Research on the Professional Improvement of Teachers' Vocational Skills Training from the Perspective of Information

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Abstract. With the advent of the era of network information, our life has also been closely linked with computer and network communication technology. Under such a realistic background, how to create network-based teacher education training resources and interactive learning platform, cultivate and strengthen teachers' information and professional ability, to meet the needs of education reform and teacher professional development in the network era is particularly important.

Introduction

The Outline of Medium and Long Term Education Reform and Development Planning (2010-2020), promulgated by the Ministry of Education, clearly points out that "perfecting the training system, making a good training plan, optimizing the team structure and improving teachers' professional level and teaching ability". The prominent problem in the current education reform is the research on teachers' professional development. At present, building a learning platform suitable for teachers' vocational skills training in the context of the network information age can strengthen teachers' information-based teaching ability, at the same time, improve teachers' vocational skills, making the purpose of teachers' vocational skills development more clear and professional more prominent.

Analysis on the Connotation, Problems and Handling Principles of Teachers' Vocational Skills Training

As an individual teacher, the specific professional skills of teachers are mainly shown in the ability of organization and teaching, language expression, organization and management, and self-regulation. Proficiency in teachers' professional skills is an inevitable requirement for a qualified teacher [2]. Among them, the core issue is how to control the classroom and impart the knowledge taught to students in various flexible ways. How to ensure the realization of this core problem, teachers' basic skills training has become an unavoidable focus. The basic skills should be a combination of the above four aspects of teachers' professional skills, and be able to combine the characteristics of the course, achieve information, diversified teaching, liberate students from passive acceptance, correct their attitude towards learning teachers' skills, clear learning objectives, and mobilize their enthusiasm for learning.

At present, there are still some problems in the process of teachers' vocational skills training in some normal universities. The main manifestations are as follows: firstly, there is no stimulation of students' interest in teachers' teaching skills courses. This is because many normal colleges and universities in the examination mainly take the professional course credits as the main criterion, so that students learn in order to obtain more relevant credits, successfully complete graduation, and thus lack of interest in vocational skills courses. Secondly, under the discipline system, some teachers' colleges and universities do not pay enough attention to the training of teachers' teaching skills, over-emphasize theory, and attach importance to relevant scientific research results; therefore,
practical courses seem to be insignificant. Thirdly, some teachers who teach teachers' professional skills lack enough learning spirit and innovation ability to meet the current situation easily, so the quality of teaching in the actual teaching process can't be guaranteed, and the process is tedious. Finally, due to the status of teachers' vocational skills courses, the allocation of relevant teaching facilities is insufficient, especially in underdeveloped areas, how to effectively improve teaching facilities and training bases is an urgent problem.

In the actual teaching process, teachers' teaching skills training should follow the following principles: first, it should be gradual. Learning is a process from cognition to understanding, mastery and application. Therefore, the process of vocational skills training should give full play to the characteristics of network fragmentation learning, modularize the training content, from easy to difficult, and integrate theory with practice, so that students can gradually grow in the process of learning. Secondly, we should teach students in accordance with their aptitude and correct mistakes in time. Each student has its own characteristics. It is very difficult to realize individualized learning in the existing large class teaching environment. Therefore, we should give full play to the characteristics of network personalized learning, so that students can identify and retrieve the knowledge and skills they need, and be able to communicate with teachers through the network platform conveniently and quickly, so as to give full play to the flexibility of network learning.

