Teaching Design of Mental Health Education Based on Case Teaching Method

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Abstract
The case teaching method mainly refers to the case-based teaching method. This teaching mode can help students master the abstract theory. Teachers and students can also interact and communicate effectively in the teaching process to motivate students to learn. The article briefly summarizes the basic concepts of case teaching method, and discusses the specific application of case teaching method in mental health teaching, including the two stages of pre-course preparation and classroom implementation in mental health education. Pre-class preparation includes selection of cases, courseware production, formation of discussion groups and familiarization of cases; classroom implementation includes presentation of cases, organization of discussions and summary of conclusions.

Keywords
Case Teaching Method • Mental Health Education Course • Application
In the current university education, mental health education is a very important teaching content. Teaching practice shows that the case teaching method is a very effective teaching method. Teachers can use this method to not only impart the theory of mental health to students, but also to stimulate students’ interest in learning, and to cultivate students’ ability to actively discover problems, analyze problems and solve problems, and achieve the goal of improving the level of mental health education. The case teaching method is mainly based on the teaching objectives and teaching contents of the course. (Gawande, 2016) The carefully selected cases are taken as the basic content of the teaching. The students are organized to carry out corresponding analysis and discussion around the problems to be reflected in the case, so that the students can master the complete set of processes. Thus continuously improve the overall quality of students. The role of case teaching method in psychology teaching is mainly that this method can highlight the main position of students in the classroom, and the teaching process also becomes the process of students actively selecting and absorbing teaching content. Students can fully take the initiative in the case teaching process. Selectivity and creativity enable students to think positively about problems. And the case teaching method also cultivates the students’ practical ability, because the cases selected in the classroom are real cases, and the case teaching is actually the process of dynamic practice. In the students’ continuous exploration of problems, the students’ curiosity and mental health are made. The level is constantly improving (Ying, 2013) This paper briefly summarizes the basic concepts of case teaching method, and discusses the specific application of case teaching method in mental health teaching, including two stages: pre-course preparation and classroom implementation in mental health education. Finally, compared with traditional teaching, the advantages of the case teaching method are obtained.

The case teaching method

Basic characteristics of case teaching

**Clear purpose.** Defining the teaching objectives and teaching tasks and completing them is the premise of the case teaching method.

**Objective truth.** The cases used in the case teaching method are basically real events, and sometimes they may be simply processed for better teaching effects, etc., but it must be noted that this processing cannot be used to personalize the opinions of the organizers. The authenticity is determined by the authenticity of the events it tells. (Ying, 2013)

**Strong comprehensiveness.** 1 The cases selected in the case teaching method usually have more rich connotations. This point is covered in the previous article and will not be repeated here. 2 Analyze the case to solve the problem, the process requires the students to first grasp a certain theoretical knowledge, but at the same time also have the ability to judge the situation, and be able to make arbitrary decisions according to different situations.

**Deeply inspiring.** (Perini et al., 2013) The focus of the case-based approach is to inspire and guide students to learn independently, not for students to simply stay on the simple rote of knowledge. By stimulating students’ interest in actively exploring problems, they have cultivated students’ ability to analyze and solve problems in...
a subtle way. If you are able to help students develop their own research methods and ways of thinking during the learning process, it is more ideal.

**Highlight practicality.** The case teaching method pays great attention to the transformation from theory to practice. It is based on the certain knowledge reserves of students, allowing students to analyze, think, judge and make decisions in the case situation, and test and expand their knowledge reserves. Students can be asked to explore practical social issues without just knowing the general book knowledge. More direct contact and the use of case teaching methods can make up for the lack of practical experience and lack of practical ability of students, which helps to help students learn more about society and adapt to society.

**Student subjectivity.** The main body of the case teaching method is the student, and the role of the teacher is transformed into a person who leads and adjusts. In the teaching process, students under the guidance of teachers, into the situation set by the case, independently experience the case role, after a full case analysis, and extensive discussions with other students, help to stimulate students' subjectivity And promote mutual learning and common progress among students.

**Process dynamics.** In the case teaching method, the whole teaching process has been dynamic, which is the biggest difference from traditional teaching. In the application process of case teaching method, there are various forms of communication such as “teacher and student”, “teacher and student group”, “student and student”, “student group and student group”.

