Research on the Development of Teachers' Innovative Ability in the Construction of Smart Campus

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Abstract. The core of smart campus lies in the transformation of digital learning methods and teaching methods, which mainly depends on the improvement of teachers' overall innovative consciousness and ability. For this reason, it is necessary to study the connotation of teachers' innovative ability in the construction of smart campus in a clear and systematic way, so that teachers can change from traditional teaching to innovative and intelligent teaching, and lay the most basic human foundation for the construction of smart campus.

Keywords: smart campus; teacher; innovative ability.

1. The Connotation of Smart Campus

The smart campus is the "high-level form" of school education development, which is based on "Internet+" and takes network technology as the core, and it provides a two-way communication and exchange platform for teachers and students timely through various transmission means of network information. It is a unique campus materialization system that integrates and seamlessly link network technology, terminal equipment, and school education management resources under the "Internet +" background. Through the campus information exchange platform and resource sharing and integration, smart campus reflects the integration of the school's various routine work and information work, the school departments are integrated with various work mechanisms and systems at the institutional level, and the resources sharing and intensive on the information platform are effectively use and integrated, the integration of teaching resources and classroom learning, the integration of school business processes and the services of teachers and students, the integration of various cultural and educational activities on campus with the external environment, and "deep information" that is efficient operating in many aspects, and make information technology truly return to a new intelligent development stage of "people-oriented".

2. The Connotation of Teachers' Innovative Ability in the Construction of Smart Campus and Its Development Goal

Under the smart campus environment, in order to meet the needs of smart education, teachers need to comprehensively and systematically use intelligent information technology and modern teaching equipment to carry out in-depth analysis and processing, integration and innovation of educational content, develop and utilize teaching resources efficiently, and everything stems from the improvement of teachers to innovative ability.

(1) Teaching choice ability

Teacher selection ability is an important part of teachers' professional development and a part of teachers' innovative ability, which can be used as an important indicator to judge teachers' professional level. It is the ability of teachers to choose teaching resources for teaching design in the preparation stage of teaching. It mainly includes the choice of teaching objectives, the choice of teaching content, and the choice of teaching methods. The teacher selects and moderately adapts, expands and develops the teaching content and teaching resources according to the actual situation of the students' learning and the teaching progress. Especially in the network age, the ability of teachers' teaching choice is an important aspect that directly affects the teaching quality and effects, it is also a guide for students to actively learn and choose. Of course, the choice does not mean that the teachers simply copy and extract the external teaching information resources, but handle, expand and reconstruct on the basis of understanding.

(2) Teaching integration ability

The teaching integration ability is that the teachers integrate different teaching factors in teaching, such as different teaching objectives, teaching content, teaching strategies, teaching information resources into a harmonious whole that can be accepted and understood by students, teachers should integrate teaching objectives and carry out teaching activities according to the pre-selected teaching resources and students' knowledge, ability, technical mastery and so on. In the era of "Internet +", the teacher's teaching integration ability is to transform the teaching content into information learning resources, namely compile the course content into electronic documents, multimedia courseware, online courses, mooc, etc., and provide students for sharing. In addition, through the integration of teaching resources, teachers also create a teaching scene and atmosphere that is conducive to student learning, and continuously improve students' learning enthusiasm and students' learning efficiency. Therefore, teaching integration ability is an important part of the teaching creativity of college teachers.

(3) Application ability of intelligent technology

The information technology is integrated into the teaching practice of various disciplines, which has become a prominent feature of modern teaching. The implementation of smart teaching has subverted the traditional teachers' lesson preparation and class teaching routines, and realized the transformation of teaching methods and learning methods. Teachers should not only make effective use of online lesson preparation, share lesson preparation, and a variety of rich cloud teaching resources, but also can generate teaching resources suitable for teachers in real time, and through continuous modification and addition, generate their own personalized cloud preparation resources library, and convenient for peers and students to download and use all the time and space; teachers should also adopt the function of intelligent campus information, widely absorb the "wisdom" participation of students, guide students to effectively expand their learning content through the "smart classroom", and create a new student-centered personalized and intelligent teaching model.

(4) Data mining and accurate analysis ability of multidimensional teaching

In the era of big data, being good at fully mining and accurately analyzing educational and teaching data has become a person with data wisdom and an important part of teachers' teaching innovative ability. In the face of mass data, if teachers have strong ability of data mining and accurate analysis, they can comprehensively collect and sort out all kinds of valuable data generated in the process of students' learning, with the help of data information processing technology, they can qualitatively and quantitatively analyze and statistics the abundant data aggregated and collected, and then get relevant factors about the students' learning results, learning methods, learning process, learning resources and other factors., find out the problems and causes in the teaching process, so as to carry out appropriate teaching design, teaching management and teaching evaluation, produce more flexible, accurate and effective personalized teaching solutions, and greatly enhance the expected value of teaching effect.

(5) Decision-making ability of smart teaching

All teaching activities, including classroom teaching, are inseparable from the Decision-making ability of smart teaching. In the smart education activities, teachers must abandon the past methods that rely on experience to determine the teaching behavior, fully analyze the multidimensional data, "data" records the "behavior track" of each student, and "transparency" describes learning characteristics of each student, improve teaching behavior based on the results of data analysis, and form a smart teaching decision. Students' learning behavior data will continuously catalyze teachers' inherent teaching actions, prompt teachers to adjust teaching plans and methods timely, and implement new teaching measures. If teachers can form innovative teaching thinking in the teaching process and have this kind of decision-making ability of intelligent teaching, they will gradually learn to manage and utilize student learning behavior data, optimize their teaching level, and better improve the number of student fans.

(6) Ability to digest with external wisdom

Modern teaching emphasizes that teachers should constantly strengthen communication and connection with the outside world, introduce external wisdom into their own inner wisdom, and integrate them to form the effect of "1+1">2. Only by integrating with external wisdom can teachers

promote their sustainable and innovative development of teaching and professional skills. Through the smart campus platform, teachers can change the closed state of loneliness, obscurity, and individual teaching experience, and communicate, explore, cooperate, and learn online with peers, elites, and experts across time and space, integrate and learn from the valuable educational experience of the brothers and universities, so that their teaching and research can be integrated into the world's disciplinary development environment, and promote the rapid growth of their professional ability.

(7) Evaluation ability of smart teaching

The traditional teaching evaluation emphasizes evaluation which integrates qualitative and quantitative; the evaluation of teachers' "teaching" and students' "learning" is often determined by the scores of exam results. Under the smart campus environment, teaching evaluation use multi-dimensional, dynamic big data, based on the teacher-student interaction and student learning process and carry out a comprehensive, intelligent comprehensive evaluation. The teacher's evaluation ability is mainly based on the in-depth understanding of various test-related terms, evaluations, different types of tests and test scales, and carry out real-time collection and analysis of student exams and homework test results, use the "data statistics" function to intuitively present the overall situation of the class and the types of high-score and low-score group, and timely carry out analysis of the cause of error, according to the emotions and attitudes expressed by the students in the learning process, carry out the scientific, objective and comprehensive evaluation, and form a scientific smart teaching evaluation system .

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