**Teachers' Vocational Skills Training Should Combine Traditional Teaching Advantages**

In traditional teaching activities, there are mainly three methods about teachers' vocational skills training: case teaching method, cooperative teaching method and Microteaching Method [4]. Among them, case teaching method is a teaching method with case analysis and explanation as its main content. Its essence is to put forward a new teaching method designed for the "inculcation" teaching in the existing traditional teaching. Teachers who teach rely on actual cases play the role of designer and guide in teaching activities, and actively encourage students to put forward through self-analysis and self-judgment. Solution to the problem; Optimize the solution according to the results of the actual case. Cooperative teaching method is based on the effective interaction between students, teachers and students, and takes group cooperative learning as its basic feature. Teachers and students carry out cooperative learning activities around common goals. In the whole teaching activities, the role of teachers is no longer the leader of the classroom, they and students merge together, join in the discussion of group learning, through inspiration and guidance, and fully mobilize students' learning enthusiasm. Micro-teaching method, also known as micro-teaching, is based on modern education theory, using advanced media information technology, according to the feedback principle and teaching evaluation theory, systematic training of teachers' teaching skills in stages. Due to the use of many factors of modern multimedia teaching, in the actual teaching and training, flexibility and pertinence are prominent, making the effect of teaching and training greatly improved.

**Information Analysis of Teachers' Vocational Skills Training**

Teachers' vocational skill training curriculum design should fully absorb the advantages of the above-mentioned teaching methods, and implement the teaching effect of vocational training curriculum to every small link of students' learning. At the same time, in the actual teaching activities, the above traditional teaching skills and methods still have some limitations. For example, case-based teaching method requires higher teaching level and is more difficult for teachers; cooperative learning method requires teachers' understanding of textbooks and outstanding ability to control the classroom, otherwise the learning effect is lower than expected; Microteaching Method has become the most effective method for teachers' education and training because of its outstanding characteristics and advantages, but due to its own characteristics, it requires teaching facilities. It is very high, and the scope of teaching objects covered at the same time is limited; for the collective demands of the vast number of students, it is difficult to achieve in microteaching. Taking into
account the advantages and disadvantages of traditional teaching skills training, we should fully absorb and draw lessons from it, extract its essence, remove its dross, and combine the principles of teachers' teaching skills training, and construct a complete information network teaching skill training. The emergence of teacher education and training resources and interactive learning platform based on network platform provides an effective and feasible way to solve the above problems.

There are many modes of learning by using the network, such as network excellent courses, micro lessons, micro Lesson Videos and so on. The main focus of the related network learning platform is based on the subject system, the theoretical knowledge is explained, while the practical courses are inadequate. Therefore, strengthening the network learning of practical courses at this stage is an important way to improve teachers' professional skills, which has very important practical significance.

Through the construction of mobile learning platform for teachers' skill training, we can give full play to the advantages of Internet learning at anytime, anywhere, open and sharing, connect it with the module of teachers' skill training, and make use of the existing network teaching resources, we can not only expand the content of teachers' vocational skill training, but also expand the coverage of training objects. The openness and interaction of the platform can be achieved. Further enrich and improve the self-construction of training platform.

Through the construction of information-based teacher skills training platform, it can effectively provide practical ways for the less developed areas to improve the overall quality of normal students, existing rural primary and secondary school teachers and build a mobile education system. Because rural primary and secondary school teachers are in the specific rural environment, the related educational resources and facilities are relatively backward, and the related learning resources and vocational training are scarce. Faced with the needs of the majority of underdeveloped rural primary and secondary school teachers, it is of great practical significance to build the required mobile education system through the network platform for improving the theoretical level and practical ability of the majority of rural teachers.

**Analysis of Professionalization of Teachers' Vocational Skills Training**

Teachers 'professional level should be measured with teachers as the core, professional requirements as the standard, and personal progress and development as the goal. Teachers' main task is to complete classroom teaching, so the level and ability of classroom teaching is the basic requirement to measure the degree of teachers' professionalization. At the same time, teachers' self-development is developing with the change of social needs, which is a dynamic and continuous process. With the intensification of social competition, the society's demand for teachers' quality is becoming higher and higher. Teachers' professional level should also reflect their own continuous learning, constantly improve professional knowledge and professional quality, and maintain a higher level. Quality emotion is also an important aspect of reflecting teachers' professional level. The interaction and communication between teachers and students is not only about imparting knowledge and telling truth, but also about psychological communication to help students establish correct outlook on life, values and moral standards.

