

## Research on the Basic Concept of Smart Classroom Teaching

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**Abstract:** The wide application of big data technology in the field of education has prompted the birth of smart classrooms and has become the focus of today's information education. This paper outlines the generation, practice and application value of the smart classroom concept, expounds the application of cutting-edge technology to reform and enhance the premise of the smart classroom model constructed by the teacher, and explores the path of the construction of the smart classroom in China.

### 1. Introduction

The intelligent classroom teaching proposed for knowledge classroom teaching refers to the teaching content, teaching methods and teaching strategies in the smart classroom, which are based on the wisdom development of students, and based on the teaching wisdom of teachers, based on the unique curriculum of teachers. On the basis of understanding, in the teaching design, teaching implementation and teaching evaluation, the teaching process of “transforming into wisdom“ and promoting the growth of students' wisdom is embodied. The teaching concept is not only a rational understanding of teaching, but also an ideal pursuit of teaching. It is the unity of rational understanding and value pursuit. It is the teaching value orientation formed by teachers in teaching practice, and it is a kind of relative stability and continuity. And the ideal concept system of teaching and understanding of directionality. The teaching concept is the rational fulcrum of the teacher's teaching behavior, and it is the internal motivation of the teaching practice. The teaching reform must take the breakthrough and update of the teaching concept as the guide. The essence of smart classroom teaching is a kind of teaching that pursues creativity and wisdom. Specifically, its teaching philosophy is mainly reflected in the following three aspects: the pursuit of students' wisdom and development as the direction of teaching purpose, to emphasize the teacher and student sentiment Communication is the ontological teaching process concept, focusing on the teaching evaluation concept focusing on the development process of students' wisdom.

### 2. The Construction Background of Wisdom Classroom Concept

Based on the ideas of Piaget and Bruner and the constructivist learning theory formed by cognitive processing theory, the mastery of knowledge is that learners rely on the power of others in specific places, rely on specific knowledge resources and use meaning construction methods to obtain. The full-featured, learning-efficient classroom environment must be created with four elements: context, collaboration, conversation, and meaning construction. The Smart Classroom fully caters to the requirements of constructivist learning theory for efficient classroom scenarios. With the latest technology and intelligent equipment, it aims at the three major nodes before, during and after the course of teaching, and creates and simulates a classroom learning environment that is more realistic. To increase the communication between teachers and students and students, enhance the cooperative learning and discussion of learners.

The efficiency of the teaching process can be displayed through data analysis, such as the student's attendance rate, the commonality of the homework, the participation of classroom activities, the frequency of teacher-student interaction, and the student's activity on the classroom content. Based on the above objective data, education managers and teachers can intuitively judge and control the teaching links and student behaviors, thus providing a data reference for the

formulation and revision of teaching decisions. Teachers in traditional classrooms should teach dozens of students, and it is difficult to grasp the differences in individual learning. The intelligent classroom based on emerging information technology adopts full-process control and intelligent push technology to monitor pre-study materials and learning resources before and during class, monitor students' learning progress and effects, accurately grasp the dynamic learning progress of individual students, and aim at teaching students according to their aptitude.

The wisdom classroom is composed of five parts: teaching process, mobile terminal, application support, big data evaluation and resource service. Its main application value is reflected in: realizing dynamic learning analysis and evaluation, constructing new classroom form and learning environment, and optimizing cognition. Goal and instructional design, reorganize teaching processes, and transform classroom teaching methods. In the smart classroom, no matter which teaching link or application value, the teacher's accurate grasp of big data analysis technology plays an irreplaceable core role. In the era of big data, an important way for teachers to improve teaching is to have data intelligence.

### **3. The Basic Concept of Smart Classroom Teaching**

The essence of the smart classroom is to explore the teaching mode of innovation and wisdom. The fundamental concept covers the concept of teaching aiming at exploring the development of students' wisdom, the teaching process view focusing on the relationship between teachers and students and intelligent communication, and the development of students' intellectual wisdom. The process is the three aspects of the teaching evaluation concept.

