# Construction of Teaching Model Based on Wechat Mini program

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## **Abstract**

Based on the analysis of teachers' teaching and students' learning in the process of classroom teaching and the framework of cognitive teaching theory, this paper, taking the course of mental health education as an example, makes a brief introduction of the current situation and future application prospects of Wechat Mini program in classroom teaching by using the methods of literature research, descriptive research and experience summary. Description and analysis of the single, and based on the Mini program process of mental health education classroom "teaching-learning" mode of exploration and preliminary construction.

# **Keywords**

Wechat Mini program, Mental health education, Classroom Teaching, Model Construction.

#### 1. Introduction

In recent years, all kinds of live websites and educational training APPs have developed rapidly in the education industry and training institutions in the form of online teaching. However, the propaganda information is blocked and the dissemination intensity is relatively small. In online training education, Mini programs just make up for the shortcomings of teaching. For example, "Lite", "Educational and Training Platform Network" and "Adult Education and Training Organization", etc , the training programs of educational institutions which are already online and have convenient entrance. The modules of detailed introduction of courses with pictures and texts, and online course ordering have strengthened the propaganda for the teaching and training of the online courses. Since the Mini program is in the early stage of development, its functions are in the exploratory trial stage. Therefore , there are not many real examples applied in classroom teaching at present, but in terms of the advantages of the Mini program itself, the future classroom activities applied in school education are worthy of development and research.

For the education industry, the application of information technology as a means of teaching needs to be considered in many aspects, including the needs of both teachers and students, subject characteristics, school network environment, physical environment and technology level, as well as the strength of teachers. Only on the basis of fully considering these factors can we find out the suitable strategies, methods and technical support for teaching. Mini program is a lightweight application. It does not need powerful backstage support, complicated wiring connections and other accessories. Only teachers and students are required to have a mobile phone and have Wechat software installed. At present, the combination of Mini program and teaching is in the stage of exploration and attempt. Therefore, we need to make more innovative ideas and attempts, and actively explore, so as to provide some valuable reference information for later research. Based on the advantages of small procedures and the characteristics of the subjects studied, this paper creates classroom teaching situations and designs corresponding teaching and learning modes, so as to explore the application of small procedures in the classroom.

## 2. Model Construction

# 2.1 Teaching Model Construction

#### 2.1.1External structure

The courseware pages will be slightly rigid when introducing materials and cases in the form of PPT in pre-class introduction. The seating advantages brought by the characteristics of courseware will cause students' reading barriers. Using the Mini program as the medium, the mobile terminal can display content conveniently and quickly. Pictures, texts and sound pixels are complete, rich in resources and clear in content. The learners are flexible in operation, convenient in control and easier to improve students' interest in reading.

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Content explanations, teacher explanations in detail, cite one thing against another, step by step guide, layer by layer in-depth, expand the way of diffusion for students to analyze knowledge points. Knowledge is not active, so teachers need to make it vivid in order to enable students to learn and use. Teachers' proper teaching methods combined with media technology are the main factors and ways to promote the absorption of teaching content.

Classroom activities, arranged at the appropriate time nodes that students produce visual and auditory fatigue, the brain appears a slight sense of resistance. Classroom activities help to increase students' brain excitement and promote their active thinking. The spontaneous brain works, and its excitement overcomes the resistance of passive acceptance. In the class, testing or game activities through small procedures, on the one hand, the knowledge learned will be applied to practice to deepen memory. On the other hand, hands-on operation can make thinking of students active, stimulate students' interest in learning and establish new learning motivation. Timely activity arrangement creates a breakthrough point for the next stage of classroom teaching.

Group discussion and homework are the process of transferring learning autonomy to students. Through the discussion to integrate students' viewpoints, improve students' spirit of cooperation and inquiry, simultaneously, reflect students' mastery of classroom content. Finally, all the contents are sorted out and analyzed to clarify the knowledge system and framework structure, so as to facilitate the deepening of classroom memory. The complete content is stored in the Mini program, which is convenient for students to consolidate and review at any time and anywhere, and feedback the students' mastery of classroom knowledge in the form of homework after class.

