

Exploration of the Path to Enhancing the Informationization Teaching Ability of Ideological and Political Course Teachers in Vocational Colleges Based on Smart Education Environment

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Abstract: In the 21st century, smart education is leading the development direction of national education informatization. In response to the problems faced by ideological and political teachers in vocational colleges in informatization teaching, this article proposes a series of improvement strategies, including strengthening informatization teaching training, building informatization teaching practice platforms, guiding teachers to change traditional teaching concepts, conducting teaching competitions and exchanges, and improving assessment mechanisms. These paths aim to help ideological and political education teachers better adapt to the smart education environment, improve teaching quality, and cultivate high-quality talents that meet social needs.

Keywords: smart education, vocational colleges, ideological and political courses, teacher Informatization

1. Introduction

With the rapid development of information technology, smart education has become an important trend in the current education field. In the context of smart education, the information technology teaching ability of ideological and political course teachers in vocational colleges is particularly important. However, there are still some problems in the information technology teaching ability of ideological and political course teachers in vocational colleges. This article will conduct in-depth analysis of these problems and explore ways to improve them.

2. Existing problems

2.1 Inexperienced technical application

With the continuous development of information technology, emerging tools such as multimedia, online teaching platforms, and interactive software are constantly emerging. However, due to various reasons, some ideological and political course teachers in vocational colleges do not have a deep understanding and mastery of these emerging technologies. For example, some teachers may be confused about how to create high-quality multimedia courseware, or encounter technical barriers when using online teaching platforms for live teaching. These issues not only affect teaching effectiveness, but also weaken teachers' enthusiasm for using information technology to improve teaching quality. In addition, with the advancement of technology, teachers need to constantly learn and adapt to new tools and methods [1]. However, due to time and energy constraints, as well as a lack of continuous technical support and training, some teachers are unable to effectively integrate the latest information technology into ideological and political education.

2.2 Limited ability to integrate teaching resources

In the context of smart education, teaching resources are experiencing explosive growth, and there is a vast amount of information available online. For ideological and political education teachers, how to filter out suitable teaching content from massive amounts of information and effectively integrate it into the curriculum is indeed a major challenge [2]. This requires teachers not only to have a keen

ability to filter information, but also to possess high-level content integration skills. However, due to the lack of professional training in information retrieval and resource integration, some teachers often feel at a loss when facing massive amounts of information. Sometimes, even if relevant teaching resources are found, it is difficult to effectively integrate them with the course content and form an organic whole. This situation not only affects the efficiency of utilizing teaching resources, but also restricts the further improvement of the quality of ideological and political education.

2.3 Insufficient innovation in teaching methods

Although the smart education environment has provided unprecedented convenience and possibilities for ideological and political education teaching, some teachers are still accustomed to traditional lecture based teaching methods and lack the awareness and ability to use information technology to innovate teaching methods [3]. This is mainly manifested in the following aspects:

Firstly, some teachers have limited understanding of emerging teaching concepts and methods, making it difficult to apply them to practical teaching. For example, they may not know how to use online collaboration tools for group discussions, or how to provide immersive learning experiences for students through virtual reality technology.

Secondly, even if some teachers intend to try new teaching methods, they often find it difficult to achieve ideal results due to a lack of necessary skill support and practical experience. For example, when creating online teaching resources such as micro courses or MOOCs, there may be technical difficulties or content design challenges.

Finally, some teachers may hold a reserved attitude towards new teaching methods due to personal habits, teaching styles, or student needs, and tend to use their familiar teaching methods. This conservative teaching attitude to some extent limits the innovation and progress of ideological and political education teaching methods.

3. Root cause analysis

3.1 Delayed conceptual transformation

Some ideological and political education teachers have not yet had a profound understanding of the importance of information-based teaching [4]. They still stay in traditional teaching modes and thinking, and have not fully realized the potential value of information technology in improving teaching effectiveness and enhancing students' learning experience. In their view, traditional lecture based teaching is sufficient to meet daily teaching needs and there is no need to introduce additional information technology teaching methods. The lag in mindset has led some teachers to lack the intrinsic motivation to actively learn and apply information technology teaching methods, and they are not willing to invest time and energy in exploring and practicing new teaching methods. Due to a lack of in-depth understanding and experience of information-based teaching, some ideological and political education teachers show obvious resistance when facing the reform of information-based teaching. They are concerned that new teaching methods may disrupt the existing teaching balance, increase teaching burden, and even have a negative impact on teaching effectiveness. This concern and resistance further exacerbate their negative attitude towards information-based teaching, resulting in them rarely or even unwilling to try new information-based teaching methods in actual teaching.

