

Virtual Teaching and Research Room: A New Form of Collaborative Teaching and Research

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Abstract

Under the background of the continuous improvement of China's information level and the comprehensive and in-depth education reform, Mu course and hybrid course have been widely used and played an irreplaceable role in the process of comprehensively promoting teaching reform with their own diversified advantages. Especially in the background of the education department attaches great importance to the construction of the grassroots educational organizations, we have actively explored the virtual teaching and research section, which is mainly organized by the grass-roots teaching internet plus era. This paper makes a detailed analysis of the relevant contents of the virtual teaching and research room, a new form of collaborative teaching and research, so as to lay a solid foundation for further improving the level of modern education in our country.

Keywords

Virtual; Department of Teaching and Research; Coordination; Teaching and Research; New Form.

1. Introduction

For the teaching and Research Office, it is a grass-roots teaching organization, which can create a good environment for colleges and universities to organize professional teachers to exchange and discuss and carry out teaching research. By making full use of modern information technology to comprehensively build a virtual teaching and research room and ensure the effective implementation of various measures for collaborative teaching and research, this is not only the exploration direction for the comprehensive construction of China's grass-roots teaching organizations in the future under the background of the information age, but also an effective way to comprehensively build a teacher teaching development community, improve teachers' teaching quality and enrich teachers' cultural literacy. Therefore, we should actively establish a number of diversified and dynamic open virtual teaching and research rooms based on modern information technology. In this process, we should not only always follow the establishment principle of "adhering to cooperation and sharing, building morality and cultivating people, and adhering to classified exploration", but also ensure the smooth completion of the construction task of "strengthening teaching research, innovating teaching and research forms, jointly building high-quality resources and carrying out teacher training". On this basis, the problems in the construction of the virtual teaching and Research Office are analyzed in detail, and the causes of relevant problems are clearly understood, so as to take effective measures to properly solve the relevant problems[1].

2. Team Building

By making full use of modern information technology, a fully functional public information platform is established, and the virtual teaching and research room is actively established based

on the platform. In this process, we must pay more attention to team building. In the process of team building, we should always implement various construction measures around the virtual teaching and research office platform. For example, how to ensure that teachers from different schools offering the same course are effectively organized, and how to take a certain major as the guide to ensure that teachers from different subject backgrounds are effectively organized. In this way, teachers can not only actively participate in various activities of the virtual teaching and research room under the guidance of the platform, but also obtain the necessary sense of belonging and achievement[2].

3. Platform Construction

For the virtual teaching and research office platform, it is a new form of collaborative teaching and research based on the public information platform. It follows two basic requirements, team formation and platform construction. In the process of building the platform, all members of the team should carry out various systematic teaching and research work based on the platform, and should be oriented towards the realization of the following functions[3]:

First, provide necessary support for all collaborative teaching and research activities carried out by the teaching and Research Office, such as initiating and participating in campus activities, sharing relevant teaching and research materials, etc. For collaborative teaching and research work, there are many contents involved, mainly including collaborative teaching and research projects, collaborative teaching design, collaborative compilation of teaching materials, collaborative design of teaching video materials, collaborative establishment of learning module and topic module, etc. Second, give active support to the collaborative teaching and research activities carried out by the virtual teaching and Research Office, mainly video conference and voice conference. Third, actively support the sharing of teaching achievements, the dissemination of teaching achievements and the application of teaching achievements carried out by the virtual teaching and research office. Fourth, publish and display the activity scenes and activity results carried out by the virtual teaching and research office. Fifth, actively organize various training activities carried out by the virtual teaching and research room, such as live teaching process, live teaching cases, etc[4-6].

4. Mechanism Construction

In the process of giving full play to the functions and functions of its new form of collaborative teaching and research, the virtual teaching and research office should first formulate a set of operation mechanism with high feasibility and effectiveness in combination with the actual situation. Since the virtual teaching and research office is composed of diversified affiliated units and teachers with multi-disciplinary background, it is not necessary to change the administrative relationship of teachers in the team, but an operation mechanism with normalization characteristics must be formulated to ensure that all work of the virtual teaching and research office always maintains a continuous operation state. In the process of establishing the normal operation mechanism, various factors need to be comprehensively considered, such as the organizational form of the virtual teaching and Research Office, the operation system of the virtual teaching and Research Office, etc. The operation system with core position is mainly reflected in two aspects[7-8]:

First, the teaching and research collaboration mechanism of team teachers, including the mechanism of publishing, responding, submitting and managing collaborative tasks; Second, co construction and sharing mechanism, including achievement release, achievement use mechanism, etc. Through a large number of experimental investigation and research, it can be found that not only each teacher participating in the virtual teaching and research room should have an open mind and open their own resources free of charge in the platform as far as

possible, but also the virtual teaching and research room should encourage teachers to actively open resources and ensure the legitimacy of teachers' opening resources through the establishment and improvement of relevant systems.

