Research on the Countermeasures for the Development of Informatization Teaching Ability of University Teachers

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Abstract. The improvement of the teaching ability of college teachers' information technology has become an important factor affecting the quality of school teaching. The teaching ability of teachers' information technology directly affects the quality of students' learning and the mastery of knowledge. This paper probes into the current situation of the development of information technology teaching ability of college teachers. Combined with the teaching practice of information technology in colleges and universities, the author puts forward that the structure of college teachers' information technology teaching ability is mainly reflected in the basic operation ability of information technology, the ability to use information technology and curriculum integration, and creativity. On the basis of using three aspects of information technology teaching ability, the countermeasures for the development of information technology teaching ability of college teachers are put forward: strengthening the system construction of information technology teaching in colleges and universities, improving the software and hardware environment of information technology teaching, and strengthening teachers in information technology. The role of “learners” in teaching and the training of teachers in teaching information technology.

Keywords: College teachers; Information technology teaching; Ability.

1. Introduction

With the rapid development of Internet technology, the application of information technology teaching in colleges and universities has penetrated into all aspects of teaching. The improvement of college teachers' information technology teaching ability has become an important factor affecting the quality of school teaching. Because the teaching ability of teachers' information technology directly affects the quality of students' learning and the mastery of knowledge. The integration and integration of information technology and teaching has made it necessary for teachers to make full use of information technology to integrate teaching content in the teaching process, and to reproduce fragmented knowledge to create new teaching content and form new knowledge to meet modern standards. Student psychology and the need to learn knowledge. Mastering and using information technology teaching ability has become the core element of teacher's teaching ability development. It is mainly reflected in teachers' information technology mastery, information technology teaching and application ability, information technology teaching design ability, information technology and curriculum integration ability, information technology. Processing capabilities combined with knowledge, information technology teaching and development capabilities, information technology teaching evaluation capabilities, information technology teaching monitoring capabilities and other aspects. Only by continuously improving their information technology teaching ability and integrating information technology with the teaching process can college teachers better meet the psychological development needs of modern college students, meet the needs of college students for information technology teaching, and satisfy the "Internet +" teaching model. The need for development.
2. Analysis on the Status Quo of the Development of University Teachers' Information Technology Teaching Ability

2.1 College Teachers' Awareness of Information Technology Teaching

Our survey of college teachers' information technology teaching found that college teachers are willing to adopt information technology teaching, and the common rate of information technology teaching is very high. Most college teachers believe that this is the inevitable result of the development of the network information age. Information technology teaching is in line with the psychological characteristics of college students, which can stimulate students' interest in students. It is an important part of teaching methods and can be improved. Teaching efficiency and effectiveness to meet the learning needs of students [1]. Therefore, college teachers have a good awareness of information technology teaching, but few people can fully carry out information technology teaching reform and innovation in the teaching process, and cannot explore the existing information technology teaching resources and potential. Summary of the topic

In summary, there is a long way to go to develop an integrity education for college students. It is necessary for all departments of the entire university to truly pay attention to it, to live a "play of chess", to conduct special research, to gather the synergy of various departments, to extend the tentacles, to slowly infiltrate the students' bite management and spot education, and to train college students to work in the future. Good professional ethics to help college students grow up healthily.

2.2 College Teachers' Information Technology Teaching Knowledge and Ability

Only a good sense of information technology teaching is not enough. It is also necessary to apply information technology to classroom teaching. It has advanced information technology theory and practical information technology teaching skills. This is to realize classroom information teaching. The fundamental element of the process. Although college teachers have good information technology theory and technology, the information technology they have mastered only stays at the level of simple technology, and has not conducted systematic and effective training in the ability of information technology. The survey found that many teachers hope that the school can provide targeted and systematic information knowledge and information technology training for teachers to continuously improve teachers' information literacy and information technology teaching ability.

2.3 Information Technology Teaching Environment and Resource Construction

In the era of "Internet +", a good information-based teaching environment and the construction of information-based teaching resources have a great impact on the life and learning of teachers and students, work and scientific research [2]. Colleges and universities not only have a good information technology teaching environment, but also have a good teaching resource construction. The school has a teaching resource platform to provide teachers. Many classrooms have been converted into multimedia classrooms or equipped with advanced information teaching equipment and facilities. The survey found that many teachers are satisfied with the information technology teaching equipment and facilities of the school, but they are not satisfied with the teaching resources and platform construction. The teaching resources construction lacks individuality and specialization, and cannot meet the teachers' needs for teaching. Nor can it meet the needs of students for personalized learning resources.

