

Research on Teaching Design and Practice of Computer Network Informatization in Undergraduate Colleges

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Abstract: With the gradual implementation of the teaching reform and the emergence of the computer network information teaching design, the teaching level of colleges and universities has ushered in a new development opportunity. It can not only improve students' practical ability, but also effectively develop students' creative consciousness. Informationized teaching refers to the informationized teaching ability shown in teaching, its fundamental lies in the effective design of the teaching process, the article first elaborates on its related concepts and teaching status in detail, and then puts forward the corresponding optimization countermeasures.

1. Introduction

It can be seen from the relevant documents issued by the Ministry of Education that the informationized instructional design is very important to the improvement of the teaching level in colleges and universities. The 21st century belongs to the information age. Only by continuously strengthening the combination degree of education and network, can we better adapt to the teaching objectives of The Times and train the talents needed by The Times. At present, in the process of network information technology teaching remains to be improved, such as teaching target mechanization, students can't effective use of teaching resources and teaching evaluation design system is too rigid, based on the research of the historical references, this article for the current teaching situation and improving countermeasures are expounded. It is hoped to provide some reference for related researchers.

2. College Computer Network Information Teaching Design

2.1 The Basic Content

Instructional design refers to taking students' teaching as the center, combining modern teaching equipment with traditional teaching methods, so as to achieve the goal of scientific teaching process. When using instructional design for teaching, it is necessary to make use of corresponding resources effectively on the basis of constructing network environment to provide maximum help for students' learning. It is through the scientific teaching concept, information as the basis of technology, so as to effectively establish a new type of teaching methods, so that students' learning with the characteristics of the new era. Instructional design is not only the change of the traditional teaching mode, but also the innovation of the traditional teaching idea.

2.2 The Basic Basis

Instructional design is mainly based on the following aspects as the premise of development :

(1) Instructional design takes teaching as the center. That is, teaching design pays attention to the cultivation of college students' ability, because knowledge is limited and ability is infinite. Knowledge is limited means that people may not even learn one thousandth of all knowledge in their whole life; The ability is infinite. It means that when students have the ability to learn, they can study at any time and anywhere, almost without restriction. No matter how The

Times change, they can keep pace with the pace of The Times and develop together with it, so as to contribute their own strength to the economic construction of the country.

(2) Instructional design takes information resources as the basis. With the development of The Times, people who were illiterate before were called illiterates, now not knowing the Internet is the same as illiterate. The emergence of instructional design makes students realize the importance of network technology. While improving students' learning ability, the level of students' use of the network has been appropriately promoted, and then the talents trained by colleges and universities can better adapt to the development of The Times.

(3) Taking task index as the main line of instructional design. Through the mode of task index, the inquiry psychology of students has been maximized to satisfy, thus mobilizing the learning enthusiasm of students, which can not only improve the learning efficiency of students, but also improve the learning quality of students. The traditional teaching method can only mechanically spread the textbook knowledge, long-term implementation can only reduce the enthusiasm of students to learn.

(4) Instructional design emphasizes the importance of collaborative learning. In the traditional teaching mode, teachers often teach their own courses by themselves, and teachers of various subjects in colleges and universities never cooperate with each other, which makes the teaching one-sided, which is not conducive to the improvement of students' learning ability. Instructional design enables teachers of different subjects to cooperate effectively. For example, in the teaching of Photoshop and CorelDraw, since both courses are graphic software, teachers of the two subjects can cooperate with each other in teaching, which improves the utilization of time and comprehensively improves students' learning ability.

(5) Instructional design emphasizes the evaluation process after learning, which is the driving force for students to make rapid progress. An effective evaluation link in instructional design can make students realize their own shortcomings, enhance their self-confidence in learning, and effectively improve students' learning ability.

2.3 Present Situation of Teaching Design of Computer Network Information in Colleges and Universities

At present, the computer network information teaching design in colleges and universities often uses the following three aspects for teaching :

(1) use multimedia technology for demonstration teaching and let students follow the practice.

(2) Teaching by combining practice with theory.

(3) Let the students study the theoretical knowledge first, and then carry out the corresponding practical activities. It can be found from the research of the above three teaching methods that teachers are still the main body in the teaching process and students are still in a passive position, which makes students' learning enthusiasm cannot be greatly improved, thus affecting the teaching effect of teachers.

The mode of large classes in colleges and universities ignores the personalized learning needs of students. To be specific, each student has a different basis, and large class teaching tends to produce the result of polarization: either the knowledge taught makes students feel easy, or makes students feel esoteric, both of which will reduce students' interest in learning and thus affect the quality of learning. Teachers lecture time is too long, because the teachers in teaching process is often a theoretical knowledge as the main body, this can make the students learn knowledge is not available in time, so it is difficult to a profound impression for knowledge, is not conducive to the improvement of students' learning quality, will also allow students to network information to produce a degree of misunderstanding. It is not conducive to students' further study of network technology. From the above aspects, we can see that the current computer network teaching in colleges and universities has a certain degree of change compared with the traditional teaching mode. However, from the perspective of long-term teaching development, the current teaching design methods and concepts should be improved and reformed to a certain extent.

