Teaching Reform of Glimmer and Infrared imaging technology

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Abstract

In order to improve teaching quality, from the perspective of teaching and learning, analysis of the current problems of teaching method proposed teacher-led instruction, independent learning at the core of Teaching Method Reform. In the reform of teaching methods, promote independent learning and enhance students' ability to reform teaching methods were discussed three aspects of culture.

Keywords

Curriculum reform, teaching methods , train abilities .

1. Introduction

Currently because of the talent comprehensive increasing demands for higher education would put a higher demand, not only requires students to master a solid foundation of theoretical knowledge and extensive professional knowledge, but also requires students to have some practical experience through teaching practice, his ownWe have learned with practice. glimmer and infrared imaging technology is a basic course, the reform of its teaching force method and teaching methods will help improve the quality of teaching, training high-level talents.

2. current major problems existing in teaching

(1) ignore the ability of students

Traditional classroom teaching is largely impart teaching. Teacher-centered teaching, focusing on indoctrination, lack of guidance, the lack of discussion class, classroom teaching, while ignoring extra-assisted instruction and answering work, teachers and students communicate less, poor classroom interaction. Subjectivity of students creative train, fewer students autonomy, has seriously affected the cultivation of students' creativity. Students in traditional passive recipients, which will enable students will think independently, limiting students' personality to play. Most students in the center of the exam Textbook learning state, learning means of a single, failing to make use of a variety of teaching resources curriculum assisted learning, the lack of true understanding and mastery of knowledge, knowledge and narrow thinking is not active, learning ability is not strong.

(2) the experimental structure is not reasonable

In practice teaching, restricted conditions, the experimental arrangement of almost all basic experiments that verification experiments and demonstration experiments, the lack of ability to improve students' ability to design and innovative experiment. Students through this experiment content, you can not access to the latest knowledge and technology, subjective ability not play, restricting the cultivation of students' creativity.

(3)Teaching resource utilization is low

Quality teaching resource sharing difficult, it did not play its due role in teaching. Courses in teaching concepts and teaching objectives still remain in the level of knowledge transfer. Foreign teachers speak little more discussion. Teachers only teach lesson plans and specify some reference books, students mainly rely on self-study, to look at a lot of reference material. Exams large, difficult, Bian to assess students' knowledge and ability and learning. They train students to raise broad knowledge, active thinking, ability to learn. Prisoners this, change teaching concepts, reform of teaching methods, learning ability is the key to teaching reform, but also the key to the improvement of teaching quality.

3. Teaching Method Reform

(1) Changing the Teaching Ideas

Clear teaching course content, teaching content through various aspects of coordination and strengthen capacity-building knowledge integration and students. Reasonable construction of the theoretical teaching, curriculum teaching new system of experimental teaching, reflect teaching and learning, theory and practice, curricular and extra-curricular teaching a combination of characteristics, promote independent learning and personality development, individualized. The compression ratio of classroom teachers in the teaching hours, increasing discussion class, increase the proportion of experimental class hours, so that students in the discussion, hands-on learning, deepen understanding and mastery of knowledge, promote students to discover new problems. Open experimental resources for students to use, so that students can make full use of different teaching resources independent study.

(2) the integration of teaching materials

We use self-made materials, primarily focused on two things shimmer and infrared. To supplement textbook content, the new additions of blackbody theory and image fusion theory.

(3) The reform of teaching methods

To improve the quality of teaching, we must first train students' interest, stimulate their curiosity which requires us to reform the old traditional teaching model to create a relaxed, interactive teaching methods to accommodate the needs of teaching. We use heuristic teaching model guided, students say consciousness. On the teaching methods is used blackboard and multimedia courseware, interactive actual situation, autonomous and other teaching methods to stimulate students' enthusiasm for change from passive learning to active learning. Actively provide students with a rich curriculum teaching resources to promote independent learning. Students can aid course teaching model, electronic lesson plans and other ways assisted learning.

(4) to strengthen the abilities of students

Construction of multi-faceted practice teaching platform to strengthen teaching, curriculum design training is an important part of the current teaching reform, is also an important means of student ability. Purpose of the experiment is to let students through hands-on, to grasp the general experimental method, the consolidation of the theoretical knowledge learned, to improve the ability to solve practical problems. Arrange experimental content plays a vital role. The content is divided into experimental validation experiments, comprehensive experiments and design of experiments. Confirmatory test is basic experiment, students ability to operate the basic instrument. Comprehensive experiment is speaking of several classroom knowledge together to achieve some functionality, it can examine the students' comprehensive ability to apply knowledge, and the ability of students hands-on. Designing experiments by the students themselves develop experimental program, write the equipment and experimental procedure used, independently experiment. Independently solve the problems in the experiment. Teachers are mainly secondary answering, using the students to discuss ways for guidance.

(5) to encourage students to participate in scientific research

Encourage some outstanding students. Students participate in national and university innovation pilot project by students independent topics, written project report, to reply to the project by the students responsible for the implementation of research projects and funding disposal. Students live through research and explore new scientific knowledge practices, help students explore the train of independent

research and innovation capacities. During the study, students need to do a lot of research and analysis related to the practice of literature, a lot of self-study and extend the knowledge and hands-on experiments to study the ability to get a great workout.

4. Conclusion

Teaching reform of glimmer and Infrared imaging technology, we are still in the exploratory stage, the reform will face many difficulties. We should follow the course of their own laws, and constantly improve and summary. Focus on the ability of students to guide students to actively use a variety of teaching resources. Using a variety of teaching methods combined with traditional teaching methods to improve student interest in learning, and strive to create conditions for students to discuss and practice to learn, effectively improve the quality of student learning.

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