Research on Electronic Design Preliminaries

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Abstract: The development of Internet information technology has brought great benefits to all fields of society. Traditional electronic design competitions are greatly influenced by the venue, manpower, and time. Using Internet technology to set preliminaries for electronic design competitions, through the combination of virtualized electronic experimental operation design and Internet evaluation, the organic management of electronic design technology in universities is more efficient, and the electronic design ability of students is improved. The excellent performance of the electronic design experiment activities laid a good foundation. This paper expounds the research status of electronic design preliminaries at home and abroad, analyzes the enlightenment of the network evaluation and test system on the electronic design preliminaries, and finally draws the concrete implementation method of the electronic design preliminaries.

1. Introduction

The college student discipline competition confirmed by the education department includes the national college student electronic design competition. The content of the competition is linked with the relevant theoretical knowledge and experimental operation of the university's electronic information major. Through the electronic design competition, the subject professional skills and experimental operations of the university students are improved in active innovation and exploration, which is crucial to the discipline construction of electronic information majors. Important role. The talents of the teachers in the electronic design competition of colleges and universities, the equipped experimental equipment, and the venues for the electronic design and the corresponding basic equipment are not highly matched with the actual needs, which makes the effectiveness of the electronic design competition weak. The modern Internet information technology application and electronic design preliminaries are superior to the traditional type in the design preliminaries in the registration process, and the information management method is more standardized, and the virtual experiment operation is more convenient, on the electronic design preliminaries. Conducting network assessments, manpower and material costs are saved, and competition efficiency is improved. Students from different places can participate in the electronic design preliminaries through the online platform. In general, the electronic design preliminaries system is another important course in the educational reform of college students' electronic information majors.

2. Research Status of Electronic Design Preliminaries

For the time being, research on e-sports has designed many aspects, such as the standardized process of electronic design preliminaries and the content of specific functionality. There are also research contents on the direction of the electronic design competition in the electronic design competition and the positive significance and role of the electronic design preliminaries in the context of teaching reform. Compared with foreign electronic design competition research, domestic research focuses on the reform of college education and talent system, and there are many theoretical studies. In the research on the design of the electronic design competition system, Wang Lingyu and others only elaborated on the examination and evaluation criteria of the electronic design competition. Wu Dandan and other relevant researchers believe that the application of information technology to the evaluation of electronic design competitions, the use of new modern

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evaluation techniques, resulting in more fair and fair competition evaluation, accuracy can also be improved. Li Lixin and Liu Lei made a study on the compilation of the competition system for querying the competition scores. However, in general, the competition system of the discipline competition involves a small number of specific professional skills, mostly based on knowledge theory. [1] In the examination system, the basic Web network testing and testing system is generally used. Among them, Tsinghua University, Xi'an Jiaotong University, Hubei University, Shanghai Jiaotong University, etc. have applied Web technology to the examination system setting in recent years. The examination system research and development not only includes colleges and universities, but also commercial software companies, such as the Power Exam test evaluation system, the science and education 2000 test system, and the point-and-test test platform. The market utilization rate is relatively high. The implementation of the virtual experiment operation and electronic test system in the electronic design competition preliminaries is an innovative move of the electronic design preliminaries, which is conducive to the discipline construction of electronic information majors in colleges and universities.

3. Inspiration for the electronic design preliminaries of the network assessment and examination system

Through a lot of research, we can find that there are still some shortcomings in the network evaluation and examination system. If it is directly applied to the electronic design preliminaries, it will delay the development of the electronic design preliminaries. The network assessment and examination system still needs to be improved, mainly in the following aspects:

3.1 The type of test questions is not comprehensive

The types of questions in the network evaluation and examination system are not comprehensive, and the objective test questions are relatively large. If the electronic design preliminaries are the same, the subjective questions are too small, it is difficult to evaluate the professional skills of college students in electronic design, and their electronic courses and The application capabilities of experimental operations cannot be reflected. In addition, for the objective questions of the test system, the students choose them, and the accuracy is subjectively influenced by the students. If the type of test questions in the electronic design preliminaries is comprehensive, the structure of the test questions is reasonable, and the theoretical knowledge of the electronic information major can be assessed, and the students' practical ability and theoretical knowledge can be measured. [2] A comprehensive evaluation of the students' comprehensive qualities and abilities and further motivating students to improve their ability in all aspects of the test, the functionality of this electronic competition preliminaries can be reflected.

3.2 Versatility and compatibility need to be improved

The electronic design preliminaries are designed to cover a wide range of courses and types of experiments, not just for a single subject. However, the applicability of the current network assessment and examination system to the corresponding disciplines cannot be multi-disciplinary and can only be used for one of the assessments. For other types of disciplines, it takes more manpower and material resources to re-develop another a system. This not only increases the human and material costs of research projects, but also the development of numerous systems, which also creates excess resources. The electronic design preliminaries need to improve versatility and compatibility, making them suiTable for a variety of electronic information majors, further enhancing the efficiency of the system's total work.

