

Teaching Research and Practice of Database Course

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Abstract

This paper analyzes the problems existing in the traditional education of the database course, introduces the research objectives and research contents of the database course. It discusses the teaching training, the optimization of the teaching contents, the reform of the teaching methods and the network teaching. Finally it analyzes the innovation points of the course research, and points out the areas to be improved.

Keywords

Database Course, Teaching Research, Teaching Method, English Teaching.

1. INTRODUCTION

Database technology has developed rapidly in recent years. Database course is a professional basic course for computer related majors. The training aim of the course is mainly to cultivate high-tech applied talents with innovative spirit and practical ability. English is a universal language in the world. It is widely used in various companies, enterprises and universities. It is a language tool that college students must master. In order to better integrate with the world and better reflect the requirements of university training talents, it is necessary to carry out English teaching research and reform of Database Course.

2. OBJECTIVES OF COURSE TEACHING

To build a high-quality and efficient teaching team; to build a complete, advanced and three-dimensional database English curriculum system, including English syllabus, selection of foreign classic textbooks, English teaching plan, English test paper library, English CAI courseware, etc. Around the research and practice of curriculum teaching, promote teaching innovation, deepen teaching reform, share high-quality teaching resources, closely integrate teaching and scientific research, and improve teaching quality. Combined with the characteristics of the course, a unique teaching style is formed. Talents who can manage and process information in combination with their own professional fields and using database technology are cultivated for undergraduates majoring in computer science and technology. In order to achieve the level of municipal and national English courses to lay a good foundation.

3. TEACHING RESEARCH AND PRACTICE

Through the English teaching research and practice of database course, students can improve their computer theoretical level and English application ability, acquire more solid basic theoretical knowledge of database system, and consolidate the computer theoretical system; on the other hand, through the study of database course, combined with the theoretical and practical knowledge of related disciplines, they can cultivate the ability to solve practical problems[1]. In the traditional course teaching process, there are some problems, such as obsolete teaching content, single teaching method and means, neglecting the practical link, and no teaching website, which cannot meet the needs of the society for database application talents. In view of the main problems existing in the current teaching process of database, it is of great significance to carry out the research and practice of the whole English course teaching

3.1. Teacher Training

The construction of teaching team plays a very important role in the course teaching. We have always put the construction of teaching staff in an important position in order to ensure the teaching quality. It is our goal to build a teaching team with good quality and reasonable structure[2]. A lot of work has been done in the training of teachers. The main measures are as follows:

(1) Training, learning and improvement of English

We will hold English training and learning from time to time, invite famous overseas teachers to give lectures, let teachers actively participate in and speak English, effectively improve teachers' English level, and provide strong guarantee for all English teaching.

(2) New teacher guidance system

For each new teacher, a middle-aged and old teacher with rich teaching experience will be appointed as his instructor. In the first semester, the new teacher did not arrange classes, but only followed the instructor in class, learned teaching methods and accumulated teaching experience.

After one semester, the new teacher begins to teach, and the instructor will track and guide the new teacher's teaching to make him competent for teaching as soon as possible.

(3) Standardizing teaching system and regular teaching inspection

Each semester, we will organize and study relevant new teaching rules and regulations, urge teachers to carry out teaching activities in accordance with relevant systems and norms; each semester, we will implement strict teaching inspection system and listening system for each teacher, find problems through inspection, and solve them in time; including theoretical courses, experimental courses, professional training and graduation design, which will be strictly inspected, It plays a very important role in standardizing the teaching process of teachers.

(4) Encourage teachers to further study

Teachers' further study can improve the comprehensive quality of teachers and effectively improve the quality of teaching. The university has formulated a strict training plan. Every year, some excellent teachers will be selected to visit and study in famous universities at home and abroad, and teachers will be encouraged to study for doctoral candidates on the job, so as to further improve their academic qualifications and professional level.

3.2. Optimize Teaching Content

The main goal of theory teaching is to teach students' knowledge structure, and the main goal of practice teaching is to cultivate students' application ability. Add the latest technology to the teaching content, so that students can understand the latest development of database technology, so as to meet the needs of the society for database application talents after graduation[3].

