

Research On The Training System Of College Student Innovation Methods With The Goal Of Improving Innovation Ability

Fang Yuan

Fundamental Science on Radioactive Geology and Exploration Technology Laboratory, East China
University of Technology, Nanchang, Jiangxi, China

455302348@qq.com

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Abstract: This paper takes the innovative method training system of college students with the goal of improving innovative ability as the research object, analyses the work plan of this research, and introduces the relevant research contents. It includes the investigation and analysis of the curriculum system of innovative methods at home and abroad, the research of the theoretical curriculum system of innovative methods, the practical curriculum system of innovative methods, the research on the talent training mode of college students based on innovative methods, and the communication and cooperation strategy in the construction of curriculum system based on innovative methods. The key points and difficulties of the research, including: the theoretical curriculum system design of innovative methods for the cultivation of college students, the practical curriculum system design of innovative methods for the cultivation of college students, and the professional module design of innovative methods for college students' education. This study is of great value in promoting the construction of innovative method curriculum system with the combination of theory and practice, and has a certain guiding significance in promoting the construction of innovative method training curriculum system at the enterprise level.

1. Introduction

The study of innovative methods has formed three major schools, and their theories and methods have their own advantages [1-4]. One is to pay attention to the free activity of thinking and regard innovation as the result of association, imagination, intuition, inspiration and so on, such as intellectual incentive method and analogical heuristic method. One is that innovative methods tend to the actual operation of thinking, that is, from the collection and processing of information. One is based on objective laws and organized thinking activities, not by chance, but according to certain procedures to achieve inevitable results, and strive to make innovation a rigorous and meticulous discipline. With the gradual attention to the study of innovative methods, a number of innovative method research institutions have been established, many colleges and universities have set up innovative education courses, the number of relevant papers and works published has multiplied, and the research work on innovative methods has been carried out in an all-round way. However, at present, there is little systematic research on the curriculum system of innovative methods at the undergraduate level, especially the in-depth investigation and research on the curriculum system of innovative methods offered by colleges and universities.

Therefore, on the basis of the investigation and analysis of the curriculum system of innovative methods for college students at home and abroad, this paper analysis the construction of talent training objectives, modular theoretical system, syllabus standards and teaching system in the theoretical curriculum system, and analysis the practical teaching curriculum design, training plan, scientific research guarantee mechanism and practice link in the practical curriculum system. In the training mode, this paper analysis the type of talent training, the proportion of class hours, professional module design and curriculum hierarchical structure, and puts forward innovative methods for the construction of teachers and students, personnel exchange and cooperation strategies from the perspective of curriculum system construction and development. This study is of

great value in promoting the construction of innovative method curriculum system with the combination of theory and practice, and has a certain guiding significance in promoting the construction of innovative method training curriculum system at the enterprise level.

2. The contents of the research

Investigation and analysis of the curriculum system of innovative methods at home and abroad. By using the methods of literature investigation and network investigation, this paper collects and investigates the objectives of talent training in innovative education in universities at home and abroad, and the basic course names and course hours of the core courses, compulsory courses and elective courses offered by universities at home and abroad. the proportion of elective courses and compulsory courses; investigate the goals and requirements of practical teaching. Investigate and understand the evaluation methods of learning performance of innovative method courses such as the proportion of experimental teaching or practical teaching, the proportion of homework scores, and the proportion of mid-term and final exam scores.

Research on the curriculum system of innovation method theory in electronic information engineering specialty. On the basis of investigation and analysis, combined with the needs of social development for personnel training, this paper determines the talent training objectives of a series of courses of innovative engineering and methods for students majoring in electronic information engineering; from the point of view of engineering practice, technical support and research methods, modular construction of innovative method theory curriculum system. Establish the standard of the syllabus in the construction of the innovative method curriculum system refer to the foreign teaching curriculum system model, refine the standard of the syllabus to the materials that should be read and the relevant content that should be completed in each course to guide the construction of the relevant innovative method curriculum system. The use of information-based teaching system to co-ordinate the construction of innovative method theory curriculum system, the teaching system resources should provide attendance, group discussion, remote teaching, video interaction, common browsing, data sharing, homework submission and correction and other functions.

Research on the practical course system of innovative methods in electronic information engineering specialty. According to the characteristics of electronic information engineering major, it can set up a curriculum system of innovative methods, study the practical design links in the courses, define the curriculum objectives of practical links, and set up undergraduates to participate in teachers' scientific research activities in innovative courses. make use of summer vacation time to set up summer practice courses for students, formulate training plans for summer innovation practice projects, and let students participate in real research projects. In order to standardize students' practical activities in scientific research, it can formulate corresponding guarantee mechanisms, such as setting up special research guidance offices, research interest groups, academic associations, and establish corresponding cooperative relations with enterprises according to the practical environment of different innovative courses. it is convenient for the cooperation of innovative methods in the field of research, teaching and students' practice, and define the relevant fields of practice.

Research on talent training mode of electronic information engineering majors based on innovative methods. This paper analyzes the talent training type design of a series of innovative methods courses for electronic information engineering majors from the aspects of theoretical system, professional knowledge and practical ability, and analyzes the distribution proportion of elective courses and required courses from the proportion of innovative method course system. From the aspect of career pertinence of innovative talents, this paper puts forward the modular construction strategy of innovative courses, and provides suggestions and plans for selecting courses according to the career development intention of electronic information engineering majors. it is divided into different levels according to the difficulty of the course and the requirements for other curriculum knowledge, and provides a schematic diagram of the hierarchical structure of the innovative method curriculum.