Teaching evaluation is divided vertically into two stages: self-evaluation and mutual evaluation. Self-evaluation is the self-reflection and summary of teachers in teaching methods ,and self-analysis and orientation of students in the knowledge system. In horizontal aspect, there are two aspects: early stage and late stage. Predictive evaluation is in the early stage, and summative evaluation is in the late stage. The comprehensive evaluation system, which is crossed vertically and horizontally, evaluates knowledge, ability and emotion, also improves and perfects it.

Teaching objectives and teaching modes have a strong internal unity, which determines the operating procedures of teaching modes and the combination of teachers and students in teaching activities. It is also the standard and yardstick of teaching evaluation. In the constructed teaching model, both teachers and students have corresponding goals, which respectively reflect the knowledge that teachers want students to ultimately acquire and the knowledge that students expect to acquire. Through comparison, the goals of teaching and learning are approached and realized respectively. Mutual improvement and improvement without affecting each other, so as to achieve the ultimate teaching goal. In terms of operating procedures, teachers and students should combine textbooks, courseware and Wechat procedures to achieve the predetermined teaching objectives according to the teaching plan. Teachers should formulate a sound teaching process and a reasonable teaching plan, students should actively cooperate and clearly understand their learning objectives to reach.

Teachers arrange teaching activities and construct the "teaching" mode according to certain teaching theories and ideas. They, construct the "learning" mode, learning ability and learning objectives. On the one hand, teaching model as a structural framework, it highlights the relationship and function

between the whole teaching activities and various elements from a macro perspective; on the other hand, as an activity procedure, it highlights the orderliness and operability of teaching modes. By comparing the initial mode of practice teaching, we can further revise and improve the content of the established framework and carry out next activities.

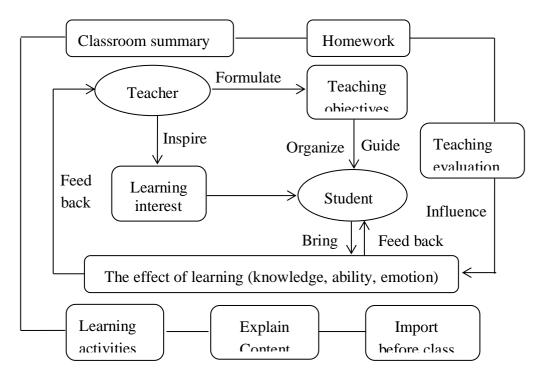


Figure 1. External Structure Diagram of Teaching Mode

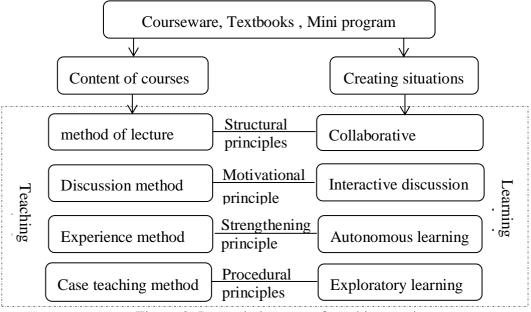


Figure 2. Internal elements of teaching mode

#### 2.1.2 Internal factors

In the theory of cognitive teaching, Bruner holds that the teaching principle is an important rule that enables students to acquire knowledge, skills and develop intelligence most effectively in teaching work. It is also a criterion for evaluating teaching and learning methods. Firstly, teachers need to stimulate and guide students to build up their enthusiasm for learning in unknown areas through three measures: stimulating - maintaining - the right direction, and make students maintain curiousity and

enthusiasm for learning while clearly defining their goals. Secondly, teachers should recognize the relationship between the existing knowledge structure and the students' original knowledge structure, so that the knowledge structure imparted matches the students' cognitive structure. Thirdly, when designing the best teaching procedure, teachers must take into account students' existing knowledge structure, cognitive ability and the nature of knowledge points, and be ready to revise or change the teaching procedure at any time. Fourthly, through feedback, evaluation, to check whether the final result of learning activities is infinitely close to the original goal, and continually correct and improve, so as to carry out the next plan.

Teaching methods are based on knowledge, ability and emotion. Teachers' teaching methods vary according to curriculum, classroom and students' characteristics. "What to teach" is the content of the curriculum, which is expanded freely by teachers. "How to teach" depends on teachers' knowledge level and classroom environment, at the same time, it is restricted by other factors in the classroom. In the classroom based on Mini program, taking the course of mental health education as an example, based on the knowledge, teachers should prepare sufficient cases and materials; based on the ability, teachers should establish a perfect knowledge system of mental health education, master the characteristics and functions of teaching tools; based on the emotion, students should be guided by teachers to complete practice and test according to theoretical knowledge .And teachers need to develop and improve students' knowledge structure system.