The teaching content of database should take into account the relationship between traditional content and modern content, basic knowledge and cutting-edge hot spots, so that students can maximize the application ability of database in limited teaching time[4]. Therefore, the teaching content of database should keep the traditional professional basic knowledge and strive to catch up with the new professional knowledge and cutting-edge hot spots at home and abroad. Therefore, in addition to using some classic database teaching materials, teachers can also carefully select some of the latest database application materials and documents on the Internet as teaching content or for students to learn after class. It is also our main teaching goal to make students master the basic knowledge of traditional database, learn the development trend of database as much as possible, learn and master some new professional methods and theories,

so as to cultivate students' solid theoretical basis of database design and the ability to acquire professional knowledge independently.

3.3. Research on Teaching Methods

In the process of teaching, we should pay attention to the actual degree of students, adopt the method of teaching students according to their aptitude, and fully reflect the teaching concept of people-oriented[5]. In the course of classroom teaching, the basic concepts and design methods of database are emphasized to guide students to learn independently; and through discussion, research-based learning is carried out to cultivate students' innovative thinking. According to the characteristics of strong operability of this course, the teaching method of "case teaching" is adopted. Each teaching topic includes task proposal, task analysis, task realization and task expansion[6]. Through the process of solving the task, master the database related operation, and through the task expansion, draw inferences from one instance.

Pay attention to the combination of theory and practice, and train the students' ability to use knowledge, analyze problems and solve problems through practical teaching. The experiment course is the assistance of the classroom theory teaching. The students consolidate the content of the theory course through simple programming practice according to the requirements of the experiment guidance, so that the students can digest and master the content of the course in time. Select a representative database design system, focusing on the practical application of theoretical knowledge.

Build a teaching website with rich contents. The teaching website of this course provides rich multimedia learning resources and convenient discussion between teachers and students. Students can communicate at any time in the learning process and get help from students and teachers in time.

3.4. Network Teaching

The whole English course teaching website of database is also a technology application learning platform. Its core idea is to change the learning mode of students' passive learning, emphasize active inquiry learning, cultivate innovative spirit and practical ability, and create favorable conditions for students to carry out database learning.

Database English teaching website not only expands the curriculum resources, but also optimizes the structure of the curriculum content and reforms the classroom teaching methods. There are quite a few contents in the learning methods, which involve how to use the network education resources effectively, so that students can gradually master the methods of collecting, analyzing and processing information and organizing activities, and gradually cultivate the students' overall development concept and the ability to explore problems. The teaching website of this course plays an important role in database teaching.

Database English course can meet the needs of students at different levels to learn database principles and application technologies. It can not only meet the needs of undergraduates majoring in computer science and technology, but also provide learning and sharing for students of other engineering colleges and relevant technicians. The course is rich in content, resources, strong interaction, clear navigation, complete functions, and convenient for students to learn.

At present, the teaching of database English course has achieved good teaching results, so that students' comprehensive quality and innovation ability can be continuously exercised and improved in the process of step-by-step. We will continue to carry out new work in the teaching reform of database all English, make new exploration on the road of combining database technology and network technology, strive to find new entry points, make theoretical teaching and practical application better and more closely combined, and cultivate more compound and applied talents who adapt to the information society.

4. INNOVATION

First of all, we should improve our language ability and cultivate our innovation ability. The whole English course focuses on the cultivation of students' language ability, practical ability and problem-solving ability. While doing a good job in classroom teaching, it strengthens practical teaching through various ways and ways to enhance students' practical work ability. It not only improves the enthusiasm of students in learning, but also improves the effect of teaching.

Second, optimize the teaching content and reform the teaching methods. The main goal of theory teaching is to teach students' knowledge structure, while the main goal of practice teaching is to cultivate students' ability structure.

Third, professional orientation; focus on training database application programmers, and lay a good foundation for students to develop to a higher level.

Fourth, actively encourage students to participate in scientific and technological innovation projects for college students and scientific research projects for teachers; actively carry out relevant scientific research activities to promote teaching through scientific research, so as to constantly improve the teaching content and level of the course.

5. CONCLUSION

Through many years of database teaching practice, we have put forward a set of new teaching methods and systems. We refine the teaching content, reform the teaching method, make the teaching process more standardized, construct the network platform of course learning and improve the students' interest in learning and teaching effect. Through the long-term construction of teaching staff, improve the comprehensive quality of teachers and improve the quality of teaching.

In the later teaching practice, the achievements of electronic teaching plan, multimedia courseware and so on need to be constantly revised, constantly improved to adapt to various uncertain situations in classroom teaching, and also need to invest a lot of energy in building an English textbook with our own characteristics!

ACKNOWLEDGEMENTS

Shanghai Dianji University Course Construction Foundation

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