**The diversity of results.** During the teaching process, the teacher guides the students to fully discuss the problem, then helps and guides the students to analyze the advantages and disadvantages of the different answers, so that you can find a better answer from a variety of answers. This means that the case teaching method does not directly instill a fixed answer or solution to the student, but allows the student to get in touch with the situation that occurs in real life. After independent analysis and group discussion, make judgments and decisions, aiming at cultivating students. Ability to think and solve problems and improve students' cognitive level. *(Perini et al., 2013)*

In the application process of the case teaching method, although the students accept the same case situation and information, but the opinions and solutions of each person are not required to be completely consistent, and the final result is not necessarily completely consistent of.

**The necessity of using case teaching method**

The case teaching method emphasizes the concept that “student is the main body of the classroom”. As a positive response to the concept of science education, it allows students to experience life in the created problem situation, and thus exercise their ability to gain true knowledge. This also shows human care to a certain extent. The application of case teaching method in mental health education teaching has important practical significance and significant effect compared with the traditional "teacher-based" teaching method.
Teaching objectives and tasks applicable to the “teach-receive” method

(1) Positive publicity and education. Any society is trying to influence the ideology of its members. This is the same, and the difference is reflected in the specific way to achieve this impact process. Positive and positive publicity in mental health education teaching And teaching plays an important role in it, and it is indispensable. (Abrams & Shapiro, 2014)

(2) One of the commonly used teaching forms of knowledge teaching. One of the greatest abilities of mankind is to pass on the vast amount of knowledge and experience of predecessors directly to students, so that students can gain sufficient knowledge before they enter society. Most of the knowledge is common sense and requires students' memory, but it is basically unnecessary to re-verify. The effectiveness of teaching methods for this type of knowledge is directly proven.

(3) It is applicable to the task of accomplishing unified thinking in an emergency. After determining the way forward, Chinese society has an urgent need for a high degree of unity of the whole society, the unity of the people, and the mobilization of all aspects of society. At this time, the use of the method of "teaching and accepting" has enormous effects and strength. As shown in Table 1, we compare the case teaching method with the “delivery-receive” method from the following aspects.

As can be seen from the comparison of the above table, the case teaching method has a significant difference from the traditional teaching method, that is, the difference in the status between teachers and students. In the traditional teaching method, the teacher is the center, the teacher controls the classroom rhythm and the teaching...
content in the teaching, and the student is relatively passive to accept the teacher's “instillation”. Since the content of the teaching is certain, students can get a higher test score by studying hard. However, the ability of students to solve problems is not fully exercised in them. The case teaching method is a student-centered teaching method. Whether it is the selection of cases or the implementation of teaching, all aspects of the development need to focus on stimulating the subjectivity of students. Often, in a classroom where case-based approach is applied, the atmosphere is easier and more enjoyable, and it develops in the ability to develop students' initiative and creativity. (Jacobs & Jaarsveldt, 2016)

In addition, with reference to the survey conducted by the university, the professor once asked the students how to treat the teacher's lecture content in the classroom in the questionnaire of mental health education teaching. The statistical results are shown in the figure 1.

![Figure 1. Statistical results of students in the mental health education class.](image)

From the statistical results shown in Figure 1, most students want to attend classes, but whether they can listen to it depends on whether the teacher's teaching is attractive. We believe that in addition to the reform and exploration of the curriculum system and curriculum content, the reform of the teaching methods and the content of the curriculum, especially the use of new teaching concepts and methods to attract students and improve students' interest in listening to the lectures. It is more legal and feasible. (Jacobs & Jaarsveldt, 2016)

Combining the connotation and characteristics of the case teaching method we have analyzed above, and the difference and connection between it and the traditional teaching methods adopted by the mental health class, we believe that it is necessary to apply the case teaching method in the mental health class.