Learning methods are based on the learning mode constructed by students. In the learning mode, students make their learning objectives clear, construct knowledge system and ability level, and divide the difficult and difficult areas through self-evaluation in the early stage. In the whole process which start from the arrangement and collection of resources in the early stage, the decomposition of knowledge points in the classroom, to the testing and feedback in the later stage, students are required to construct and improve themselves. Psychological health education focuses more on students, so practical teaching and experience analysis are particularly important.

# 2.2 Analysis of Teaching Activities

Fig. 3 shows a simple analysis of a process of students' classroom learning activities. In a learning mode that conforms to the characteristics of adaptability, feasibility, effectiveness and individualization, students need to combine the theoretical knowledge of the textbook and complete test in the Mini program.

Textbook knowledge: analysis of four personality traits: bile, blood, mucus and depression.

Designing test questions in Mini programs

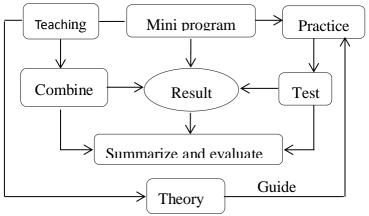


Figure 3. Design teaching case diagram

#### **Evaluation Reference:**

Combining textbooks and other materials, we can grasp the characteristics of four personality temperaments and evaluate the test results.

**Expansion analysis:** 

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Through the test results, they can understand temperament types, analyze personality characteristics, refer to relevant explanations, and locate their areas of expertise. For example, the hostages who have agile working ability are good at adapting to the changing environment. Therefore, they have more talents in tour guides, sales promotion, speeches and foreign affairs reception. Activity testing is a process of integrating and internalizing knowledge points, and also is a process of applying theory to practice, which helps to achieve better teaching effect.

The teaching mode based on Mini program is not an online learning platform or material carrier that relies solely on teaching resources. After screening and integrating the existing resources, it presents in the form of mobile resources. On the one hand, it caters to the students' interest in mobile learning tools, on the other hand, it conforms to the popular communication mode of the Wechat platform. In addition, the presentation of nodal and selective materials, the arrangement of activities and the experience of testing have reached the meeting point w the course of mental health education. "Teaching" and "learning" in the teaching mode are the mode community in which teachers and students have a deep understanding of each other and achieve teaching effect. In this community, the main body are teachers and students who have a unified goal, that is, students fully grasp curriculum knowledge; a consistent process, that is, mutual cooperation in classroom teaching; a comprehensive and cross-cutting evaluation system, so as to promote and improve each other.

In terms of realizing conditions, the physical environment and network environment for teaching activities must be analyzed in advance when working out operation procedures. In the teaching evaluation, the link of mutual evaluation is set up, that is, when teachers evaluate students, students also evaluate teachers. so as to promote the effective implementation of teaching activities.

# 3. Reflections and Prospects

The improvement of technology means the renewal of teaching methods, but in any way, if it can not arouse students' interest in learning and achieve the desired teaching effect, it would be futile. Teaching which is to teach seriously, to study hard, and to teach conscientiously means to analyze the current learning situation, consider the field environment, understand the needs of students, so as to teach reasonably and teach with goals. "Studying hard", requires students to fully cooperate with teachers' teaching and do their own "study" well. The environment and technology which play an important role in teaching are the basic conditions and supporting technology for teaching and learning. Only when the teaching methods are appropriate, can teachers be proficient, students be happy to learn, so, teaching effect can be multiplied with half the effort.

Therefore, in the context of the era of reform education in the new generation of information technology, Internet of Things, cloud computing and communication networks gradually changing the way of education, the education industry will have more opportunities and challenges for development as other areas. Scientific development means theoretical innovation, technological progress represents a breakthrough in practice, and advanced scientific and technological level are important supports for all sectors of society. The emergence of Wechat widget not only brings a new starting point for Tencent's own development, expands the survival space and time for Wechat, but also brings a certain degree of imagination and expectation for business, finance and education. Through the analysis in this article, on the basis of previous experience, we will make further analysis, exploration, attempt, and application in future research and learning.

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