**Teaching Objectives to Explore the Development of Students' Wisdom** The traditional teaching model is influenced by Herbart's concept of rational knowledge. The teaching value pays more attention to students' understanding of the outside world and the grasp of rational understanding. With the rise of humanism and the beginning of the practical education school, the value of teaching tends to be diversified. Classroom teaching pays more and more attention to the acquisition and learning of procedural knowledge. At the same time, the development of students' moral and emotional values is gradually incorporated into the important goals of teaching, which are mainly reflected in the following aspects.

**Emphasizing the students' innovative spirit and ability to develop wisdom** The profound significance of the classroom lies in caring about the future and the unknown world. Students who cultivate wisdom must teach them not to blindly succumb to textbooks or authority, so that they dare to question and dare to use science. Spiritual and innovative thinking examines traditional theories and customs and interprets and reconstructs the outside world with a unique vision. Innovative ability is a complex comprehensive ability, which is mainly composed of many factors such as innovative thinking, innovative personality and human knowledge and skills. Among them, innovative thinking is a high-level process of human psychology, an important symbol of innovative talents, and human innovation. At the core of the ability, the focus is on the fluency, flexibility, originality and ingenuity of thinking. The innovative personality is concentrated on innovative personality qualities such as curiosity, imagination, challenge and adventure. The "new" of students' innovative ability is mainly reflected in the perspective of thinking and the novelty of methods. Therefore, wisdom teaching should encourage students' unique viewpoints and novel conclusions, form their own unique way of thinking, be good at breaking through the routine, and understand from the perspective of innovation. The essence of things, propose solutions to problems; train students to find new starting points for Wanfang data and mining thinking, find new perspectives of thinking, and combine various thinking methods such as forward and reverse, divergence and aggregation. Generate innovative results.

**Emphasizing the learning wisdom of students** The wisdom of human beings is reflected in dealing with problems, coping with crisis and thinking about life. The wisdom of student learning is reflected in the ability to command knowledge. Students' new views, new knowledge and new ways of external things are the promotion of experience, the re-emergence of skills and the beginning of wisdom. Learning is both a cognitive activity and a practical activity. Learning is to turn into

wisdom, which is achieved through understanding the world and understanding one's interaction process in practice activities. Smart classroom teaching starts from the harmonious development of students and is based on knowledge acquisition and experience internalization. The construction of wisdom and the generation of emotions. The cultivation of students' learning wisdom in the classroom is mainly realized through the teacher's learning strategy and learning ability teaching. The teacher uses the teaching material as the carrier and has the plan, purpose and system according to the individual learning conditions of the students. In the process of imparting knowledge, the students are taught to master the learning strategies, learning skills, learning rules and learning methods. The teachers promote the development of students' innovative thinking through the teaching strategies of the students. The teachers use the learning strategies to teach and bring the results. It is the change of some innovative qualities of students. As students' quality of innovation changes, they will constantly generate new insights, acquire new knowledge and master new methods. These new insights, new knowledge and new methods are a sublimation of experience. A reproduction of ability, a kind of wisdom.

Emphasis on students' concern for life wisdom Life wisdom refers to “the ability of individuals to use their knowledge and experience to examine their relationship with others, society and the outside world, and to make rational, decisive judgments and choices about these relationships“. Through classroom experience and experience, students proactively internalize and promote the knowledge acquired by individuals into a smart understanding of life.

Life wisdom refers to the subject's use of existing knowledge and experience to positively examine, understand and understand the relationship between himself and others, with society and nature, and to give history, future and many possibilities to others, society and nature. The wise, courageous judgment and choice of the relationship. Life wisdom points to a positive, good, sustainable living and living state of human beings, pointing to the practice of human present and future life values. The purpose of teaching is not only to enable students to acquire knowledge, but also to highlight the survival value of knowledge, so that in the encounter and interaction with knowledge, in the realization of knowledge, obtain the positive meaning of survival that is conducive to the good life of human beings. Individuals learn to choose and enjoy knowledge, seek the power and meaning of survival or life in the knowledge world, and constantly improve the wisdom of survival is the full meaning of wisdom teaching. Classroom teaching is essentially an activity generated for the wisdom of students. Under the guidance of teachers' teaching wisdom, students consciously put their own knowledge and theory through the process of experience, experience, accumulation and generation in the classroom. And sublimation is the wisdom of understanding life.

