Reform and Practice of Data Structure Course under the Background of Internet

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Abstract: With the continuous development and progress of science and technology in China, the Internet has been applied more and more to the actual curriculum structure, and with the continuous innovation and improvement of the reform, the data structure course based on the Internet is carried out. And a series of reform measures are proposed. Therefore, this paper analyzes and explores the reform and practice of data structure courses in the context of the Internet.

1. Introduction

The data structure course is one of the important courses in computer teaching, an important cornerstone of computer development, and an important teaching position in teaching. In the process of teaching and reforming the data structure course, teachers should use the Internet as the background of teaching to expand and innovate in teaching, and in the course of teaching, in-depth analysis of teaching status, understanding of various teaching problems, according to the learning status of students Choose the appropriate textbook for teaching guidance [1]. Through practical reforms and innovations, teachers can improve the diversity and flexibility of structural courses, and are more suitable for students' development and improvement. It is the smooth progress of data structure curriculum reform.

2. Teachers Should Make Students Have a Correct Understanding of the Data Structure

In the process of teaching data structure teaching, teachers should correct the students' learning attitude, so that students can deeply understand the importance of data structure learning. And to clarify the student's learning goals, students can actively participate in the classroom learning, teachers should guide students to learn more and explore independently [2]. Teachers should also abandon the traditional teaching concept and use students as the main body of teaching to carry out diversified teaching strategies and improve students' enthusiasm for classroom participation. Because in the traditional teaching process, teachers use a single boring teaching method to guide the teaching, students believe that the data structure learning pressure is great, and there is no practical use, which leads students not to actively learn and explore data structure, and can not actively improve the efficiency and quality of data structure teaching. Therefore, in view of the current status of such teaching, teachers should conduct a profound analysis and clearly guide students to learn and understand the data structure so that students can have a correct understanding of the data structure and help students to correctly treat the data structure [3][4].

Teachers should study the teaching materials in depth, and design a set of courses in line with the students' learning, so that the teaching can have distinct characteristics, and systematically guide students to learn and expand the data structure. Teachers should use the Internet as the background of teaching to guide the teaching, and through practical development, help students to practice in the process of learning and enhance students' ability to master knowledge points. Teachers should also have a deep understanding of the relationship between the quality of teaching materials and the state of students' learning, so that students can better use the teaching materials to improve in the process of learning [5]. In the process of teaching and guiding the data structure, the teacher should thoroughly understand the quality of the teaching materials, find the teaching materials that meet the students' learning status, expand the teaching, enhance the combination of theory and practice,
and guide students to learn theoretical knowledge step by step. Teachers should also use the typical exercises in the teaching to expand the teaching, help students to better grasp and sort out the knowledge points through the exercises, and improve the students' analytical and problem-solving skills. When preparing the supporting experimental textbooks and courses, teachers should give students a certain amount of materials to supplement, so that students can find suitable materials for the course to learn and improve.

3. Teachers Should Carefully Organize the Teaching Content

In the process of reforming and innovating the data structure course in the context of the Internet, teachers should always keep in mind the teaching objectives and create the teaching content based on the syllabus as the teaching goal. And refer to the teaching plans of the relevant institutions and the content of the textbooks, take the essence to its dross, design efficient teaching objectives, and improve the learning efficiency and quality of students. Teachers should also rigorously sort out and screen the content of the teaching, and select some teaching content with deep meaning, so that students can better think and understand in the process of learning. And teachers should also delete some messy content, to avoid students being plagued by thoughts during the process of learning. Therefore, in the process of selecting and compiling the content of the teaching materials, the teachers should highlight the key points of teaching, and gradually guide the teaching from the shallower to the deeper. And the ideas of all levels are integrated into the teaching of data structure, enhance students' ability to master knowledge points, stimulate students' enthusiasm for learning, and enable students to connect the learned knowledge to memory and promotion. Teachers should also carry out teaching concepts with students, and use students as the main body of teaching to guide and guide students, enhance students' enthusiasm for learning, and draw closer to students, so that students can understand the importance of data structure courses. And to stimulate students' awareness of learning input, help students develop good study habits, and improve the efficiency of data structure courses.

