Research on Strategies to Enhance Information Technology Teaching Competence of School Teachers in the Internet Era

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Abstract: With the continuous development of the era, the enhancement of information technology teaching competence becomes particularly crucial, which is also an important ability that school teachers should possess in the new era. Therefore, how to enhance it becomes crucial. On the one hand, it requires schools to formulate corresponding policies and provide guidance in the system. On the other hand, it requires teachers to comprehensively transform their teaching philosophies, actively improve their own qualities, so as to better adapt to the new requirements of modern teaching, and effectively improve their teaching levels.

Keywords: Higher vocational colleges; Teachers; Information technology teaching competence

Introduction

With the advent of the Internet era, informatization has already had a huge impact on various industries, including daily teaching. In the new era environment, modern teaching software such as PPT and Excel are widely used. If teachers lack sufficient information literacy, it is difficult for them to use these software correctly. This not only leads to a continuous decline in the efficiency of information technology teaching but also results in a decrease in classroom teaching efficiency. Therefore, in the new era environment, it has become particularly crucial to comprehensively improve teachers' information technology teaching competence, requiring schools to invest more efforts. In addition, teachers also need to continuously change their teaching philosophies, strengthen self-learning comprehensively, and proficiently use various modern teaching tools, thereby comprehensively improving the quality of education and teaching.

1. The Necessity of Enhancing Teachers' Information Technology Teaching Competence

1.1 The Needs of the Era and Teachers' Own Development

On the one hand, the country increasingly emphasizes the importance of building information technology teaching competence. On the other hand, significant changes in teaching tools are also essential factors. This requires teachers to improve their skills in response to the evolving information technology, thereby achieving modernized teaching. It's worth noting that information technology teaching is not simply the integration of information technology and teaching; it involves continuously improving the quality of daily teaching through the use of modern teaching tools, including creating teaching videos for students using modern software and enhancing teaching interaction through information technology tools to achieve blended learning. In summary, the continuous development of the era will bring about ongoing changes to information technology teaching, necessitating a comprehensive transformation of teachers' teaching philosophies and the efficient transmission of knowledge to students through the creation of high-quality online courses and question banks, among other means, to further enhance teaching quality.

1.2 The Fundamental Basis for Cultivating High-quality Modern Talents

Teachers themselves bear the important responsibility of nurturing talents. If they cannot possess modern information technology teaching methods, they will be unable to impart the concept of informatization to students, let alone cultivate information awareness. From this perspective, only when teachers fully grasp the enormous impact of information awareness and recognize the significant influence of new technological means on educational reform, can they help students develop information awareness in their daily learning and cultivate modern talents required for the construction of an information-based society. In conclusion, it has become particularly crucial to comprehensively enhance the information technology teaching competence of school teachers in the Internet era.

2. Paths to Enhancing Teachers' Information Technology Teaching Competence

2.1 Top-level Design to Create an Informatized Teaching Atmosphere

Enhancing information technology teaching competence is not solely the responsibility of individual teachers. Schools need to incorporate the cultivation of teachers' information technology abilities into the school's development planning and design from a top-level perspective. Based on the actual situation and development orientation of the school, an informatization planning and construction should be conducted. On one hand, it is necessary to build a smart campus platform, including intelligent classrooms and big data platforms. On the other hand, a high-quality information network is needed to support campus construction further, thereby enhancing the level of campus informatization development. In addition, to further cultivate an informatized teaching atmosphere, targeted informatization teaching activities should be carried out to provide strong support for informatized teaching. Therefore, while ensuring top-level design, efforts should also be made to organize supporting measures effectively to provide strong support for the enhancement of information technology teaching competence.

2.2 Institutional Guidance to Stimulate Teachers' Enthusiasm for Information Technology Teaching

School systems are not only essential support for the standardized operation of schools but also an important foundation for encouraging teachers to adopt information technology teaching methods. To further enhance teachers' information technology teaching competence and achieve the coordinated development of information technology and curriculum, it is necessary to establish corresponding assessment and incentive mechanisms and further quantitatively clarify actual assessment standards to stimulate teachers' enthusiasm. Additionally, teachers should be actively guided to develop multi-program courses, and daily learning quality should be analyzed through intelligent statistical methods to support the enhancement of information technology teaching competence. Moreover, more support should be provided in terms of education and teaching funds and title evaluations, enabling teachers to apply information technology teaching methods as daily habits. Furthermore, opportunities for information technology training should be actively provided to teachers to further enhance their information technology teaching competence.

2.3 Transforming Teaching Concepts to Enhance Overall Awareness of Information Technology Teaching

Whether teachers themselves can possess a strong awareness of information technology teaching is also crucial. For veteran teachers, constrained by their teaching experience and the education philosophy they received, the importance of information technology teaching has not been fully reflected, and the cultivation of awareness is lacking, requiring targeted adjustments by schools. As for newly hired teachers, they should begin nurturing this awareness from the day they start. Therefore, in the new era environment, facing new teaching requirements and the conditions of teaching subjects, teachers should integrate education and information technology, break away from traditional teaching forms, and enhance their awareness of information technology teaching through the use of information technology teaching methods, truly achieving the integration of education and the development of the era. In conclusion, teachers' educational concepts need to be transformed, abandoning traditional teaching ideologies, continuously increasing the proportion of information technology teaching, enhancing awareness of information technology teaching, providing support and assistance for overall information technology teaching, and further improving the modernization of school education.

2.4 Building a Diverse Training System to Establish the Path of Teachers' Professional Development

For the enhancement of information teaching competence, progress in consciousness is not enough; there needs to be improvement in professional skills as well. Given the current teaching situation, it's evident that teachers' information capabilities are lacking, and many teachers are not proficient in using modern educational software. Even with corresponding teaching ability training, there exist problems such as rigid training methods and insufficient coverage of personnel, which are highly unfavorable for enhancing teachers' information capabilities. Schools should consider the enhancement of teachers' information technology teaching competence as a fundamental task and develop long-term education and training plans based on actual conditions to provide support for the professional development of teachers' information technology teaching, truly empowering teachers with information technology and encouraging them to actively participate in information technology teaching training. Moreover, the integration and innovative development of information technology with the curriculum should be combined with targeted training arrangements. There should be in-depth study of educational theories and achievable information technology teaching cases as references, truly achieving the integration of theory and practice.

3. Conclusion

With the continuous development of the era, traditional educational methods will also face new challenges. In this context, building information technology teaching competence has become particularly crucial. Given the current state of teaching, many teachers in China still

adopt traditional teaching methods, indicating a clear lack of information technology teaching competence. Therefore, this paper proposes that by establishing a diverse training system, enhancing awareness of information technology education, optimizing top-level design in schools, and further enhancing teachers' information technology teaching competence, schools can adapt to the evolving demands of the era and effectively enhance the level of education and teaching. In summary, educational informatization will become a new trend, requiring teachers to continuously improve their information technology teaching competence, thus synchronizing education and the development of the era and laying the foundation for talent cultivation.

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