**The application of case teaching method in mental health education**

**Do a good job in preparation before class**

The cases used in mental health education must be representative and can be thought-provoking, and have certain enlightening significance to the students' minds. Therefore, teachers must make adequate pre-course preparations and choose appropriate psychology when implementing case teaching. According to the key points
and difficulties of mental health teaching, the case teaching is arranged into four chapters: interpersonal communication, emotional management, employment psychology and love psychology. In interpersonal communication, the selected cases are mainly used to solve people's self-conceited self-esteem, inferiority and shyness; emotional management cases are mainly used to solve students' depression, jealousy and anxiety; the employment psychology case is mainly to help students cope with setbacks. Cultivate excellent will quality; love psychology is mainly to help students solve problems such as unrequited love, love triangle and online dating. After determining the teaching objectives of each chapter, the corresponding cases are collected through the network, and the cases are added to the multimedia courseware. The cases can be presented in the form of words, videos, pictures, and the like. Finally, class discussion groups should be formed to balance the abilities and personality differences of each group member, and select the person with affinity to prepare for the case teaching. (Winship, 2016)

![Teaching Platform Diagram](image)

*Figure 2. Implementation process.*

The teaching mode can be summarized as follows:

**Select mental health education case.** The case of mental health education refers to the case that occurs in real life, which contains certain psychological principles, can be thought-provoking and has certain educational significance, which can be inspiring and researchable to the students' mind. Usually a mental health education case contains a number of psychological problems, and the cause of the problem is caused by a combination of factors, and the solution to the problem is also diverse. These cases can be selected from classic mental health education case sets, or edited by examples of fresh and typical examples of schools and surrounding colleges.

**Classification of cases.** According to the difficulties and key points of teaching materials, class arrangement and teaching, the content of four chapters of interpersonal communication, emotional management, employment psychology and love psychology was determined. Interpersonal communication cases mainly solve the psychological problems of self-sufficiency, inferiority and shyness in students' interpersonal communication. (Sharp, Hargrove, Johnson & Deal, 2006)

**Courseware production of case class.** After selecting appropriate cases, teachers use multimedia technology to create vivid visual courseware by adding dubbing, pictures, videos, etc. according to the actual
situation, and strive to give students a deep impression, to touch the students and stimulate “I want to say” the impulsive effect.

**Group discussion group.** A class generally consists of 4 to 5 discussion groups, each with 4 to 6 people. When forming a group, pay attention to the balance and complementarity of each group member in terms of personality, gender, language expression, etc., to avoid some groups being too dull and some groups being too active. Team leaders should have affinity and organizational skills, and teachers should also schedule time to teach relevant knowledge and skills in group discussions. The selected team leader can organize the group discussion and record the views of each member, and summarize the opinions of the group members in order to fully communicate in the class free discussion.

**Familiar case.** On the one hand, teachers should fully study the case, not only know the basics of the case, but also carefully design the case discussion, make the discussion problem moderately difficult, and can be closely related to the learned psychological knowledge. (Sharp, Hargrove, Johnson & Deal, 2006) At the same time, the teacher must Students may submit plans or preparations for relevant extensions beyond the scope of the case. On the other hand, due to the limitation of teaching time, in order to allow students to discuss in class, it is usually a week or so to distribute the text materials and questions of the case to the students, so that students have sufficient time to familiarize themselves with the case, consult relevant materials, and prepare.

![Diagram showing the main aspects and tasks of the teaching model.](image)

*Figure 3.* The main aspects and tasks of the teaching model.

**Classroom implementation process**

**Presentation case.** The presentation of the case should be consistent with the psychological and cognitive characteristics of the student. According to the different topics of the case discussion, you can choose oral, picture, video, live simulation, courseware and other presentation methods, so that students can revisit the case content, deepen the understanding of the case, quickly integrate into the case scenario, awaken self-cognition and experience, stimulate The impulse to discuss. According to the case design, the teacher can discuss the problem and the difficulty level of the problem. (Sharp, Hargrove, Johnson & Deal, 2006) It can also take the
case and discussion, and then present the case and discuss the steps to guide the students to communicate and discuss in depth. Teachers can also present some key nodes or dispute points repeatedly based on actual cases and student discussions.