3.2 Limited training opportunities

Vocational colleges have relatively limited investment in information technology teaching and training, which is not only reflected in the overall allocation of teaching resources and funds, but also particularly evident in the professional training opportunities for specific subject teachers. Especially for ideological and political education teachers, relevant training opportunities are extremely scarce. The lack of such training opportunities undoubtedly exacerbates the challenges and difficulties faced by ideological and political education teachers in mastering and applying modern information technology for teaching. The lack of skills not only limits the innovation and practice of ideological and political education teachers in teaching methods, but also greatly affects their teaching quality and effectiveness. In the context where modern students have become accustomed to digital learning environments, if teachers cannot keep up with the pace of educational informatization and cannot use modern information technology to enhance classroom interaction and attractiveness, their teaching will

be difficult to arouse students' interest and resonance, and it will be difficult to achieve the expected educational effect.

3.3 Lack of practical platform

Due to the lack of specialized information technology teaching practice platforms, teachers rarely have the opportunity to truly use information technology teaching methods in their daily teaching activities. Even if they are fortunate enough to receive relevant skill training, they often cannot put these skills into practice due to a lack of practical operating environment, resulting in a significant reduction in training effectiveness. The disconnect between theory and practice greatly limits ideological and political education teachers from deepening their understanding and mastery of information-based teaching through practical experience.

For ideological and political education teachers, information-based teaching is not only an application of technological means, but also an exploration of new teaching concepts and teaching models. However, without a dedicated practical platform, it is difficult for them to effectively apply and accumulate valuable experience in information-based teaching in daily teaching. This not only affects the improvement of teachers' teaching ability, making them feel powerless in the face of information technology teaching reform, but also restricts the promotion and application of educational informatization in ideological and political courses in vocational colleges. Due to the lack of practical opportunities, many ideological and political education teachers' understanding and comprehension of information-based teaching still remain at the theoretical level, unable to truly appreciate its enormous potential and value in teaching. This leads to a lack of enthusiasm and initiative among them when facing the reform of information-based teaching, and even generates resistance, further hindering the in-depth development of educational informatization in vocational colleges.

4. Path improvement

4.1 Change mindset and enhance awareness of information-based teaching

In today's increasingly popular smart education, ideological and political teachers in vocational colleges urgently need to change their traditional teaching concepts and actively embrace the new concept of information-based teaching [5]. How to leverage the role of modern educational technology is a key issue that ideological and political education teachers need to face directly. Therefore, ideological and political education teachers need to think rationally about their functional positioning in the context of information-based teaching, and clarify the direction for improving teaching ability.

We establish the concept of information-based teaching, constantly update teaching concepts, and promote the transformation of ideas into actions. By organizing various forms of activities such as lectures and seminars, we aim to deeply popularize the importance and significant advantages of information-based teaching to ideological and political teachers. These activities aim to stimulate teachers' strong interest and enthusiasm for information-based teaching, enabling them to fully recognize the enormous potential of information-based teaching in improving teaching quality and enhancing student learning outcomes. At the same time, it is emphasized that ideological and political education teachers are not only transmitters of ideological and political knowledge, but also guides for students' growth. They should have the ability to apply modern educational technology to cultivate students' comprehensive qualities, such as being able to use modern educational technology to construct situations and promote students' independent exploration of problems. We improve classroom interaction and student participation by encouraging teachers to use modern information technology more in the teaching process. We guide teachers to pay attention to students' learning needs and individual differences, focus on cultivating students' innovative thinking and practical abilities, combine traditional teaching methods with information-based teaching methods, and form a teaching mode that combines online and offline, thus providing students with more diverse and personalized learning experiences. At the same time, it is pointed out that ideological and political education teachers should also be researchers, keep up with the pace of the times, and become technical and scholarly teachers. Therefore, ideological and political education teachers need to continue researching in the areas of multimedia teaching materials, shared teaching resources, personalized teaching, and autonomous learning, in order to truly form a profound understanding and rich experience of information-based teaching. In order to enable teachers to truly experience the practical effects of information technology teaching, by sharing specific cases and practical experience, we encourage

them to actively apply information technology in actual teaching. At the same time, teachers are encouraged to combine research results with practical experience, continuously innovate information-based teaching methods and means, in order to better meet students' learning needs and improve teaching quality.

4.2 Building a platform and creating an atmosphere for cultivating information technology teaching ability

In the context of smart education, in order to enhance the information technology teaching ability of ideological and political course teachers in vocational colleges, schools should comprehensively build an information technology teaching ability cultivation and practical exchange platform, and provide teachers with rich learning resources and practical opportunities from multiple dimensions.

One is to actively purchase and update information technology teaching facilities, providing a solid material foundation for the information technology teaching of ideological and political education teachers. This includes accelerating the overall construction of smart campuses, from classroom environments to teacher office environments, comprehensively adding hardware equipment and teaching software related to information-based teaching, and organizing teachers to receive systematic learning and training on usage.

