Based on the construction of continuing education information platform and teaching management

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Abstract: In view of the rapid development of domestic information technology, combined with the depth of education teaching and information technology integration requirements, found the network learning platform data sharing difficulties, use efficiency is low, students learning process is difficult to real-time monitoring, teaching effect is poor, evaluation and evaluation and difficult problems, this paper puts forward the continuing education in higher vocational colleges information platform using "cloud platform + local" mixed deployment mode, realize the remote teaching, team management, student management, course management, teaching management and other integration service, provide new mode and new methods for continuing education teaching. Practice has proved that the effective use of online learning platform and management means can achieve the expected education and teaching goals and results.

Keywords: Continuing Education; Information technology platform; Teaching management; Internet; big data

1.Introduction

On November 9,2022, the Ministry of Education and other five departments issued the vocational school conditions standard project implementation plan, has been clear about the vocational school conditions construction requirements, the vocational school conditions key monitoring index by the end of 2023 must reach 80%, 90% by the end of 2025, further accelerate the vocational education to further advance, continuing education network learning platform construction also ushered in the new spring. Therefore, it is very important to strengthen the construction of continuing education network learning platform, including network teaching management, teaching platform construction, network teaching resources, teaching support environment teaching conditions, according to the continuing education students academic system and flexible combination of the centralized management and distributed management teaching requirements , through the construction of network learning platform student management, course learning, course assessment process management and performance, promote the comprehensive utilization of teaching resources and the transformation of learning environment, also for continuing education teaching reform and network teaching and management provides a reference.

2.Current Status of Continuing Education Online Learning Platform Construction

The 21st century is an era of informatization. Internet technologies such as computers, mobile terminals, big data, cloud computing, and new media are swift and violent. The network has been integrated into the clothing, food, housing, and transportation of the whole society. The online learning platform is also increasingly recognized by the society. "Internet plus education" has accelerated the upgrading and transformation of network construction. From a wired network of several megabytes to a hundred megabytes of optical fiber, from 3G to 4G, 5G mobile networks, and campus wireless WIFI are fully covered. Vocational colleges and universities have basically completed the "cloud network end" network architecture, realizing the digital and information-based network upgrading or transformation. The configuration of terminal equipment meets the conditions of network distance education and teaching, especially smart phones, tablets, and portable devices. The popularity of mobile terminals such as computers has provided strong support for online teaching, learning, examination and management of continuing education, Opened a new era of continuing education where everyone can learn, learn anytime, anywhere. At present, the construction and application of online learning platforms for continuing education in vocational colleges have not achieved the expected goals and effects, and the following problems need to be addressed:

(1) The teaching platform of continuing education does not adapt to the construction demand of "Internet plus education"

With the deepening of information application, continuing education will gradually reduce its teaching in school classrooms, and online learning has become the main way of continuing education. In particular, since the outbreak of the COVID-19 epidemic in December 2019, the application of online teaching platforms has seen exponential growth, and many online teaching platforms have seen a surge in users. The online teaching platform for continuing education generally adopts cloud deployment and local school deployment. Due to insufficient and unclear early needs and preparations, the saturation test of the service platform for the COVID-19 was not done in a timely manner, and the online teaching was carried out blindly by means of free trial or purchase of services. The number of people online on many teaching platforms exceeded the capacity of the platform, and normal access could not be achieved in case of stumbling or paralysis. Secondly, the teaching methods and tools have not been matched with online teaching management, resulting in poor quality and effectiveness of online teaching, and causing a negative impact on society. Again, the management of online teaching resources does not fully cover every major and course, and many courses can only be conducted offline. In addition, the continuing education network platform has not been upgraded and updated in a timely manner, and the use, management, and process supervision of the platform have resulted in poor performance, which has constrained the effectiveness of the platform's use.

