduate professional basic course this course is intended for freshmen just access to higher education, teaching C++ syntax rules of the programming language and object-oriented programming method, programming examples. Explain how to use object-oriented programming methods to solve specific problems, develop students' programming ability.

E-commerce business activities with the popularity of computers and networks, and it are a large area of the promotion. Colleges and universities in response to the social is needs of e-commerce teaching very seriously. Nationwide, the e-commerce professional set up has been nearly 10 years, but the theory of e-commerce system, complete theoretical system has not yet formed. Therefore, there are some problems in teaching, combined with my e-commerce professional teaching experience.

In this paper, has become a common mode of international engineering education. It embodies the modern engineer should have service in modern industrial products from conception and design, to achieve the basic ability to run the whole process must have; of CDIO engineering education philosophy is to this whole process of students of engineering capabilities as the carrier its ability to include not only scientific knowledge, but also the ability of students personal skills, interpersonal skills and products, system and process construction [1]. The paper proposes the application of Heuristic CDIO model in E-commerce and advanced language program design curriculum reform.

Heuristic Education in E-commerce Teaching

Heuristic Teaching Method is the soul of a variety of teaching methods, and it is permeates all aspects of teaching and learning activities, and implement the teaching process always. Teachers in a typical model with the general requirements of the combination, a combination of lectures and guidance, under the guidance of the principle affirmed and supplemented to the combined, can take

a variety of forms inspired.

Theory and Practice of touch, lack of practice teaching. E-commerce training is multidisciplinary mutual penetration of the compound talents. Personnel as e-commerce, the use of computer technology, network technology and modern information technology must be able to engage in related business activities. Therefore, a more urgent need for a wealth of practical teaching from the current situation of our universities, many schools just set up a simple e-commerce laboratory, supporting training practice software.

Heuristic teaching method of research, as well as in the actual teaching process, I found that the reasonable use of the form in the teaching process to inspire students to think independently, and the creation of problem situations and inspire students thinking to guide students in the use of scientific way of thinking, to analyze the problem, to solve the problem, and to encourage students to actively thinking, made their views, and to cultivate independent self-learning ability of students. The following combination of my teaching experience, it is teaching applied to e-commerce professional to propose the following heuristic teaching, as is shown by equation1.

$$M(x, y)dx + N(x, y)dy = du(x, y) = \frac{\partial u}{\partial x} dx + \frac{\partial u}{\partial y} dy \quad (1)$$

Through the creation of scenarios, the method to determine the problem, independently explore collaborative learning, and other sectors, under the guidance of teachers, mainly through the student's own learning to solve the problem, for example, when talking about e-commerce website design unit, first of all to the students recommend some good business websites and personal websites, so that students feel should have the basic conditions of the basic functions required by the various types of websites, as well as a good site first, and then ask the students create a site technologies such as: PHP, JSP, etc., to create some simple web pages, built after class demonstration, mutual evaluation of the advantages and disadvantages of the site and allow students to encourage the students to continue to learn from own experience of success and failure with others, continuous improvement, eventually building elements of the website [2].

This method makes use of modern teaching techniques inspired teaching to make classroom abstract into concrete, of static to dynamic, chemical complex for simple illustrations, shaped sound combined. For example, the characteristics and applications of the lectures B2C business model, the use of projection teaching the process made a fine slide, combined with multimedia tools.

Application of Heuristic Education in Advanced Language Program Design

A commonly used method of heuristic teaching method in the teaching process, I try to set up some suspense let students immediately replied, but managed to cause thinking on the suspense, so that students in a temporary state of confusion, and thus stimulate readers feel motivation and interest, lead them to explore new knowledge in the cycle of doubt - doubt - doubts. Allow students to learn a new lesson with a problem, and this method to inspire students 'creative thinking, stimulate students' emotions, so that students learn consciously exploratory, enthusiasm and creativity.

The heuristic teaching lies in the interaction between teachers and students, teachers for students to think about the changes in thinking, exercise the understanding of the students' ability to judge. Here in conjunction with their actual teaching, the heuristic method is proposed to change teaching methods to stimulate students' interest in improving teaching effectiveness.

The program design is a very practical course, the actual programming capabilities of students is important training objectives [3]. Every time the computer experiment counseling teachers taught time of 10-15 minutes, to explain the programming environment, coding standards, as well as some common mistakes. Some individual one-on-one guidance, as is shown by equation2.

$$W_{s3} = \frac{\lambda_1 + \lambda_2 + \lambda_3}{\lambda_3} \overline{W}_{1-2-3} - \frac{\lambda_1}{\lambda_3} W_{s1} - \frac{\lambda_2}{\lambda_3} W_{s2}. \quad (2)$$

The big difference in Elementary students must select and design appropriate teaching content,

taking into account the various levels of student acceptance for targeted counseling, and counseling will be divided into online counseling and individual counseling [4].