**Organizational discussion.** Take the example teaching of the emotional management chapter in Chapter 3 of the Mental Health Education Course as an example. In the teaching, the teacher will focus on “knowing and preventing depression” and select the events of Leslie Cheung and others as a case. *(Jacobs & Jaarsveldt, 2016)*

First, through the display of several groups of mental illness pictures, let students initially discuss what is the most harmful emotional disease. *(Sunchai Pattanasith, Nattaphon Rampai, & Jongkol Kanperm, 2015)* The discussion of this issue allows groups to send representatives to pre-class materials or courseware to communicate in the classroom. Teachers should pay attention to guiding students to quote data to explain the types of various emotional diseases and the proportion of morbidity, and explain the reliability and authenticity of data sources, and cultivate students' ability to collect information. Then, the video of Zhang Guorong’s suicide was reported, allowing students to analyze and discuss the psychological reasons for Leslie Cheung’s suicide due to depression. The teacher then plays a video of several different types of depression patients and a psychologist's treatment plan. Each group discusses the causes and psychological adjustment methods of different types of depression patients, which can be conducted by group leaders, and the group members take turns to speak and supplement speeches. *(Ying, 2013)* This part is the focus of the case discussion class in this section. Teachers should inspire and guide students to diffuse thinking, and think about the causes and countermeasures of depression from multiple angles, such as social support, improvement of family atmosphere, cultivation of hobbies, improvements in interpersonal relationships, changes in lifestyle habits, and rational cognition face suggestions for psychological adjustments and ways and means to help them in patients who are depressed due to loss of love. Finally, the group leaders summarize the opinions and solutions of the discussion in their respective group cases. The students in other groups can ask questions, refute and debate on relevant issues and opinions, and inspire more in-depth analysis and argument through the impact of different ideas to deepen the case.

**Figure 4.** The relationship between teachers, students, teaching content and multimedia.

**Design of classroom teaching process flow diagram.** In order to make teachers, students, teaching content and computer multimedia in classroom teaching organically linked to form the best classroom teaching structure,
it is possible to design flowcharts of classroom teaching structures and use them as a blueprint to implement classroom teaching activities by using some graphic symbols. It reflects the interaction among teachers, media, and students and the combination and use of multimedia in the teaching process. (Wilson & Hungerford, 2015) Therefore, in the organization and presentation of the classroom teaching structure map must be done: 1 to make the classroom teaching content form a complete and logical knowledge system; 2 in line with the student's psychological order of learning; 3 easy for teachers to switch multimedia forms operating. The effectiveness of classroom teaching depends on the interrelationships and organizational structures among teachers, students, and teaching content. The most important factor is the teacher who guides students' activities and conducts teaching content.

From this we can see that giving full play to the role of teacher guidance and management is the fundamental guarantee for improving the effectiveness of multimedia college Mental health classroom teaching, and it is also a problem that multimedia university Mental health classroom teaching process design should pay attention to. (Jian & Haiyan, 2014)

One of the purposes of optimizing mental health classroom teaching is to optimize the classroom teaching structure, give full play to the students' enthusiasm for learning, and provide students with more opportunities to participate actively, so that they can actively practice, find problems and provide insights, and cultivate their opinions.

Table 2

<table>
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<th>Comparison of Teacher and Student Activity Types</th>
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<tbody>
<tr>
<td>Teacher</td>
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<tr>
<td>Respond to the goal: Inform students about learning objectives through multimedia means, arouse students' attention.</td>
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<tr>
<td>Exciting engine: Inspire interest in learning, give play to students' initiative and initiative spirit, inspire students' desire for knowledge, and guide them to perform the subject.</td>
</tr>
<tr>
<td>Suspicion and doubts: Teachers can use modern media to conduct classroom suspicion, arouse students' thinking resonance, create problematic situations with exploring factors, and stimulate and encourage students to carry out exploratory intellectual activities.</td>
</tr>
<tr>
<td>Provide clear knowledge and structure of teaching content: Highlight key points and difficulties, and use multimedia features to provide students with a complete cognitive structure to promote learning and prevent interference.</td>
</tr>
<tr>
<td>Student</td>
</tr>
<tr>
<td>Actively participate in related mental health learning and practical application activities rather than passively listening to others' experiences.</td>
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<tr>
<td>Autonomously explore, think, discover, and raise questions, and devote efforts to finding solutions to problems rather than avoiding or simplifying problems.</td>
</tr>
<tr>
<td>Actively negotiate interactive activities with others through the multimedia learning environment, such as repeated descriptions, role-playing, discussion speeches, and opinions. Promote the construction of meaning in cooperation and interaction.</td>
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<tr>
<td>Online writing, independent reading and practice consolidation.</td>
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</table>