4. Teachers Should Realize the Accuracy of the Connection Between Data Structure Courses and Other Courses

In the process of teaching and guiding the data structure course, it is necessary to pay full attention to the problem of docking between the pre-requisite and follow-up courses. For example, c language is an important elective course, which contains important knowledge points and compiling principle operating system. In the process of teaching docking, it is easy to lose sight of it. In order to realize the seamless connection of the course in the process of teaching and guiding the actual data structure, teachers must actively communicate with other teachers and understand the teaching characteristics and teaching tasks among other teachers, so as to effectively connect. During the course of the lecture, the teacher can also take the first stopover of the course after the fishing, so that the students can understand and enhance the cognitive ability of the students, so that the students can have the correct attitude to the knowledge and study, especially the students are learning. Pre-requisite course program, design language, need the same teacher to teach the programming language and data structure two courses, so that in the process of telling, various knowledge points can be closely connected and guided to enhance students' learning. Ability to deepen students' learning impressions, enable students to better grasp the focus of learning in data structure learning, and enhance students' ability to understand knowledge points. And the teacher should use the relevant data structure content to guide the teaching in the follow-up teaching course, so that the students can clearly understand the characteristics of the knowledge.

5. Teachers Should Innovate Teaching Methods and Training Methods

In the traditional data structure, the course teaching guidance, teachers use a single teaching method to guide the theoretical knowledge, students are too passive to understand the knowledge
points in the process of learning. And to improve their own learning enthusiasm, so teachers should fully recognize the drawbacks of traditional teaching, enhance practical teaching guidance, improve students' analytical problem ability, enable students to follow the teacher to actively think and explore, improve students' thinking status. Due to the data structure, there is a large amount of theoretical knowledge in teaching, and it also has a rich practical course. Therefore, teachers must truly enhance students' ability to master the theoretical knowledge, so that students can use theoretical knowledge to practice. And expansion. Therefore, in the process of teaching guidance, teachers should increase practical teaching assistance, help students to understand theoretical knowledge in practice, and use theoretical knowledge to improve students' enthusiasm for learning and enhance students' enthusiasm for learning. Teachers should carry out careful curriculum design for data structure learning and practice. Because the algorithms in the data structure course are relatively classic and complex, the students' thinking consciousness is not perfect enough, and the algorithm can not understand and memorize well. Therefore, in the process of teaching guidance, teachers should guide and remember the algorithm through diversified teaching methods, so that students can better master the knowledge points. Teachers should try to talk less and conduct more instructive exercises to help students remember and improve, enhance students' understanding and stimulate their enthusiasm for learning. Data structure learning includes both theoretical knowledge and practical guidance. Therefore, in the process of teaching, teachers should fully design two parts of teaching content to provide teaching assistance, improve students' practical inquiry ability, and effectively enhance students. Knowledge point mastery. Teachers should select classical exercises to guide the teaching, enhance students' hands-on practice of developing students' intelligence, expand students' knowledge points, and enable students to flexibly grasp related topics, which helps to enhance students' data structure learning ability. Teachers should communicate more with students, narrow the distance with students, enable students to fully trust teachers, and actively learn and explore according to the guidance of teachers, and enhance students' enthusiasm for learning. Data structure learning includes both theoretical knowledge and practical guidance. Therefore, in the process of teaching, teachers should fully design two parts of teaching content to provide teaching assistance, improve students' practical inquiry ability, and effectively enhance students. Knowledge point mastery. Teachers should select classical exercises to guide the teaching, enhance students' hands-on practice of developing students' intelligence, expand students' knowledge points, and enable students to flexibly grasp related topics, which helps to enhance students' data structure learning ability. Teachers should communicate more with students, narrow the distance with students, enable students to fully trust teachers, and actively learn and explore according to the guidance of teachers, and enhance students' enthusiasm for learning.

6. Teachers use Heuristic Teaching Strategies to Guide Teaching

In the process of traditional data structure teaching guidance, teachers use the cramming teaching method to teach, students have too much psychological pressure in the process of learning can not improve their enthusiasm for learning, so teachers must deeply understand the traditional teaching The disadvantages are that the students' interest in learning is the main direction to guide and expand the teaching to promote students' enthusiasm for learning, enhance students' enthusiasm for learning, enable students to interact and communicate, improve students' learning motivation, and teachers need more students. Communicate, draw closer to students, encourage students to think and practice more, and improve students' problem-solving skills and knowledge points. In addition,
teachers should strengthen students' summary and combing of knowledge learning. Students can grasp important learning links to think and explore in learning, improve students' learning ability, and teachers use heuristic teaching strategies to enable students to actively learn and enhance students' mathematical deduction and excavation ability, so that students can With the help of the Internet to improve and improve the overall quality, teachers also. It is necessary to systematically train and guide students, enhance students' ability to summarize and improve students' logical thinking, and enable students to better study data structure courses.

7. Conclusion

In summary, we can see that teachers use the Internet as the background for data structure. In the process of teaching guidance, we should abandon the traditional teaching concept, take students as the main body of teaching, respect the characteristics of students, and use diversified teaching methods. The innovation of teaching, through the combination of practice and theory, enhances students' initiative in learning, enables students to learn to analyze and solve problems, improve students' learning characteristics, and lay a solid foundation for follow-up teaching.

References


