Strategies for Improving the Professional Development of Teachers under the Background of Educational Informatization

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Abstract: As an important means of teachers' professional development, information technology has been gradually integrated into schools and become an important tool for teachers' teaching and students' learning. The wide application of information technology in teaching is the demand of the times. It can not only better improve the quality of teaching, but also promote the professional development of teachers. Based on the status quo of teacher's professional development, the text actively explores how to promote teacher's professional development through information technology.

Key words: information technology; teacher's professional development; the status quo; strategies

1. Introduction

With the rapid development of society, especially with the continuous innovation of information technology, education technology in school is also facing great challenges. There are many misunderstandings in the use of information technology by teachers. They take PowerPoint as the main technological means of teaching, use electronic blackboard writing instead of chalk blackboard and excessively use modern teaching media to play movies or things related to teaching material, which restricts teachers' professional development. The real educational informatization requires every teacher to think deeply about the relationship between information technology and teacher's professional development, and it is necessary for us to study how information technology promotes teacher's professional development. Only when teachers have good information technology operation skills and actively explore the effective implementation of information technology, can they keep pace with the times and achieve their own professional and comprehensive development.

2. The Connotation of Teacher's Professional Development

Teacher's professional development directly determines the success or failure of education reform, from the macro national strategy and the micro teaching application level. The professional development of teachers under the background of educational informatization refers to the systematic and dynamic process of promoting primary and secondary school teachers to constantly improve their professional knowledge, teaching skills and professional attitudes in the process of educational informatization. Its connotation includes the basic information literacy, the knowledge and ability to support students' learning, collect resources and carry out their professional practice with the help of technology.

3. The Current Situation of Teachers' Educational Informatization

3.1 The application of technology is not popular

Many teachers have weak awareness of technology application, fear or even refuse it. Under the influence of traditional teaching concepts, there are phenomena of "not using technology" and "abusing technology". In the municipal evaluation of "Excellent Class" activities, many experts reflected that the exquisite teaching courseware, videos and other materials submitted by some teachers did not correspond to the classroom teaching record, and even the informationalized teaching design was copied rigidly. Later, it was found that the technology was not really applied to actual classroom teaching of the teachers who had participated in the activity. Technology became the decoration of the classroom.

3.2 The development of informationalized teaching ability is insufficient

Many schools and teachers are used to applying technology for exam-oriented education service, however, they are at a loss in the subject teaching design and resource development for the new curriculum. For example, in the on-site observation and research class, both the teachers and students can use the tablet and electronic whiteboard intelligently, but the classroom is still teacher-centered, which lacks interactive communication and independent cooperative exploration. How to carry out information-based teaching design is still the biggest puzzle for most teachers. In the information-oriented environment constructed by new technology, most teachers cannot independently complete the teaching design supported by technology and do not know when and where to adopt what kind of teaching strategy.

3.3 Lack of internal motivation for professional development

Under the background of educational informatization, teachers' professional development needs strong self-development consciousness and internal motivation, which depends to a large extent on whether teachers have accumulated a lot of practical experience in informationalized teaching. However, some common factors severely restrict the professional development of teachers: (1) Teachers do not have enough time. They are always preparing lessons, giving lectures, correcting homework, taking exams and marking papers, so they have little time to learn and apply new technologies, or even optimize information-based teaching and explore new teaching and learning models. (2) The school does not have enough financial support. For example, the software and hardware need to be timely added and updated by the school. Teaching resources of education needs to be purchased or made and necessary funds are required for training related to teachers' professional development. (3) Lack of discipline practice reflection guidance. When most teachers encounter technical and teaching practice problems, there is no follow-up support and help, and there is a lack of information teaching strategy guidance and experience exchange at the teaching level.

4. The Strategies of Promoting Teachers' Professional Development

4.1 Create an information environment to improve the information literacy of teachers

First of all, schools should consider the status quo of teachers' professional development, personal values and their own needs, exploring new ways of teachers' professional development and creating an educational information environment. Secondly, the school should also provide teachers with a large number of practical opportunities and personalized working conditions to encourage teachers to develop and create new courses. Finally, there should be a reward and punishment mechanism, striving to create a good psychological environment and mobilizing teachers' enthusiasm to improve their pheromone cultivation.

4.2 Support teachers from country and information technology

The State should increase its financial support to the education sector in a scientific and reasonable way and popularize necessary hardware, software and corresponding network support to schools. At the same time, information technology support should be guaranteed, including the establishment of information technology training centers and

information technology continuing education mechanisms. Teachers have been working at the front desk for a long time and their professional development is bound to be closely related to the teaching practice. Without the enrichment of new educational ideas and the renewal of educational techniques, the professional development of teachers will inevitably stagnate. Information technology is the basis of cultivating teachers' information literacy. If teachers do not have the awareness and enthusiasm to use information technology, they cannot play their due role. Therefore, there should be a long-term mechanism and policy, so that teachers can timely supplement new knowledge and skill, broaden their horizons, break the inherent job burnout and add fresh blood to education. For example, the two policies of "National Training Plan" and "Capacity Improvement Project" have provided a good opportunity for teachers' off-job training, short-term centralized training and distance training.

4.3 Promote lifelong learning and strengthen the promotion role of information technology

The improvement of teachers' information literacy plays a certain role in promoting teachers' professional development. With the development of network technology, learning resources are integrated efficiently and how to make effective use of network information is worth every teacher's thinking. When receiving technical training, teachers should not only be eager to learn and know the importance of technology in education, but also put what they have learned into practice to promote their professional growth with information technology. In the process of implementation, traditional thinking, critical thinking and creative thinking should be organically integrated, so that technology, information, resources and media can serve to promote lifelong learning. Teachers should actively communicate with the outside world to display and share their own achievements, so that they can learn from other teachers' excellent teaching experience, which includes successful teaching and new teaching models inside and outside the school. This way can form a good channel and mode of information exchange, which plays a very important role in improving teachers' teaching ability and accomplishment. Due to the heavy teaching task of teachers, they can communicate their own teaching content and process through digital teaching and online open courses to promote the improvement of their own teaching level.

5. Conclusion

Teachers are important bearers of basic education. Under the background of educational informatization, teachers in primary and secondary schools are not only learners of technology, but also implementers of information teaching with technology, which is the key to connect students with classroom and technology. With the deepening of the construction and application of educational informatization in China, the professional development of primary and secondary school teachers has been injected with new content and technical support, and also faced with new opportunities and challenges.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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