Innovative ability and thinking ability to promote the development of learning ability and learning quality. Students are the main body in classroom teaching. In the teaching process, students must be involved in teaching activities in a large area and at multiple levels to truly reflect their dominant position. (Sharp, Hargrove, Johnson & Deal, 2006) The entire teaching process is centered on student learning. Under the guidance of ingenious and concise explanations by teachers, students use multimedia to create the specific language scenarios needed for teaching content, through human-computer communication and interaction between teachers, students or students. Subject learning or seminars, conversation or self-paced learning, and more.
**Designing exercises.** Constructive learning requires that multimedia courseware have strong interactive capabilities. Students can conduct man-machine conversation at any time in the process of autonomous learning, thus completing the transfer of knowledge. Therefore, a strong human-computer interaction is designed in formative exercises. In the form of question banks, according to bidirectional breakdowns, topics of different levels, different levels and depths are selected according to teaching objectives, and problems are randomly generated with a wide coverage. It involves every aspect of the learning content and gives appropriate feedback to the student's answers so that students can instantly check what they have learned. (Sharp, Hargrove, Johnson & Deal, 2006) The difficulty of practice can be graded to suit different levels of students. Some of the more complex issues can be satisfactorily resolved through the group's negotiation. The question bank is in an open format, and teachers can add, modify or modify the questions at any time to suit different needs.

**Summary class.** The teacher's summary of the case discussion can play a finishing role. First, the teacher analyzes the relevant psychological principles involved in the case.

These knowledge play a further strengthening role. For example, when summarizing the case of "depression", it is necessary to help students distinguish between depression and depressive symptoms, and eliminate students' misunderstanding of depression. Second, the teacher helps the students sort out the ideas and clear the clues. Because mental health is a psychological phenomenon that is difficult to measure and difficult to quantify, the results or answers of mental health case discussions are uncertain, but teachers do not need to give standard answers, but should focus on the analysis of case ideas to help students distinguish the main Second, grasp the nodes and improve the ability to analyze and solve problems. Then, summarize the results of the case discussion and expand it. (Winship, 2016) For example, in the “depression” case discussion, the teacher guides the students to expand the understanding of the words and deeds of the characters in the case by playing characters with different family backgrounds, educational backgrounds and work backgrounds. Through multi-angle and all-round perceptions, experience the emotional emotions of the characters in the case. Improve self-sympathy and the ability to regulate depression. (Sharp, Hargrove, Johnson & Deal, 2006) Then, the teacher should summarize the performance of the student participation in the case discussion, and should focus on the appreciation and encouragement, with the emphasis on the direction of the effort. Teachers should promptly praise the group with a warm discussion and good atmosphere, and openly appreciate the students who have thorough analysis and put forward their own unique opinions or opinions. They should be good at discovering the progress of each student and encourage them in time. Teachers' praise for the little progress made by students can stimulate students' self-identity and enhance their self-confidence, which helps students to better participate in the next case teaching.

**The case class effect analysis**

The teaching experiment used a comparative study that lasted one year. Both groups of students used the same teaching material, but the two groups had different teaching modes. The conventional teaching arrangement of the control group is as follows: Traditional classroom teaching is conducted four times a week, in which the comprehensive course has three classes of study per week, and the course of listening and speaking
is taught every Monday. In addition, the class of self-study attends the second class of study on an extracurricular basis. The experimental group is using the multimedia computer environment to expand the classroom teaching, and the input and output activities around the same subject are carried out during extracurricular teaching throughout the class. The output of the research is taken as the purpose of learning and the model of experimental design is performed. The Mental health class takes thematic teaching and teaches a topic every week according to the teaching content. (Perini et al., 2013)

This paper adopts the dynamic student model and the working principle of the dynamic student model in SQL learning. After the student logs on the system, the students can use the two-layer dynamic student model to intelligently guide the students’ experiments, learning, testing and other activities. The system generally selects the student model to drive the corresponding database and generates users. Personalized experimental tasks, test topics, learning resources, etc., combined with the characteristics of the cognitive student model, in the SQL learning system designed the following data structure to record the students' cognitive ability:

\[ SM = \{\text{Knowledge}, \text{Comprehension}, \text{Application}, \text{Analysis}, \text{Synthesis}, \text{Evaluation}, \text{CorrectRate}, \text{ExAccuracy}\} \]  

Among them, Knowledge, Comprehensiveness, Application, Analysis, Synthesis, and Evaluation are used to memorize, understand, apply, analyze, synthesize, and evaluate six parameters of cognitive ability. ExAccuracy and CorrectRate correspond to the correctness of the experiment and the correctness of the test.