2.4 The Predicament of the Development of Teachers' Informatization Teaching Ability

With the development of "Internet +" and the development of information technology teaching in colleges and universities, college teachers have become more and more aware of information technology teaching. There are more and more teachers who master information technology teaching, using information technology equipment. Courseware and the ability to integrate fragmented information are also gradually improving. In the survey, we found that the main problem that hinders the development of informatization teaching ability of college teachers is that many teachers have not systematically trained and advanced teaching information technology. The school does not regard
information technology teaching ability as evaluation, reward, promotion, and evaluation. The content does not introduce policies that encourage information technology teaching and form a good information technology teaching environment. This is also the reality of the emphasis on scientific research and light teaching in colleges and universities.

3. The Composition of University Teachers' Information Technology Teaching Ability

3.1 Information Technology Basic Operational Capability

The basic operational ability of information technology is the specific performance of college teachers' information technology teaching ability, namely multimedia, network technology and database, and the most basic information technology operation skills of "Internet +". This is the most basic level of college teachers' use of information technology teaching, and it is also the embodiment of the basic operation ability of college teachers' information technology teaching. It is also the most basic survival of college teachers as an ordinary educator in the environment of Informational, network and digital society development. Ability and application capabilities. In the "Internet +" era, the teaching environment of colleges and universities has undergone profound changes. Information technology teaching has become the dominant factor in classroom teaching, which is in line with the psychological characteristics and learning needs of college students. Therefore, only by mastering the basic operational skills of modern teaching information technology and information technology equipment, college teachers can better accept the knowledge of teachers' communication, processing, sorting, induction, selection and innovation, and better use the school. The network teaching platform and teaching resources provided can demonstrate their ability to acquire, store, process and integrate knowledge. Therefore, the basic operational ability of information technology is the most basic teaching ability of college teachers in the information-based teaching environment.

3.2 The Ability to Integrate Information Technology with Curriculum

The ability to integrate information technology with curriculum is the ability of university teachers to internalize the basic operational skills of information technology that they have mastered into their own comprehensive use of information technology to solve teaching problems. This is the second level of college teachers' information technology teaching ability, and it is also the display of college teachers' teaching ability in the "Internet +" teaching environment.

"Internet +" provides a powerful environment for openness, learning and innovation. The integration of information technology and curriculum has become an important part of the reform of information technology teaching in colleges and universities. It reflects the requirements of information technology teaching in colleges and universities on the basic ability of teachers' information technology teaching [3]. Therefore, on the basis of mastering the most basic information technology operation ability, college teachers should actively apply information technology and “Internet +” to the teaching process, and innovatively and acquire new information technology and course content. Integration, that is, in the subject curriculum teaching, the curriculum content, network resources, teaching resources are integrated, and processed into new knowledge content through information technology processing, the course content is deeply processed to form an innovative knowledge content, and use information Technology to complete the course teaching tasks.

3.3 Creative Use of Information Technology Teaching Ability

This is the third level and the highest level of the information technology teaching ability of college teachers. It requires university teachers to constantly improve their information technology literacy, learn and master advanced information technology in teaching practice, and be able to creatively use and develop the teaching ability of information technology [4]. On the basis of mastering the basic operational ability of information technology and the ability to integrate information technology and curriculum, college teachers must also use information technology to teach creatively in teaching
practice, and integrate the creative content of “fragmented” knowledge content. Processing, forming new knowledge content that is not available in textbooks and course content, can also display the processed and integrated knowledge content and use information technology to “fragment” the students. At the same time, teachers should be able to guide students to carry out innovative and personalized independent, effective and creative learning and communication, and complete their own unique works. Therefore, college teachers should constantly improve their information technology literacy, accept, learn, master new information technology in their daily study, life and work practice, and be able to use information technology to improve their teaching ability creatively. This is the highest goal that college teachers must achieve in their information technology teaching ability.