The concept of teaching process with the core of teacher-student emotion and wisdom communication. Different from the traditional teaching concept, the teaching process of the intelligent classroom focuses on the cognitive and emotional communication between teachers and students. It is a process of emotional exchange, intelligence, intelligence and intelligence. It is the interaction between teachers, students and students. The process is a process of joint creation between teachers and students.

The generation of wisdom is based on knowledge and experience and is enhanced in the exchange of knowledge and experience. The interaction between teachers, students and students generates the wisdom of “teaching and learning“ through the stimulation of wisdom, effectively promoting the exchange of experiences in the cognitive, emotional and value aspects of teaching subjects. In the classroom teaching, they understand each other through language or non-verbal means, appreciate and affirm each other, and develop together in sharing with each other. Through the collision of thoughts and hearts, teachers, students and students gain the growth of experience, the improvement of ideas and the sublimation of spirit. The difference between them is objective. This difference is not only reflected in the difference of knowledge, experience and emotional experience, but also in the differences in values. It is also inevitable in personality characteristics, attitudes and ways of life. has a difference. Therefore, in the process of interaction, students interact with each other in terms of cognition and emotion, and they must also interact with values. This

influence is subtle and unconscious, but the impact on students is often profound.

A teaching evaluation concept focusing on the development process of students' wisdom. The Smart Class breaks through the old ideas of selecting students, pays attention to the development of individual students, and promotes the development of students' potential and the formation of wisdom. Among them, in the evaluation of the development of students' wisdom, pay special attention to the following two points.

Should focus on the comprehensive development of students. The classroom should not only pay attention to the students' knowledge and rational development, but also pay attention to the development of students' emotions, wills and values. Only in this way can we not ignore the students' learning attitude and learning motivation. Under the impetus of the new curriculum reform, the three-dimensional expression of the textbook with the main content of student activities has replaced the linear expression of the past with knowledge narrative. This inevitably requires teachers to guide students to participate in the teaching process as much as possible, and through the classroom teaching evaluation process, especially through the evaluation of the student learning process, change the student learning style, change the teaching mode, and optimize the classroom teaching. "We generally judge the validity of a class from the emotional state, participation state, state of mind, and state of communication."

Must pay attention to the differential development of students. American psychologist Gardner believes that the test or examination classifies and labels students, often judges the weaknesses and weaknesses of students, not the strengths and strengths of students. . Therefore, teaching evaluation should pay more attention to students' starting point differences, potential differences and personality development differences, and develop diversified teaching evaluation indicators and systems. The core of teacher data intelligence is that teachers apply data to monitor student learning, identify problems, analyze problems, and identify solutions to problems, thereby improving the teaching plan and evaluating the implementation of the plan. Big data makes education no longer rely solely on teachers' perceptions and intuitions about the student's learning process, making the rules of education more quantifiable, standards becoming more objective, information becoming more dynamic, classrooms becoming more efficient, and student needs becoming more specific. To improve the quality of teaching has become more feasible. The smart classroom model builds a solution from information collection, problem monitoring to smart solution, providing specific data analysis processes and team collaboration to help teachers explore their potential and better serve their needs. Teachers should take advantage of the opportunities brought by big data, learn to discover, use and analyze the big data accumulated in the teaching process as soon as possible, improve and improve the classroom teaching mode, form the data wisdom with its own characteristics, and then apply the data wisdom to discover the individual differences of students. Personality needs to improve teaching efficiency and quality. Only in this way, teachers can explore their great potential while teaching and educating people, transform big data into information, and sublimate into wisdom, overcome burnout, and provide continuous motivation for future career development.

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