

Exploration on the Reform of Practical Course System for Electronic Information Engineering

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ABSTRACT. *With the continuous progress and development of society, education is also facing reform and development. As a hot subject in recent years, electronic information engineering specialty needs more prospective reform and exploration. This paper discusses the necessity of the reform of the practical curriculum system of electronic information engineering from three aspects: the current situation, the measures of reform and the significance of reform and exploration, so as to improve the practical level of the curriculum and cultivate excellent successors in the new era.*

KEYWORDS: *Electronic information engineering, Curriculum system, Practice reform*

1. Introduction

The “Twelfth Five-Year Plan for the Development of National Education” clearly pointed out that to promote socialist modernization, science and technology is the key, talent is the core, and education is the foundation. The essence of education development lies in reform. Therefore, to promote the scientific development of education, our country should take reform and innovation as the first priority, cultivate comprehensive and compound talents for the society, and improve the quality of talents[1]. The specialty of electronic information engineering needs to cultivate application-oriented talents more. The reform and practice course meets the requirements of the national “twelfth Five-Year plan” and the requirements of electronic information engineering professionals.

The major of electronic information engineering belongs to the major of electronic information, which cultivates compound talents who possess both the professional theory and technology of electronic technology content and strong foreign language and computer abilities. Among them, the main practical teaching includes graduation design and graduation practice, course design and experiment, computer training and other courses. At present, the traditional teaching course can not meet the goal of cultivating all-round talents of electronic information course,

and can not keep up with the development of the times. In the new era, the requirements for electronic information professionals are higher and higher, including practical ability, professional ability, team ability and so on. The reform and innovation of practice curriculum system and the establishment of student-oriented practical education are the tasks for the reform and innovation of practical teaching system of electronic information engineering specialty in this era[2]. Practical teaching is a process by which students apply the theory of learning to practice. It is the most important teaching activity in the teaching process of students. However, there are some problems in the current practical teaching system of electronic information engineering in universities:

(1) Due to the constraints of many factors, such as capital problems, resource problems, environmental problems, equipment problems and so on, the practical teaching in many colleges and universities is limited by objective factors, and the professional courses and practical teaching can not complement each other, which also causes the students to pay less attention to this aspect.

(2) Unitary teaching mode and unspecific practice design will give students the impression that practice teaching cannot be implemented, and practice teaching cannot be carried out effectively.

(3) At present, many universities do not pay much attention to practical teaching, and there are irrational time arrangements and connections between many courses. Students cannot learn effectively through the arranged courses, nor can they effectively digest and understand knowledge. In this way, not only can students not have an overall understanding of practical teaching after finishing the courses, but also a considerable part of the courses will waste resources and be ineffective.

(4) At present, the curriculum evaluation standards and systems for practical teaching are not perfect. Most of them are mere formalities, which reduces the quality of teaching courses and is of no significance to the growth of students.

All in all, the reform and innovation of the practical teaching system of electronic information engineering is a requirement of the times and a course that universities should pay attention to.

2. The Reform Measures of Practical Course System of Electronic Information Engineering

Electronic information engineering professional practice teaching includes four aspects: in-class practice, curriculum design and experiment, computer training, graduation design and graduation practice. According to the above-mentioned problems in the practical curriculum system of the electronic information engineering major, combined with the current social situation and the employment situation of students, the following measures can be taken for the reform of the electronic information engineering major:

(1) Economic investment: it is mentioned in the “Twelfth Five-Year Plan for National Education” that it is necessary to support the development of local higher

education, optimize the curriculum structure and system of universities in accordance with the local economic development capabilities, and promote local governments at all levels of colleges and universities. Economic investment to promote the cooperation and support of the practical teaching system with other universities and community platforms in the region, so that the practical teaching of electronic information engineering has certain hardware resources and conditions.

(2) In-class practice: in-class practice refers to the actual exercise and operation through the understanding of knowledge in class. At present, teachers still carry out teaching activities through teaching objectives and syllabus for practical teaching. Therefore, it can be combined with the syllabus for practice teaching and professional courses are effectively designed and connected to guide students to master the content of digestive knowledge[3].

(3) Curriculum design and experiment: curriculum design and experiment is a content that is more difficult than in-class practice. This aspect can be aimed at one or more courses. Therefore, teachers can promote students' understanding of key and difficult knowledge by allowing students to preview before class, and improve students' professional skills on the basis of increasing students' interest in learning.

(4) Computer training: computer training is an indispensable part of the practical teaching system of electronic information engineering. Only by training on the computer can we truly integrate theory with practice, understand problems, analyze problems, and solve problems. This aspect can improve students' enthusiasm and initiative for this major, and enable students to have a more comprehensive understanding of electronic information engineering.

(5) Graduation design and graduation internship: the traditional graduation design is guided by a tutor, and students complete the graduation design in groups or independently. Graduation internships can be practiced in enterprises through school-enterprise cooperation. This link takes the group as a unit, and the content of students' practice can improve the students' practical ability, professional ability, teamwork ability and professional design ability in all aspects[4]. After the graduation project has gone through the students' practical links, the thesis topics with strong application are selected, and the tutors strengthen the guidance and management of the students to achieve the real improvement of the quality of practical teaching.

(6) Improving the practical teaching system of the Electronic Information Engineering major is the most important part. Strict evaluation standards and a complete evaluation system can largely prevent the phenomenon of mere formality and proclamation. Therefore, college teachers should also pay attention to the establishment of a practical teaching system.

3. The Significance of the Reform of Practical Course System for Electronic Information Engineering

The traditional engineering education and practical teaching system are far from

meeting the society's demand for electronic information engineering professionals. Reforming and innovating the practical teaching system of electronic information engineering is a course that cannot be ignored[5]. Starting from the national requirements, in order to cultivate the compound and applied talents needed by the society, this paper focuses on six aspects: economic investment, improving the level of practice in class, improving students' professional ability of curriculum design and experiment, enhancing the comprehensive understanding of computer training, improving the quality of graduation design practice teaching and improving the practice teaching system of electronic information engineering. This series of reforms and explorations have strengthened students' professional application ability and professional skills, and has profound significance for the society to cultivate all-round talents.

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