Application Research on Information Teaching in the Process of Analytical Chemistry Education

Yuguang Lv, Baohui Guo, Yushan Qin, Qi Shi, Lu Tian and Chunhui Shi

ABSTRACT

With the continuous development of society, human beings are in the midst of profound changes. The new information thinking has penetrated into society, study, work and life. The application of information technology has become an important direction for the teaching reform of chemistry. By analyzing the application status of information education and teaching, this paper concludes that the construction of information teaching resources needs to be improved, and the application of information teaching technology still needs to be strengthened, and proposes the idea of integrating it with innovation and development, using information technology. Improve the teaching concepts of chemistry subjects, improve teaching resources and improve the application of information technology. Due to the introduction of information technology, it can highlight the characteristics of rapid, sensitive and accurate analysis of chemistry. The combination of various teaching methods makes the application of analytical chemistry more extensive and strongly promotes the development of analytical chemistry. Change traditional teaching methods and traditional education models, and innovate teaching concepts and practical concepts. It is believed that the continuous integration of information technology in development and rapid social economy will definitely create an information environment for the whole society.¹

¹Yuguang Lv, Baohui Guo, Yushan Qin, Qi Shi, Lu Tian, College of Pharmacy Jiamusi University, Heilongjiang, Jiamusi 154007. E-mail: yuguanglv@163.com
Chunhui Shi, First Affiliated Hospital of Jiamusi University Jiamusi, Heilongjiang, 154002, China. E-mail: shichnhui66@163.com
INTRODUCTION

Chemistry is a natural science based on chemical experiments. The subject contains a relatively trivial knowledge base, so there are high requirements for students' learning ability and memory ability. In the teaching of chemical instrument analysis, "viewing, moving, remembering, thinking, practicing" is the most basic requirement for students to learn instruments [1]. For the teaching of general chemical analysis, due to the limitations of traditional teaching methods, some students do not fully grasp the use and protection of various analytical instruments. Therefore, as a teaching worker, it is necessary to seek a more vivid, visual and easy-to-understand method. Introduce students to the working principle, composition, use methods and daily protection of the instrument.

Education has always played a vital role in the traditional culture of our country since ancient times. For the traditional education that has been passed down for hundreds of thousands of years, “the theory, the knowledge, the light skill, the light practice” is the biggest traditional education mode. Features [2]. There are many drawbacks in the concept of education and teaching. For example, lack of training in hands-on and practical ability, too much emphasis on the teaching of knowledge and less attention to the cultivation of learning ability. The improvement of the education system, educational philosophy, and education system is a problem that the education sector needs to solve. Therefore, this paper mainly discusses the application of innovative teaching through information. Promote the development trend of education.

THE NEW STAGE OF INFORMATION TEACHING

Information teaching is to display courseware suitable for classroom content through network resources, using multimedia, combined with classroom content [3]. Information teaching can make teaching more vivid and vivid, and can be understood and accepted to a greater extent, which can greatly improve classroom efficiency and develop innovative classrooms.

What will information education bring us? Some scholars believe that this will become an educational revolution, and others suggest that the informational education model will replace the traditional educational approach. Perhaps information education cannot replace traditional education methods, but it will certainly become an important supplement to the current education model.
THE STATUS QUO OF INFORMATION TEACHING

At present, information technology has begun to integrate into all aspects of school education and teaching. The combination of information technology and education and teaching will enable information technology to be fully integrated into education. Some colleges and universities have already explored some more mature practices. For example, the APP software “Easy Class”, which is currently used by many college teachers and students, can provide comprehensive interactive software for teaching notification, school news, life service, and culture and entertainment. The website incorporates the current mainstream application software, and has joined the one-stop service function of education information customized for teachers and students. It has become a well-known cultural brand of the national education system [4].

To update, do not think that the use of information technology is naturally an educational innovation [5]. In fact, information technology has become a powerful tool to promote educational change. It can deepen the harmonious development of teacher-student relationship, change teaching methods and cooperation models, and innovate teaching concepts and practices to meet the learning needs of learners.

At present, most regions have limited funding and technology, lack of the concept of teaching resource platform construction and teaching resources sharing, less access to teaching resources, and low usage rate of teaching resources. Many teachers lack the full use of teaching resources. In fact, building a platform to make full use of teaching resources can enable limited high-quality teaching resources to be disseminated indefinitely. Through the Internet technology, the original educational resources can be used to exert greater value. It can be seen that the sharing of teaching resources is very necessary.

APPLICATION OF INFORMATION TECHNOLOGY IN INSTRUMENTAL ANALYSIS TEACHING

(1) The development of various industries in today's society is very rapid, and the content in the textbooks often lags behind. Therefore, using the Internet to obtain up-to-date information can be used to enrich teaching content.

(2) The use of information technology in teaching can effectively break through the limitations of traditional teaching models, and use information technology as a medium and platform. First, build the platform, then upload the teaching resources on the platform. Finally, students can also download the resources on the platform to learn.

(3) Information technology can enrich teaching methods and enhance students' interest in learning for instrumental analysis teaching. Making multimedia materials with various software, breaking through the difficulty of teaching in the study of chemical knowledge, it is often necessary to explain some macroscopic changes or phenomena through microscopic changes. Teachers also cleverly integrate Flash
animation, video, micro-course and other materials into the teaching, which makes some abstracts difficult to understand. The knowledge becomes intuitive, easy to understand, and effectively breaks through the difficulties of teaching to assist teaching.

INFORMATIONAL TEACHING TRENDS

At present, information is the premise of education reform and development. Integrating information technology into education and teaching is especially important for education optimization. This requires us to update teaching concepts, build teaching resources, improve teaching environment, change teaching methods, and realize educational information. Sustainable development will inject and train a large number of innovative technical talents for the rapid development of society in the future.

CONCLUSIONS

With the continuous development of China's information technology, and the increasing popularity, information technology has shown great advantages in the analysis of chemical instrumentation, which has brought a qualitative leap to China's education and teaching reform. The information teaching mode fully combines and exerts the advantages of new information education and traditional education, promotes the deep integration of information technology and education, and promotes the reform of the existing traditional education and teaching model. In the future, the information-based teaching model will definitely make a great contribution to the development of China's educational undertakings and have incalculable cultural values.

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