The SQL Server Database For Non Computer Professional Teaching Reform

Xiangwei Liu

Foundation Department, PLA University of Foreign Languages

2 Guangwen Road, Jianxi District, Luoyang Henan province, 471003 China

Tel: 15824909625 E-mail: liuxwletter@163.com

Received: March 15, 2012 Accepted: March 29, 2012 Published: May 15, 2012

doi:10.5430/jct.v1n1p22 URL: http://dx.doi.org/10.5430/jct.v1n1p22

Abstract

A summary of the teaching methods of the non-computer professional SQL Server database, analyzes the current situation of the teaching course. According to non computer professional curriculum teaching characteristic, put forward some teaching reform methods, and put it into practice, improve the students' analysis ability, practice ability and innovation ability, obtained the good teaching effect.

Keywords: SQL Server database, Teaching method, Teaching reform

1. Introduction

Teaching methods are the ways and means of teachers and students in order to achieve the common goal of teaching, to complete the common task of teaching(Liu, 2009, p.75-77). Therefore, there must be a clear teaching objectives, arouse students' interest in learning, develop students' analysis ability, stimulate students' sense of innovation, to improve students' lifelong learning ability. In order to achieve this goal, we should combine the characteristics of this course, coupled with a reasonable teaching methods, to achieve the expected teaching goal.

Structured Query Language (SQL) is a database query and program design language, used to access data and query , update, and management relation database system. SQL Server is a relational database management system, high safety, is a really client/Server system structure, graphical user interface, system management and database management more intuitive, simple, rich programming interface tools for users program designed to provide more choices.

Through this course, students master the basic knowledge of database systems and operation, in the analysis, design, complete the process of application-specific system, exercise the way of thinking of the student program design, training students' learning abilities, innovative thinking and innovation ability.

2. Teaching Situation

2.1 Lack of learning interest

Because of the non computer professional students lack of program design, data structure and other front following the course, so the theoretical knowledge for students study interest is not high, To really understand the theory when using, should be how to use. Therefore, students generally feel abstract, difficult to understand, cannot be linking theory and practice, the learning effect is not ideal(Xuan, 2006,p.121-122).

2.2 Course content and hours of contradictions

At present, the course content based on the relational model of the basic concepts, standard query language for relational database, relational schema normalization, database security and integrity and database application system design knowledge. As the hours less, part of the explanation principle occupy most of time, little chance to practice the operation, lead students in the learning process is very difficult to understand some of the database technology, not to mention how to practically grasp.

2.3 Over a single teaching method

Conventional teaching method is based on syllabus of teaching log, and then according to the SQL Serve database textbook chapters teaching content arrangement. Teaching methods generally use multimedia courseware for teaching, in the explanation process also supplemented by traditional methods such as whiteboard. But on the large capacity, fast rhythms, so students easily fatigue, lead to inattention. In the practice, students operate the mainly parts, according to the problems of common, teachers for presentation to explain. Although conventional teaching method can make the students master the basic knowledge and operation, complete the teaching of primary goal, but it is very difficult to stimulate students' interest in learning, training students' learning ability and innovative consciousness.

3. Teaching Reform

According to the SQL Server database for non computer professional curriculum teaching characteristic, combined with the teaching of the teachers and the students' feedback, this paper put forward the teaching content integration and optimization, take" project guide, task driven" way(Pan, 2008, p.12-25). Project and task to stimulate students to explore and seek knowledge desire, Let the theory teaching and practice teaching do many things at once, In every organic fusion of the interpretation of knowledge and skills training, "teaching, learning, doing harmony" in one, Create the learning environment based on the work process, greatly improve the learning effect.

3.1 Project guide

Non computer professional students for the course of the program design, generally there is fear, feel more difficult. First of all, teachers should arouse the students' interest in learning, to show students SQL Server development of the database management system. The article with "teaching management system" as an example, stimulates students desire for knowledge and passion for creation.

Project guide is in the process of learning, students in the teachers' help, closely around a common centre project, independent exploration and interactive collaboration, in the process of projects, train and analyze problems, to solve problems and deal with the problems. The goal of the project and the creation of teaching situation is very important, so students can take a real project in the exploration of learning. The project should have flexibility, to adapt to different levels of students, at the same time to challenging to wither, dynamic learning initiative of students. The teacher should also pay attention to the different between students learn basic difference, when necessary for individual students separate design related study plan.

3.2 Task driven

Task driven(Shi, 2010, p.90-93)suitable for application of courses teaching, students centered on a common task, independent exploration and interactive cooperation learning. Students become the main body, which can greatly enhance students' interest in learning as well as the ability to collaborate with others.

Teachers in the formulation of the task, should give full consideration to the students the ability difference, task design is not single, but also can stimulate the students' learning enthusiasm. So teachers should according to the SQL Server database content, have ladder of the design task link, then refine the task, make students understand at this stage of learning tasks and new knowledge of the relationship between, athe same time, give those who have the potential of the

students to develop a space.

In the task execution process, according to the difficulty of the task to give proper guidance, pay attention to each student's progress of task, discover in the process of students' learning problems, ensure that students learning efficiency. Completed all the tasks of the theory and practice teaching under the guidance of teachers through the task driven teaching, students not only master the basic theory of the database, and have the database design and application ability. While learning new knowledge, the students also learned how to learn ,and master the science of learning method.

3.3 Mutual evaluation and mutual learning

Students' self-assessment and student peer assessment is an effective way of learning feedback(Song, 2008, p.58-59), also the students understand their learning situation, further improve the knowledge structure, improve the comprehensive ability of the important method. In each task is completed, the teacher should organize students to show results, self and peer assessment, teachers should show the results to be evaluated, and student learning to be recognized. Evaluation can stimulate students desire for knowledge, promotes student's sense of achievement.

4. Conclusions

SQL Serve database is a practical, operation is very strong course, is also a systemic strong course. Therefore, according to the SQL Serve database characteristics, must adopt reasonable comprehensive teaching method and teaching means, learn from each other, in order to better mobilize the enthusiasm of students, improve students' ability.

References

Liu, Chang. (2009). The application of exploration of the case law and the project-driven method in the teaching practice of database theory. *Computer education*, 75-77

Xuan, Junying. (2006). Talking about database theory teaching methods. *Journal of Jiaxing University*, 121-122

Pan, Yonghui. (2008). *Database system design and project application*. (3rd ed.). Beijing: Science Press, (Chapter 1).

Shi, Jiangping. (2010). Database applied in the teaching of "task driven" teaching method exploration. *Taiyuan University Journal of Education*, 90-93

Song, Limin. (2008). The item teaching method in the object oriented programming curriculum application. *Armed police college journal*, 58-59