3. The Related Practical Countermeasures to Improve the Teaching Design of Computer Network Information in Universities

3.1 Set Reasonable Teaching Objectives

The importance of targets from sport to see, if a sprinter's speed is 8 m/s, for the average person has been very quickly, but he also wants to improve their running speed, then set up the goal of 18 m/s, after tried several times, the athletes will not only give up the original goal, will also feel doubt about its ability; On the other hand, if the athlete sets a goal of 8.5m /s, he or she is more likely to meet that goal after hard work. Therefore, a realistic goal is very important, and the rationality of the goal should be maintained in the process of setting the teaching goal. In the actual teaching process, teachers can establish good communication with students. Through the expression of students' own needs, teachers can establish reasonable teaching objectives, so as to improve the learning quality of students and make the effect of teaching design more obvious. Such teaching design is not only conducive to the improvement of students' learning efficiency, but also conducive to the promotion of the friendship between students and teachers, so that the contradiction between teaching and learning is fully coordinated, so that the teaching design has been further developed.

3.2 Use Learning Resources Effectively

Learning resources are the integration of all learning information, which can provide diversified learning information for learners. When teachers carry out teaching design, they must teach students the method of finding information resources step by step. After all, with the method, students can independently look for learning resources and master more learning approaches, so as to improve the quality of learning and enhance their confidence in learning. Confidence is a prerequisite for the development of learning ability. No matter how strong the learning ability of students without confidence is, it is often unable to give full play to it effectively, because students without confidence do not believe that they can complete their learning tasks. On the contrary, those who have the confidence to learn not only succeed in any task, but occasionally excel.

3.3 Achieve Three New Targets

Want to achieve the new three rounds of the teaching goal, must work to make the following several aspects of innovation:

(1) in the teaching process should always carry out the integrity of the goal, the teaching design should not only realize the teaching task knowledge information, but also realize the teaching task of real-time information, thus effectively realize the goal of integration in the process of teaching.

(2) In order to achieve the goal of curvaceous design, the theory and practice should be organically combined in the actual process of instructional design, which not only strengthens the subjectivity of students in the learning process, but also ensures the teaching effect of the combination of teaching practice and theory, thus effectively improving the learning quality of students.

(3) The principle of collaboration should be properly applied. In the collaborative teaching between student groups and teachers, the collision of different ideas will create new teaching concepts and learning methods, which can not only improve the learning quality of students, but also improve the effect of teachers' teaching design.

3.4 Reform of Evaluation System of Instructional Design

Appraisal can not only bring positive influence to study, but also bring negative influence to study. Proper evaluation of teaching design can not only enhance students' interest in learning, but also make students aware of their own shortcomings, so that students with interest to constantly improve their own shortcomings, so as to constantly improve their learning quality; On the contrary, improper evaluation of teaching design will affect students' learning enthusiasm, and make students feel that teachers are targeted at them rather than aware of their own problems in learning. As a result, students will ignore their own learning problems and reduce the quality of learning. It can be seen that the evaluation of instructional design is very important to learning. Therefore, in the new

instructional design evaluation system, the evaluation criteria should be considered in an all-round way. This mainly includes two aspects :

(1) To communicate with students in time, and effectively grasp the importance of students on all aspects of evaluation.

(2) To establish a diversified evaluation system, only the establishment of a diversified system can meet the personalized needs of students' evaluation, so as to effectively improve the overall level of teaching design.

4. Conclusion

The effective application of instructional design has benefited from the popularization of network infrastructure in China over the past 10 years, which has effectively promoted the rapid development of universities in research, teaching and management.

Based on teaching objectives, learning resources and evaluating teaching system reform, can make information network teaching effectively design development of colleges and universities, and improve the university for the time needed for talents cultivation of ability, improve the well profile, meet the teachers' sense of honor, in improving the enthusiasm of the teachers at the same time, It can also create a virtuous circle of talents trained by colleges and universities.

References

- [1] Wang Xiaonan, Zhou Miao, Practice and Exploration of Computer Network Basic Informationization Teaching in Higher Vocational Colleges -- Taking the Attack and Defense of Network Security as an Example. Joint Journal of Tianjin Vocational Colleges, 2019(6) : 59-63,68
- [2] Zhou Jiyun, Practice and Research of Information-based Teaching Design and Training -- Taking "Entering Home Network" as an Example Tian Reading and Writing (Education and Teaching Journal), 2019 (2) : 241-242
- [3] LXing Meng, Wu Huiming, Wang T}} Design of information-based teaching curriculum based on comprehensive experimental platform -- Taking the teaching content of computer network security as an example "China Information Technology Education, 2018(15): 175-178
- [4] Zheng Liming, Research on Teaching Design and Practice of Computer Network Informatization in Higher Vocational Education, Field Information System Engineering, 2015 (6) :148