(2)The development unit of the teaching platform lacks practical teaching experience

In the early stage of developing teaching platforms, the development unit should fully investigate the current situation of online teaching platforms at home and abroad, the application of the platform, as well as the needs of various levels such as industry policies,

schools, departments, teachers, and students. The functionality of online teaching should meet various issues such as teaching management, student management, course management, theoretical and practical course management, whether the R&D personnel are familiar with the business process of the teaching management system, whether they consider business development comprehensively for users at all levels, whether the platform development and management meet the school's management process, various professional learning management, educational system classification management, and the diverse user groups for continuing education. The practicality, flexibility, compatibility, and differences of the teaching platform have a significant impact on teaching effectiveness and usage.

(3)The teaching curriculum system and content are not suitable for online teaching

The teaching curriculum system is mainly designed for traditional offline classroom teaching, without considering the multi platform online teaching mode, whether the courseware materials, audio and video terminal devices meet the classroom requirements, and the flexibility of selecting and reorganizing tutorial content. Some theoretical courses have increased the difficulty of online teaching and classroom interaction, and the difficulty of case design for teachers has increased their workload. In addition, online teaching of some integrated courses and laboratory courses is difficult, and factors such as equipment purchase, classroom preparation, and online guidance make it difficult to achieve course offerings. In terms of instructional design, it is necessary to be familiar with both instructional design software and course production software, as well as various resource platforms, experimental platforms, live streaming software, and other applications. There are also difficulties in assigning tasks and supervising the entire process before, during, and after class, which hinders the development and quality evaluation of online teaching.

(4)The information technology level and literacy of subject teachers need to be improved

Due to differences in information levels among different schools, levels, and regions, the teaching staff of vocational colleges are mostly accustomed to offline teaching and management. There is still a significant gap in their mastery of current information technology and application in teaching, especially in the management and application of smartphone applications and online teaching platforms, which cannot keep up with the pace of the times. Insufficient understanding of ideology, unwillingness to accept new teaching concepts and information literacy, difficulty in changing traditional teaching habits, and unwillingness to try new technological applications and innovations. In addition, platform technology training and application cannot reach all teachers in a timely manner, and platform upgrades and technical support are also difficult to handle quickly and in a timely manner during use. The application of the platform requires an overall improvement in the literacy of teachers and students.

3.Construction ideas for continuing education online learning platforms

At present, online learning platforms are divided into online resources, online teaching, online teaching guidance, online training, online communication, online testing and other platforms. They mainly focus on students' autonomous online learning, supplemented by online lectures and interactive teaching. In the construction of continuing education platforms, it is necessary to ensure the stability of the platform, which not only meets the requirements of content sharing, learning process, online communication and other applications, but also meets the requirements of performance evaluation and feedback of learning outcomes throughout the teaching process. The main strategies are as follows:

(1)The online teaching platform adapts to the requirements of remote teaching

The online online teaching platform meets the requirements of concurrent learning based on the number of users in each school, supports distributed deployment of local servers and cloud platforms, adopts B/S structure, and supports J2EE architecture deployment. The platform supports online playback of documents, videos, multimedia courseware, and various audio and video formats according to standardized design requirements. It also supports third-party video resource links, including online videos, MOOC videos, Tencent, Youku, and other videos. Support online preview, learning, homework, exams, notes, online discussions, questionnaires, live broadcasts, quizzes, exams, video proctoring, and other activities on both mobile and PC devices. The information dissemination is flexible and the learning process is accurately recorded. The platform also supports template based and personalized course construction, with simple, convenient, and flexible operation. It supports a huge capacity of 1GB for personal and local cloud disks, with the ability to resume from a breakpoint. Personal space provides no less than 120GB of cloud disk space and 10G of local space. Teaching resource management is complete, including centralized and distributed management of teaching materials for teachers and students, management of textbooks and rich reference books, question bank management supporting multiple choice, multiple choice, judgment, short answer, analysis, fill in the blank, graphics and other import methods and document formats. It also supports fixed and random test papers, as well as personal and class grade statistics and result analysis. The platform has powerful statistical functions, supporting distribution charts, grades, chapter quizzes.