The second is to carry out a series of systematic and targeted information technology teaching and training activities. The content should cover multiple aspects such as multimedia courseware production, use of online teaching platforms, and application of online teaching tools, ensuring that teachers fully master the basic skills and methods of information-based teaching. At the same time, by introducing external experts for special lectures and workshops, teachers can broaden their horizons and introduce more advanced experiences and concepts.

The third is to encourage teachers to exchange experiences and learn from each other. Schools should establish a teacher learning community and regularly hold teaching salons and workshops, allowing teachers to jointly explore problems and solutions in information-based teaching, share teaching experiences and insights, and form a close learning community.

The fourth is to build an information-based teaching resource library. This resource library covers rich multimedia resources such as ideological and political teaching cases, videos, courseware, etc., meeting the diverse teaching needs of teachers. At the same time, we have developed a dedicated online teaching platform to support teachers in conducting various teaching activities such as live lectures, recorded courses, online discussions, and homework, breaking the time and space limitations of traditional classroom teaching.

4.3 Improve mechanisms to ensure the sustainable development of information-based teaching

By establishing incentive mechanisms, improving evaluation systems, and strengthening technical support, we provide strong support and guarantees for teachers' exploration and practice in the field of information-based teaching.

One is to establish an incentive mechanism. Incentive mechanism is an important means to stimulate teachers' enthusiasm and creativity in participating in information-based teaching. In order to encourage teachers' innovation and efforts in information technology teaching, schools should formulate clear incentive policies. These policies can include recognizing and rewarding teachers who excel in information-based teaching, providing them with more development opportunities and resource support. By establishing awards for information technology teaching and organizing information technology teaching competitions, we can further stimulate teachers' enthusiasm for participation and promote their continuous exploration and practice in the field of information technology teaching. At the same time, schools also need to establish a teaching incentive system, focusing on the theme of information-based teaching to carry out research incentives, teaching reform incentives, etc., using material rewards, honor rewards, etc. to encourage ideological and political teachers to continuously improve their information-based teaching skills through learning, teaching research, and other means, and achieve self-innovation and self-improvement.

The second is to improve the evaluation system. A scientific teaching evaluation system is the key to ensuring the sustainable development of information-based teaching. We incorporate the ability and effectiveness of information-based teaching into the scope of teacher performance evaluation by establishing a comprehensive teaching evaluation system. This evaluation system should focus on the combination of process evaluation and outcome evaluation, paying attention to the performance and efforts of teachers in the process of information technology teaching, as well as the actual teaching

effect and student feedback. Schools need to establish an evaluation system for the cultivation of information technology teaching abilities of ideological and political education teachers. Based on national guidance and combined with the actual situation and educational needs of the school, evaluation standards should be formulated to regulate the information technology teaching behavior of ideological and political education teachers through rigid rules and regulations. At the same time, regular assessments and evaluations of the effectiveness of information technology teaching in each grade and major will be conducted, and professional personnel will analyze the evaluation results to urge ideological and political teachers to improve their information technology teaching abilities. Through regular teaching evaluations and reflections, teachers can continuously summarize their teaching experience, improve their level of information technology teaching, and achieve mutual development of individuals and schools.

The third is to strengthen technical support. Technical support is an important guarantee for the smooth progress of information-based teaching. In order to ensure the stable operation of information technology teaching equipment and platforms, schools should provide sufficient technical support and services, including regular technical training, equipment maintenance and upgrades, as well as timely technical consultation and troubleshooting. At the same time, we should collaborate with professional technical teams to jointly develop and innovate information technology teaching tools and platforms, providing teachers with better technical support and solutions. By strengthening technical support, we ensure that teachers have no worries in the process of information-based teaching and are fully committed to teaching innovation and practice. At the same time, we should balance external supervision and internal incentives, and promote the improvement of the information technology teaching ability of ideological and political course teachers through the construction of a sound system.

5. Conclusion

In the context of smart education, improving the information technology teaching ability of ideological and political course teachers in vocational colleges is a systematic project that involves multiple efforts and practices. By changing their mindset and enhancing their awareness of information-based teaching, teachers can actively embrace new technologies and face teaching challenges with a more open and innovative mindset. Strengthening training and enhancing information technology teaching capabilities are key to achieving this goal. Through systematic learning and practice, teachers can comprehensively master information technology teaching skills and improve teaching effectiveness. At the same time, building platforms and promoting information-based teaching practices and exchanges is also an indispensable part, which helps teachers continuously hone their skills in practice, achieve the sharing and common progress of teaching resources. Finally, improving mechanisms and ensuring the sustainable development of information-based teaching provide strong guarantees for the continuous promotion of this process, ensuring that teachers can continuously innovate on the path of information-based teaching. Through a series of measures, ideological and political education teachers will be assisted in adapting to the smart education environment, improving teaching quality, and cultivating more talents with critical thinking, innovation ability, and social responsibility.

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