

Reflections on the Electric Information Course Examination System Reform

Chenjie Zhang^a, Hanping Hu^b

Changchun University of Science and Technology, Changchun 130022, China

^acustzcyj@163.com, ^bcusthhp@163.com

Abstract. This paper on the reform of the examination system of electronic courses conducted some exploration and practice. According to current social complex requirements for talent, you need to have innovative, dynamic new talent. The traditional examination system has restricted the development of personnel training, especially in the electronic courses has its own characteristics and properties, and more emphasis on ability and engineering design capabilities.

Keywords: Electric information course, examination system, reform.

1. Introduction

Students after each semester, need to be appropriate examination sessions. Exam is to test students' mastery of knowledge and understanding of a link. School evaluation of teaching effectiveness, examination is an important measure. And the need to adjust the content and methods of teaching, making teaching more conducive to the cultivation of innovative talents. Guide students to take the initiative, creative learning, and exam is an important tool. For contemporary college students who need to develop and improve students' creative thinking and innovation, dynamic, encourage innovation, scientific and rational examination system in favor of creating and building an innovative country needs innovative talents, helping to train college students creativity.

Electrical courses in colleges and universities have some of its own unique characteristics and nature: in the lower grades, when taught the basics, while low grade and high school lecture part of the course, some programs require a separate experiment set up classes, and some practical aspects of the curriculum or labs accounted for 20% to 50% of the total hours of theoretical teaching. Some courses set up a mathematical model of abstract and difficult, so that students can make use of MATLAB, LABVIEW software, engineering concepts through experiments and mathematical models to understand the use of the software will be difficult visualize, to understand and grasp these abstract physics concepts, some practical circuit model for the physical meaning of verified. Allowing students to establish the necessary engineering concepts to master certain engineering design capabilities.

2. Drawbacks of a current examination system

Many courses in electronics courses to practice teaching, but teaching the theory, supplemented by teaching these courses rely on experiments, the effect is more significant. Introduce some basic elements and basic concepts in the classroom, to rely on experiments to solve and understand the details of teaching in the classroom, has become the main course of the experiment. Through the experiment, improve the students' practical ability to improve the engineering design capabilities. For the examination of these programs, due to the "examination-oriented education" thinking is basically a continuation high school examination system, still follow the traditional examination system, there are many disadvantages of such examination system.

Examination form is relatively simple, is not conducive to the comprehensive ability of many students. The current examination, the vast majority of the final arrangements for the conduct of each semester, the final decision Jungian of the final grade, and the final exam determines the merits of student achievement. Ending a one-time exam determines student achievement. But the end of a

one-time exam, paper capacity constraints, is not an accurate, objective and comprehensive picture of the student by the mastery of knowledge.

The existing forms and methods of university exams too single. Basic written exam conducted, rather oral respondent fewer such examinations; Even in traditional examination methods, namely, the written exam is closed book exam forms much less use of open-book exam; theory test multiple, study skills, operating less practical ability, and more unified examination, aptitude test facilities less. This single, inflexible way that students learn exam monotonous, is not conducive to the students hands-on training and social practice is not conducive to students' creativity and initiative play.

Analysis formality examination. Under the current examination system, the teacher at the end of the examination should be conducted examinations case analysis, but the analysis but the basic formality examination, cannot put the papers in question reflected back to the students, the students answer reflected the effect of teaching and analyze students' ability to apply knowledge of the lack of attention.

For the above-mentioned problems, the reform of the examination system of electronic courses imminent, related to the success of this reform school personnel training mode. In order to improve the examination reform, to scientific analysis, realistically, we must carry out in-depth investigations and studies, especially serious examination discipline, examinations and rich content, making the examination reform healthy development.

3. Electrical courses target Examination Reform

(1) Establish the correct exam objectives and promote the overall development of students' comprehensive quality

We should give students to establish a correct concept, as a preliminary examination is a summary of learning, not to get semester. After the exam, not the end of teaching a course, but students and teachers an interactive curriculum teaching. For students, it can be clearly aware of their weaknesses in the learning process through the exam, which is not yet fully grasp the content and when makeup, self-measure, self-improvement, as the starting line the next stage of learning and learning for the future lay a good foundation. For teachers, the teachers pass the exam, students learn mastery of curriculum knowledge, to understand their teaching effectiveness, found himself in the presence of negligence and defects in the teaching process.