5. Content Construction

In the process of comprehensive construction of the platform of virtual teaching and Research Office, the platform should be divided into different modules according to the actual situation, so as to provide strong support for the smooth development of collaborative teaching and research activities of virtual teaching and research office and the continuous accumulation and sharing of relevant achievements. Generally, in the process of building a virtual teaching and Research Office, the platform can be divided into the following modules:

First, the module of curriculum construction and curriculum exchange. In the process of building the virtual teaching and research room with the goal of curriculum collaboration, teachers can use the curriculum construction module and curriculum communication module to publish the curriculum outline, teaching design, teaching plan and courseware, typical exercises and typical topic content in the platform of the virtual teaching and research room in the form of standardized documents, and communicate with other teachers on specific problems. Different schools can use the curriculum construction module and communication module in the Cross School virtual teaching and research room to upload the curriculum outline and teaching documents of their own schools to the virtual teaching and research room platform for publishing, so as to provide opportunities for all teachers participating in the virtual teaching and research room to discuss each other and learn from each other. In this way, teachers can not only reach an agreement on specific teaching problems, but also ensure that the teaching documents formulated have a high level of standardization, so as to provide professional guidance for the teaching committees of different schools to fully implement various curriculum reform measures. In this process, it should be noted that each school does not have to strictly follow the contents of the standardized teaching documents formed in the virtual teaching and research room, but should reasonably refer to these standardized teaching documents on the basis of adhering to the fine traditions and development characteristics of the school, so as to select the contents suitable for the development of the school and infiltrate them into the specific teaching, so as to promote the all-round development of the professional level of the school and teachers.

Second, collaborative teaching research project module. For collaborative teaching research project planning, it involves not only teachers in various schools, but also rich teaching contents of different majors. Therefore, it has high complexity. The specific contents include: specific project proposal of the teaching and research project, refining the joint declaration, tracking the research progress of the teaching and research project, making a mid-term summary of the teaching and research project, concluding the teaching and research project, summarizing the results of the teaching and research project, etc.

Third, teaching resources co construction and sharing module. The teaching resources involved in the virtual teaching and research room mainly include teaching courseware, course materials, teaching cases, teaching videos, teaching database, topic database and so on. By designing the co construction and sharing module of teaching resources, teachers can promote and apply teaching resources cooperatively under the active organization of virtual teaching and Research Office, so as to effectively realize the goal of co construction and sharing of teaching resources.

Fourth, the practical activity module of collaborative teaching reform. By creating a collaborative teaching reform practice module, teachers from different schools can carry out various teaching reform practice activities in the same platform. For example, carry out inter

school teaching demonstration activities of famous teachers, joint teaching activities of multiple schools, joint teaching discussion activities of multiple schools, etc., and effectively achieve the goal of educational equity through the co construction and sharing of teaching resources in the platform.

Fifth, the cumulative module of teaching achievements. Through the continuous accumulation of teaching achievements, we can gather points to form an area and make more from less, so as to keep improving and constantly improve. For example, in the process of compiling specific teaching materials, teachers need to carefully prepare the teaching materials according to the contents of specific chapters. However, before the teaching materials are formally formed, teachers can accumulate teaching achievements in this module and continuously improve them. Teachers from different schools can refer to and select different materials by logging in to this module, and organize them into teaching materials that can highlight the characteristics of the school. At the same time, the virtual teaching and research office platform should also set up the achievement dissemination function to facilitate the active promotion and application of teaching achievements.

Sixth, special lecture culture and teacher training module. Teachers of all schools can use the special lecture module to release special training videos, and use the teacher training module to organize live video training meetings to ensure that the training of teachers in different regions can be carried out simultaneously.

It can be seen that in the process of building the virtual teaching and research room for the whole people, we must attach great importance to the effective implementation of relevant measures such as curriculum collaboration, project collaboration, resource construction collaboration, teaching activity collaboration, continuous accumulation of achievements, sharing and co construction of achievements. At the same time, the platform should be able to provide support for the effective development of diversified communication activities such as document exchange, audio and video live conference exchange and instant message exchange, and give full play to the new form characteristics of collaborative teaching and research in the virtual teaching and research room.

6. Conclusion

This paper systematically combs the construction background of virtual teaching and research room, and deeply discusses the connotation and characteristics of virtual teaching and research room. On this basis, this paper comprehensively constructs the construction framework of virtual teaching and research room, so as to provide theoretical reference and practical basis for scientific establishment and flexible application of Virtual Teaching and research room in Colleges and universities. With the continuous deepening of the construction of virtual teaching and research room and the continuous improvement of teachers' research on virtual teaching and research room in Colleges and universities, virtual teaching and research room is bound to comprehensively promote classroom reform and learning reform, and promote the smooth development of collaborative teaching and research work dominated by teachers, just like admiring classes and mixed courses. Therefore, relevant people must start from the level of thought and action, and correctly recognize and attach great importance to the importance of building a virtual teaching and research room in improving teachers' professional ability and comprehensive quality. In the continuous combination of modernization ideas and diversified measures, ensure that the role and value of modern information technology can be truly brought into play in the construction of virtual teaching and research room, and promote the overall improvement of teachers' ideology and teaching ability. It can not only further improve the quality of curriculum construction, but also ensure the effective cross integration between various disciplines, provide positive help for the comprehensive construction of new teaching

paradigm and new teaching mechanism, and finally cultivate a large number of excellent professionals for our country.

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