Based on the exchange and cooperation strategy in the construction of the curriculum system of innovative methods for electronic information engineering majors. Promoting the further construction of the curriculum system of innovative methods in electronic information engineering through exchange and cooperation is the key to the development of innovative methods research in the future. Centering on the construction of the team of teachers and students with innovative methods, this paper puts forward the strategies of building the team of teachers and students suitable for the development level of higher education; aiming at the exchange and training of personnel, establish student exchange programs such as exchange student programs, enterprise internship programs, summer workshops and teachers' exchange plans such as hiring full-time teachers, short-term visits and lectures by experts, hiring visiting professors. This paper puts forward the strategy of scientific research cooperation in the field of innovation method research with innovation organizations, domestic famous universities, academic institutions and well-known enterprises.

3. Key points of the research

The design of the course system of innovative method theory for the cultivation of college students majoring in electronic information engineering. Aiming at the goal of cultivating innovative talents for electronic information engineering majors in colleges and universities, combined with the development characteristics of higher education model, on the basis of relevant curriculum system investigation and typical case analysis, the construction of innovative method theory curriculum system for undergraduate training is one of the core issues in this research. The theoretical curriculum system plays a directional role in training talents with innovative methods and in carrying out innovative training for enterprises.

The design of practical curriculum system of innovative methods for the training of college students majoring in electronic information engineering. Practical teaching system has an important influence on the cultivation of students' practical ability, innovative ability and research ability. How to apply innovative methods to education, technology, R&D and other fields through practical teaching, so as to improve students' employability and adapt to the different needs of innovative talents in different positions is one of the core issues in this research. The design of the in-class practice system of innovative methods can guide teachers to carry out more practical teaching links, make a close combination of theory and practice, and improve the results of theoretical teaching; the design of the extracurricular practice system of innovative methods can enable students to expand the application of innovative methods through social practice, practice, scientific research activities and other experiences in school, and promote the improvement of students' professional practical skills. The practical curriculum system plays a guiding role in the development of innovative teaching of electronic information engineering specialty and the guarantee conditions for the construction of practical teaching system.

Professional module design of innovative methods for the education of college students majoring in electronic information engineering. The cultivation of innovative talents has different needs in different industries, and there are some differences in the curriculum system and knowledge structure needed. On the basis of the established curriculum system of innovative methods, this topic conducts a questionnaire survey on the needs of innovative talents and innovative methods combined with the major of electronic information engineering. to determine the characteristics of electronic information engineering to establish a modular curriculum system of innovative methods. How to make a reasonable and scientific combination of theoretical and practical courses according to the talent needs of different positions, so as to meet the personnel training needs of electronic information engineering majors and enterprise innovation methods. It is one of the core issues in this research.

4. Research scheme and ideas

The investigation and analysis of the curriculum system of innovative methods at home and abroad, including innovative methods, talent training objectives, theoretical curriculum system,

practical curriculum system, and academic achievement evaluation methods. The research on the curriculum system of innovative method theory, including the goal of personnel training, the design of modular curriculum system, the standard of syllabus and the construction of teaching system. Innovative methods, practice curriculum system research, including practice system design, summer practice training plan, curriculum guarantee mechanism, practice link setting. Research on undergraduate talent training mode based on innovative methods, including talent training types, proportional distribution of class hours, professional module design, curriculum hierarchical structure.

The method of combining literature analysis with network investigation. By using the method of literature analysis, this paper extensively collects the relevant literature on the construction of curriculum system of innovative methods at home and abroad to understand the latest progress of research in this field at home and abroad, and uses the method of network investigation to inquire about the courses offered by colleges and universities at home and abroad in innovative methods, talent training objectives, practical teaching system, performance evaluation methods and corresponding guarantee conditions. On the basis of summarizing and summarizing the literature and network survey data, we can understand the current situation of the construction of innovative method curriculum system at home and abroad.

The method of combining case study with comparative study. By using the method of case study, this paper selects the theoretical teaching system and practical teaching system of electronic information engineering major in 1-2 aboard and domestic universities to compare and analyse the theoretical teaching system and practical teaching system in the construction of innovative method curriculum system. and focus on the core curriculum system of innovative methods, proportional distribution of class hours, curriculum hierarchical structure, practical teaching model and other related contents are compared and analysed.

The combination of expert interview and questionnaire survey. Aiming at the enterprise level, this paper makes an in-depth investigation on the innovative talents in all kinds of innovative methods and engineering technology needed by the enterprise by using the methods of field investigation, expert interview and questionnaire. Understand the talent demand and training demand in the innovation method, in order to realize the professional module design of the innovation method. Through cooperation with enterprises to determine the training direction and talent training mode in innovative methods, to determine the practical opportunities that may provide innovative methods for innovative talents and teachers.

Conclusion

This paper introduces the research significance, research contents, difficulties and key points, ideas and methods of college students' innovative method training system, which is of great value in promoting the construction of innovative method curriculum system with the combination of theory and practice.

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