(2) Establish an information feedback mechanism after the test

To promote the development of teaching activities, at the end of each exam, to be reflected in research papers situations and problems, to carry out analysis of test papers after the teacher, will be reflected in the exam feedback to teachers and students, and actively encouraged to help students better understand what they have learned.

(3) For courses feature rich form of examination

At present, our exam, written exam or a single majority in the evaluation of over-reliance on test scores exam, cannot fully reflect the overall quality of students, students cannot fully examine the true level and practical ability. To solve this problem you must start by reforming the examination form and examination evaluation criteria.

4. Examinations should be noted that the issue of reform

(1) The purpose of the examination is a prerequisite for success clear the exam reforms

Exam is a means rather than an important teaching evaluation purposes, the basic task is to test students 'test basic theory, basic knowledge to grasp the extent of the problems found in teaching, testing students' learning, supervise student learning. Aimed check the teaching effect, the extent of testing to achieve the objective of teaching, improve teaching work to improve the quality of teaching, students consolidate the knowledge learned to improve the students' abilities and qualities. Teachers should be good at using the test and monitoring tools to monitor the quality of teaching, teaching standards and guidance behavior, urging students to study hard.

(2) Rich test method

In the courses have been part of the curriculum in the Reform examination methods, such as "computer-controlled" test has been used in parts of the tests taken in the form of machine "Automatic Control Theory" at. In the "Motion Control" course design, in addition to examine students' practical ability of students to complete the design and content, students also organized defense, given a comprehensive final results. Electrical courses in accordance with the characteristics of the content, choose a reasonable and scientific examinations. Electrical courses exam tests basic form can usually be following.

1. Closed book exam. Some courses are still fit the traditional inspection methods.

2. Open-book exam. For some courses, more knowledge, more than formulas, concepts and more, this program does not require students to memorize, the content can be mastered, so you can use open-book examinations.

3. The results of the examination and operational cooperation. Better able to stimulate student interest and develop research capacity and capability integrated application of knowledge to solve practical problems; better able to assess the quality of students' practical abilities and skills related to the field of action to promote mutual cooperation and division of labor among students, promote student team will be a more effective means of testing.

4. Computer and online exams. The course content in the basic concepts, basic knowledge, and after a simple calculation you can master the content in the form of computer-based test that can achieve both visits to grasp the situation of knowledge, but also to save time. In the information society, open education today, we should vigorously develop and take advantage of this test improve the examination and evaluation criteria, so the whole process of examination and learning organically linked. Assessment objectives to achieve diversification, assessment content diversification, flexibility of the assessment methods, evaluation personalization.

In addition to these methods, we can also take some other methods, such as in the end of a one-time change in the way the exam, the exam will be phased program. In teaching, according to the syllabus, at the end of each chapter are arranged thinking questions, require students to complete within a certain time in the form of small papers; we can update Exam content proposition to highlight the capabilities assessment, should help the students to express their opinions, inspire personal reflection. Proposition should reflect openness. Content of questions open, open answer questions, open answer method.

5. Conclusion

Examination Reform has taken a welcome step, the next journey is long, arduous task, which requires not only the majority of positive thinking and practicing teachers, workers need to actively cooperate in teaching management system innovation only way to make reforms on the right track to achieve the comprehensive development of human resources in favor of the goal.

References

- [1] Zhang Yunbo. Research and practice on the reform of examination of industry electric automation technology specialty. Electric Engineering of Changchun Institute of Technology (Soc. Sci Edi), 2004, 5(01).
- [2] QIU Jie, MA Xi kui, Luo Xian-jue. On the formulation and practice of undergraduate training program of electrical and information engineering majors. Journal of IEEE, 2005, 27(06).
- [3] Luo Wenguang, Chen Wenhui, Hu Bo, et.al. Establishment of a Diversified Practical Teaching Mode for Electrical Information Majors. Research and exploration in laboratory, 2013, 32(05).