As the main body of teaching activities, how to achieve self-professional development of teachers can be studied and analyzed from the following aspects to find solutions.

First of all, as a people's teacher, first of all, we must have noble professional ethics, which is determined by the characteristics of teachers' own profession. Teachers teach knowledge in class is only a means, the real purpose is to educate people. Teachers should first have noble moral character, which is the premise of training students to have a correct outlook on life; teachers should have profound knowledge, which is the basis for answering questions and solving puzzles; teachers should have rigorous words and deeds, which is the unity of teaching and teaching, and the guarantee of training students to abide by the law and discipline. Teachers should not only be the guide of students 'learning, but also the beacon of students' growth. Therefore, abiding by professional ethics,
improving moral accomplishment and elegant sentiment are prerequisites for teachers to achieve professionalization.

Secondly, professional teachers must have abundant professional knowledge reserve and outstanding scientific and technological innovation ability. The common way for teachers to acquire new knowledge is post-service related training, which makes the space for teachers to expand and improve themselves limited. Therefore, teachers need a long-term stable platform, which can constantly update knowledge for interactive learning. At the present stage, network learning and lifelong learning have become popular. As teachers at the top of the learning chain, they should incorporate this learning concept into their own learning, enhance their knowledge and innovation ability, and lead students to develop their self-innovation consciousness and innovation ability, so that students can improve in a subtle way and grow in self-reflection.

Thirdly, all kinds of mature professional professions improve the quality through long-term systematic professional knowledge learning and long-term social practice training. So is the profession of teachers. Schools are a relatively closed environment with less contact with other sectors of society, which limits the scope of teachers' social contact, and the relevant teaching content may be out of touch with the actual social needs. How to introduce social norms and industry standards into campus in time is the key. Generally, schools employ relevant industry experts and famous teachers to give lectures on campus or send their teachers to society for short-term exercise. These methods are not long-term. Therefore, how to realize the transformation of theory and practice still needs more effective ways to solve. One of the goals of educational reform is to break through the bottleneck of practice and strengthen the cultivation of teachers' practical innovation ability. Therefore, how to realize the normalization of practice is the basis of realizing the professionalization of teachers. The cultivation of an excellent people's teacher needs normalization of practice to help realize the renewal of knowledge and the enhancement of ability.

Conclusion

Teachers' professional skills are the basis for a qualified teacher and the prerequisite for a good teacher to grow up in the future. Teachers' professional skills training is a systematic project, which requires teachers to have good teachers' ethics, love education, have advanced educational ideas, long-term study spirit, dare to break the tradition and innovate. At the present stage, the training of teachers' professional skills should take teaching information as a means, highlight the characteristics of teachers' professionalization, and improve teachers' comprehensive quality through normalization of practice.

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References

[1] Zhicheng Zhu. A Preliminary Study on the Construction of Teachers' Professional Skills Evaluation System for Normal Students [J]. Journal of Minnan Normal University (Philosophy and Social Sciences Edition), 2016(04).

[2] Yan Zhang. Research on Teaching Design Based on the Improvement of Teaching Skills of Young Engineering Teachers [J]. Journal of Hefei University of Technology (Social Science Edition), 2014 (06).

[3] Ke Li. Reflection and Reconstruction of Teachers' Educational Skills of Normal Students [J]. Journal of Hebei University of Economics and Trade (Comprehensive Edition), 2014 (01).
[4] Jianqiang Zhang. Counselors and the Cultivation of College Students' Humanistic Quality [J]. University Education, 2017 (11).

[5] Jinqian Ma. Research on the Current Situation and Demand of Teachers' Vocational Skills Training for Normal University Students in Colleges and Universities [J]. Quality Education in Western China, 2018 (17).

[6] Qingyan Han. On the Reform of Teaching Skills Training in Teacher Education Specialty under the Background of Excellent Teacher Training [J]. China Adult Education, 2018 (19).