The parameters of the student model are formed by the interaction between the system and the user. In the SQL learning system, they are mainly recorded through activities such as resource learning, normal experiment, and comprehensive testing (Jacobs & Jaarsveldt, 2016). It should be noted that when the system designs experimental tasks and comprehensive testing topics, each item undergoes cognitive transformation, that is, each item has an observation point for cognitive ability. If the test item passes, then the cognitive ability observation The score is 1, the score is not -1, and the score is not 0. Therefore, each activity of the student responds to one or more cognitive ability parameters recorded in the student model library. The information on students’ cognitive ability can be summarized from the transformed test items.

In the vector format, \( S_i = (a_1, a_2, a_3, a_4, a_5, a_6) \). It represents the correct rate of a certain cognitive ability,

\[ a_i = \frac{R_{ij}(1)}{R_{ij}(1) + R_{ij}(-1)} \]  

Among them, \( 0 \leq i \leq 6, 0 \leq j \leq n \). \( n \) is the number of all test questions performed by the student.

\( R_{ij}(1) \), Represents the number of correct answers in the tests of the i-th cognitive ability to date.

\( R_{ij}(-1) \), The number of incorrect answers in all tests so far that represent the i-th cognitive ability.

The average of each student's cognitive ability \( a_i \) will be updated to the student model library at any time. The same accuracy rate of Correct Rate and ExAccuracy will be updated to the student model library at the same time. Simple weighted evaluation and classification of the model parameters, based on the accuracy of the sacrifice part of the assessment, we can evaluate the mental health learning listening learning results in the network environment (Gawande, 2016).
To verify the validity of the student model, 248 students were randomly divided into two groups. 168 students in the experimental group used the SQL learning experimental teaching environment; 80 students in the control group used the real experiment environment. In the case of the same learning time, the results of the four tests were listed in Table 1, and the average score of students in the experimental group was 16.29% higher than that of the control group. In the subsequent survey on student model recognition, 152 valid questionnaires were received, of which the number of highly recognized, approved, and unrecognized students was 109, 38, and 5, respectively, and the student’s model’s classification result was recognized among the tested students.

Table 3
The Result of Experiment Teaching

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<thead>
<tr>
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<th>Control Group</th>
<th>Experiment Group</th>
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<tbody>
<tr>
<td>Test 1</td>
<td>76.5</td>
<td>89.2</td>
</tr>
<tr>
<td>Test 2</td>
<td>69.8</td>
<td>81.8</td>
</tr>
<tr>
<td>Test 3</td>
<td>82.2</td>
<td>96.8</td>
</tr>
<tr>
<td>Test 4</td>
<td>73.4</td>
<td>83.3</td>
</tr>
<tr>
<td>Mean Scores</td>
<td>75.475</td>
<td>87.775</td>
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</tbody>
</table>

Conclusion

In short, the case teaching method is a very practical teaching method. It can be used in mental health education to obtain good teaching results. However, the premise of the application of this method is to prepare adequate pre-course, teachers should be in the classroom. Give full play to the advantages of the case teaching method and achieve the purpose of improving the quality of classroom teaching. Compared with the traditional teaching methods, the case teaching emphasizes the students’ original cognitive foundation, cognitive structure, learning interests, attitudes and learning methods and the interaction of teaching, focusing on the experience and reflection to make knowledge into the inner world of the individual, and The student's individual life situation and life experience are combined. Case teaching emphasizes the participation process of students, attaches importance to the unity of individual development and individuality development of individual students, emphasizes that teachers in ideological and political courses should be student-centered, adopt diversified and individualized strategies, and strive to select cases in mental health education. It is in line with the spirit of "arming people with scientific theories, guiding people with correct public opinion, shaping people with noble spirits, and inspiring people with excellent works." Promote the maximum development of each student so that it can correctly select and innovate in a complex, diverse and fast social environment. This will lay the foundation for the exploration and development of mental health education and teaching.

References