3.3 The editing function is not perfect

In the electronic design preliminaries system, it is necessary to ensure the effective use of each editing function, and its functions are relatively perfect. However, the current network assessment and examination system is not perfect in terms of editing functions. For example, the corresponding input and editing of graphics, formulas and symbols are lacking, which limits the evaluation scope

of the network evaluation and examination system. In the electronic design preliminaries, students participating in the competition need to use various editing functions in the system to conduct virtual experiments on electronic design, including online registration and review results review. [3] In addition, the team leader and the expert group teacher need to have a complete editing function for the electronic preliminaries in the screening and review of the competition. Otherwise, it will adversely affect all aspects of the electronic design.

3.4 Lack of unified standards for resource construction

Although the current research and development of the network evaluation and examination system is slightly fruitful, due to its complicated coverage, there is a lack of uniform standards in the system construction of resources, and each researcher often has its own measurement indicators. Therefore, there is a certain degree of infeasibility in terms of the specific operation of the system. In fact, the competition or network assessment and examination system need to implement standardized and scientific implementation standards. Only then can the system be combined with modern teaching to improve the teaching level and promote the development of college students. The electronic design preliminaries should be set in combination with the direction, making the management of the electronic design competition more standardized and efficient.

4. The specific implementation of the electronic design preliminaries

Since the organization of the National Undergraduate Electronic Design Competition, there have been many students and colleges nationwide, and the number of participants is still growing year by year, making a significant contribution to the reform of college teaching. Under the influence of the electronic design competition of college students, the enthusiasm of electronic design competitions between universities and colleges and universities, the research and development of electronic design preliminaries, the professional theoretical knowledge and practical application ability of domestic colleges and universities electronic information students Great help.

The traditional form of the electronic design competition is to publish information through the Internet. The labor involved in the registration, review, and review is relatively large. The participants need to be unified in the competition venues specified by the education department, and then face-to-face with the judges. Design theory knowledge and experimental operation assessment. Therefore, some students in the same group cannot participate due to site factors, or because of the influence of other aspects of the competition on manpower and material resources, it restricts the wider promotion of electronic design competition among college students. development of. [4] Based on the development and growth of modern Internet information technology, the computer is more meticulous and scientifically applied to the electronic design preliminaries system. Under the standardized system operation, the limiting factors of space, site, manpower and material resources are reduced. It can not only make the electronic design competition more influential among the national college students, but also meet the needs of the participating students, competition organizing committee, team leader teachers and expert group teachers in all aspects of the e-sports activities, and further promote the electronic information category. Professional discipline construction.

Incorporating the virtualized electronic experimental operation design into the electronic design preliminaries brings many conveniences to the competition and at the same time improves the efficiency of all aspects of the competition. First of all, in the traditional electronic design competition, the concept of information technology application is extremely shallow, so it is only used for Internet information release and student registration. The electronic design preliminaries system can be more efficiently carried out through the integration of information technology, whether it is online registration, registration, grouping, or competition results. [5] In the judging session, the expert group teachers can also use the computer to make a good review online. Overall, the comprehensive management level of the competition organizing committee has been improved, and it has also brought convenience to the teachers of the expert group. Secondly, because the venue and space are no longer restricted, no matter where the students are, there is no need to participate

in the competition to participate in the competition and not participate in it. Moreover, the design made in conjunction with the virtual experiment platform does not need to consider the relevant factors of the experimental equipment, but affects the competition. Again, in the form of a group competition for the electronic design preliminaries, students in the same competition group can achieve off-site cooperation with the team members on the Internet. At the same time, the electronic design preliminaries system can also retain the design traces of the team members. The other members of the team can further modify and optimize the design works in the original design, and in the same design of the member login system, other groups of the same group Members will be reminded if they want to log in. In this case, avoiding the repeated design and modification of the team members greatly improves the quality and efficiency of the design work. [6] Finally, the application of the virtual experiment platform of the electronic design preliminaries makes the experimental data more accurate and provides a favorable review basis for the expert group teachers.

5. Conclusion

The setting of the electronic preliminaries system requires careful consideration of all aspects of the competition. After the application of Internet information technology to the system, the combination of virtual experiment operation and the new Internet evaluation system makes the setting of the electronic competition preliminaries more Science and norms. Optimize and improve the inadequacies of the traditional electronic design competition, effectively improve the comprehensive management level of the competition. At the same time, due to the high matching of the new preliminaries system and the requirements of each part of the competition, the competition data and results are more accurate. It has greatly helped the development of electronic information subjects. The ever-expanding influence of the electronic design competition among the national college students has positive significance for the mastery of the theoretical knowledge of the corresponding disciplines and the promotion of practical operation design.

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