(2)The R&D team of the continuing education platform has rich practical teaching experience

The R&D team has developed a practical and feasible platform construction plan based on the needs of continuing education platforms in vocational colleges, which requires both professional development skills in application systems and teaching management experience. Therefore, the operation of the platform should strive for humanization, personalization, convenience, and simplicity, making it convenient for users of different age groups and educational levels. Developers should be familiar with the teaching management process and operation rules, understand industry policies and school teaching management system applications, sort out the business process of continuing education teaching management, develop detailed design plans, comprehensively record the teaching process and learning situation analysis, and be able to quickly generate various learning analysis reports. In terms of platform construction strategy, it is necessary to fully consider the shift of students' learning situation from traditional PC to mobile, and the transformation of teaching methods from imparting knowledge points, graphics and text, audio and video, live streaming, questionnaires, stage answering and other modular courses. In course design and platform application, information technology should be used to achieve the integration of person and course, avoiding online teaching

from finding people to replace learning and brush up classes. The architecture of the platform should consider system compatibility and scalability, software technology should be standardized, interfaces should be easy to expand, user roles should be graded and classified to adapt to the permissions and role divisions of different users such as managers, teachers, and students, fully considering personalization and integrity, and facilitating the use of various types of users.

(3)The teaching curriculum system and content should adapt to the requirements of online teaching

Continuing education courses mainly focus on the difference between degree education and non degree education. The curriculum system of degree education is divided into public basic courses and professional courses, with practical courses generally accounting for more than 50% of professional courses in vocational colleges. The non degree education curriculum system mainly focuses on job training, professional skills, specialized knowledge training, and vocational skills, aiming to enhance vocational and professional skills. The enrollment time is flexible, and the total amount of course hours and credits is controlled. The learning rules are independently mastered according to the course requirements, and the learning process should be accurately saved and recorded. Grades are recognized according to various personnel training standards and assessment results. Firstly, the content of continuing education courses should be targeted. Most students have certain work experience, rich work experience in their positions, and clear training objectives. With work problems and educational upgrading needs in mind, they hope to improve their ideological concepts, work abilities, and educational levels through learning, with stronger purpose and pertinence. Secondly, the curriculum of continuing education has a longer learning time and is more flexible. The learning content is also relatively novel, which can effectively integrate new technologies, theories, and methods into practical work and improve one's abilities more conveniently and quickly. Once again, the curriculum of continuing education should choose the corresponding major based on the student's career position, and the teaching content can be formulated according to the position. Everyone should improve their professional skills by solving problems and focusing more on practical work, with a strong sense of purpose.

(4)Improvement of the informatization level and literacy of the teaching staff

At the beginning of 2020, affected by the COVID-19, schools across the country carried out online teaching of "non-stop classes", which ushered in new development opportunities for continuing education. In particular, information technology provides a strong guarantee and technical support for education and teaching, and online teaching has also become the main channel for teachers to improve their information capabilities. Various regions and schools have increased the construction of online courses, the improvement of information technology capabilities, and competitions and training in information technology teaching design, which have enhanced teachers' ability to apply information technology. At the same time, efforts have been made to institutionalize, normalize, and standardize the improvement of information technology capabilities. The level and application of teachers' information technology have been included in the teacher evaluation system, and incentive mechanisms have been used to encourage teachers to participate in competitions and evaluations such as MOOC courses, micro courses, open courses, and high-quality courses. This has created a good atmosphere for teachers to consciously participate in the construction and application of online courses, enhanced their information technology level, improved their information literacy, and better served continuing education.

4.Conclusion

The construction of online learning platforms has become an inevitable requirement and important means for the development of continuing education teaching. According to the characteristics of continuing education teachers and students and the requirements of talent training programs, through the construction and application of information technology platforms, focusing on student-centered self-learning, remote management of teaching management as support, and course knowledge units as the main line of learning content, supporting blended online and offline teaching and management, realizing business management process, institutionalization, and standardization, fully utilizing information technology to promote the deep integration of continuing education teaching and management, innovating teaching management models, continuously exploring innovative teaching methods and information application means, building an information-based teaching system and learning environment for teachers and students' self-learning and lifelong learning, accelerating the construction of smart campuses in schools, and helping continuing education informationization to develop in depth.

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