4. Countermeasures for the Development of University Teachers' Information Technology Teaching Ability

4.1 Strengthening the System Construction of Information Technology Teaching in Colleges and Universities

This is an external driving force to promote the development of information technology teaching awareness and ability of college teachers. In order to improve the quality of teaching, meet the characteristics of modern college students' learning psychology, and give full play to the extensive application of modern information technology in teaching, colleges and universities should actively establish corresponding incentive policies and rules and regulations for information technology teaching, and build a management system and evaluation of information technology teaching. The system encourages teachers to make good use of the existing information technology teaching equipment and educational resources available to teachers in schools, encourage teachers to explore new teaching resources through information technology, and apply new information technology to teaching. In this way, it is possible to ensure that college teachers use information technology in teaching and improve the teaching ability of teachers' information technology. Schools can introduce relevant incentive policies, stipulate the proportion of teachers using information technology teaching, and apply information technology teaching as an evaluation index factor for teachers' teaching ability. Information technology teaching is used as the school's regular teaching inspection content and the teacher's task completion year. One of the assessment contents. In the daily teaching practice, the supervision and inspection of teachers' information technology teaching are strengthened. There are rewards and punishments, and a long-term mechanism for information technology teaching evaluation and a normal management method are formed.

4.2 Improve the Software and Hardware Environment for Information Technology Teaching

This is an effective guarantee for improving the development of information technology teaching capabilities of college teachers [5]. The premise of information technology teaching must have corresponding hardware environment and software environment. The perfect education information software and hardware facilities environment construction is the basis of university information technology teaching. With the continuous development of network technology, information technology teaching has become an important teaching method and teaching method in college teaching process, because good and effective software and hardware information technology teaching facilities will promote teachers' enthusiasm for using information technology teaching, and can effectively improve the quality of teaching. Therefore, colleges and universities should continuously increase the construction of software and hardware environment for information technology teaching facilities. On the basis of increasing information technology teaching equipment and facilities, it is necessary to increase the software environment construction of information technology teaching and increase the teaching resources platform and teaching. The resource library, especially the sharing of teaching resources with the outside world and the external school, strives to build a variety of professional teaching platforms and high-quality teaching resources that are suitable for professional
development needs and the actual needs of teachers' professional teaching. For example: various professional teaching resources, a variety of teaching courseware, teaching videos, case and examples of teaching support, and digital resources. According to the development of the times and the development of school teaching, teachers will be provided with more effective and convenient information and software technology construction software and hardware environment construction, so as to continuously meet the needs of teachers' information technology teaching.

4.3 Strengthening the Role of "Learners" in Teachers in Information Technology Teaching

In the era of digitalization and intelligence, teachers are educators for students and learners of self-development and growth. Teachers can only learn and master modern information technology in their daily life and work, so that they can better apply information technology to teaching to meet and meet students' needs for knowledge [6]. Therefore, colleges and universities should closely focus on the information technology teaching and exchange activities carried out to improve the teaching ability of teachers' information technology, strengthen the development of information technology teaching ability of teachers in daily teaching work, and improve the role of "learners" in information technology teaching. According to the professional characteristics of teachers and the characteristics of teachers, mobilize the enthusiasm and creativity of teachers' information technology teaching, encourage and reward teachers to apply new information technology to teaching, and focus on cultivating teachers' practical ability and development of information technology teaching. It is possible to carry out irregular information technology teaching contests, the production of excellent innovative courseware, the open class of information technology teaching, the micro-curricular production competition, and the research project of information technology teaching, so that teachers can learn and communicate with each other to promote teachers. In the teaching, learn better, master modern information technology and creatively apply information technology to teaching practice, let teachers become the main body of information technology teaching and lifelong learners.

4.4 Strengthen the Training of Teachers' Information Technology Teaching Ability

The development of college teachers' information technology teaching ability mainly includes: self-learning mode, school-based training mode, post-specialized training mode, and exchange learning mode between teachers. Among these training modes, the school-based training model is the most important. In the survey, we found that many teachers are willing to participate in the training of information technology, but as for some new information technology or other teaching software and teaching resources are rarely used. Therefore, colleges and universities should increase the training of teachers' information technology teaching ability, especially the development requirements of teachers' information technology teaching ability based on strong school-based, combined with the educational information construction of schools and the actual teaching situation of information technology. According to the professional characteristics of teachers, adopting irregular multi-form and multi-faceted training work, paying attention to the basic technology and skills of information technology teaching, methods and modes of information technology and curriculum integration, design and production of teaching multimedia courseware, and development of teaching resources. And application, as well as effective inquiry teaching, collaborative learning, teaching evaluation and student-specific learning modes in the information technology environment. On the one hand, strengthen the training mode of the school headquarters, continuously improve the information technology teaching ability of teachers, on the other hand, provide opportunities for teachers to go out for training and learning, and increase the training of teachers' information technology in many aspects to ensure that teachers can master well. And the use of modern information technology teaching, and constantly improve the teaching skills of teachers in information technology.
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References