Practice of Innovative Engineering Training Mode based on CDIO

Culture of engineering and technical personnel of our colleges and universities can not meet the requirements of modern enterprise status quo, applied training model based on the CDIO concept of school enterprise cooperation projects, to integrate the knowledge, ability, social three, from enterprises oriented projects to develop comprehensive competence to colleges, enterprises, industry-university cooperation relying on personnel training mechanism to operational three-dimensional as the carrier, and engineering education and business needs close contact to achieve a culture in line with the modern enterprise requirements of engineering and technical personnel and serve society.

Innovation is the main core of the CDIO teaching mode, its integration in education, and combined with a strong foundation of teaching; continue to strengthen the social practice, so as to achieve the innovation of this model system. From normal law personnel training, do cross-domain development training from experiment to practice. Students neither seems weak, because suddenly exposed to complex engineering will slowly mastered the gradual development of practical ability, so as to enhance their innovation capabilities.

According to the students' cognitive law, from the multi-dimensional, multi-level reflects the composite, hierarchy personnel training. Build two platforms, four modules "practice teaching system. Two platforms, namely basic teaching experiment platform and technology innovation experimental platform; four modules that the experiment of basic skills, professional skills experiment, integrated design experiments, scientific and technological innovation, experiment; basic skills - expertise - design skills - technological innovation skill level progressive ability training, quality training main theme at all levels of practice teaching system, as is shown by equation3 [5].

$$\lambda p_n = n\mu p_{n+1}, p_{n+1} = \frac{\lambda}{n\mu} p_n = \frac{\rho^{n+1}}{n \cdot n!} p_0 \quad (3)$$

CDIO engineering education model is an effective way to develop innovative engineering talent through a combination of theory and practice of teaching mode, so that the student is no longer only focus on textbook knowledge. Good campus atmosphere in the building this system, but also train students interpersonal skills, teamwork skills, self-innovation capability and other aspects of the overall quality of society for future students to become practical talents lay a firm foundation.

Application of Heuristic CDIO model in E-commerce and Advanced Language Program Design Curriculum Reform

Heuristic pedagogy requires teachers to be good at guiding the transformation, the use of certain means and methods, students' book knowledge into the student's specific knowledge to further the student's specific knowledge into the student's ability. Its ideological connotations stressed that students are learning the subject, insist that the teacher-led and student body combined; adhere to impart knowledge and development of intellectual unity. The synchronous development; knowledge and ability to focus on Teaching and Learning Methods the combination of its transformation, and it are cultivating students' learning to learn.

Based on CDIO idea to take a business-oriented curriculum grouping, the existing curriculum system updates, reorganization the platter, modular, project decomposition of the course content regroup the introduction of the actual project, according to the development of science and technology, real-time, large-scale multinational Tactual projects to the classroom, and to build a dynamic curriculum system adapt to cultivate engineering talents.

Heuristic teaching is vital to the creation of problem situations, the teachers should provide students with the content of thinking, fascinating, problems such as confusion, accidents, and

wonderful, difficult issues, to inspire students thinking [6]. The form of heuristics can be varied, but in principle there is only one: is to play the leading role of teachers, and fully mobilize the enthusiasm, initiative and creativity of the students, and students to acquire knowledge, build capacity and ideological education for the purpose of it.

The CDIO the purpose is to build a set of curriculum system to train students to conceive, design, implementation, and operation of engineering systems, mainly students of complex system application ability, teamwork skills, the ability to control the complete life cycle of the project. Therefore, based on the business environment CDIO teaching model concept is: driven project development process based on real cases, methods, techniques and tools training in accordance with the norms of production, production environment, based on corporate standards of quality assurance, schedule control and performance appraisal other project training.

For engineering, new scientific research on learning has a lot of help. Therefore, the research results to write a book to introduce teaching CDIO teaching philosophy, process from theory to practice. Or the results of scientific research directly through the form of the experiment unfolded, so that students can feel the charm of science close stimulate creative ability.

Conclusion

This paper argues that the essence of higher education is the most important should be to develop students self-learning ability and ability to solve practical problems, which is the essence of heuristic teaching, the heuristic teaching to better play the leading role of teachers, students the main role, in order to fully mobilize the various factors play an active role in teaching, improve the quality of teaching, classroom teaching process to obtain optimal results. Two platforms, four modules "practice teaching system based on the CDIO concept of practice teaching system reform, build basic skills, professional skills, comprehensive design skills, technological innovation, skills level progressive, and the ability of training, quality training main theme all levels of practice teaching mode.

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