

Action Research on Individualized Education Model for Visually Impaired Students

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Abstract: Implementing individualized education is the general trend of special education development. How to effectively implement individualized teaching under the background of class teaching system? How to Enrich the Connotation of Individualized Education in the Information Age? Yantai Special Education School has carried out 20 years of practical research around individualized teaching, constructed an individualized education mode under the background of class teaching system, improved the comprehensive quality of visually impaired students, and put forward thinking and understanding on the individualized education path for many years.

Keywords: Individualized Education; Education Model; Education Teaching

1. Research Background

Vision with the improvement of national medical and health level, the number of children with disabilities showed a trend of gradually reducing, the provinces the blind schools have appeared in different degrees of students to reduce the phenomenon, some classes only 6, 7 students, but students' individual difference is quite big, not only has low vision students, there are completely blind students, not only have normal intelligence of blind children, there are also blind with other disabilities (such as both mental disabilities or autism, etc.) of the students. According to the investigation on some blind schools in Shandong, about 20% of the disabled students in school are blind and have multiple disabilities, and about 15% of the students with moderate and severe multiple disabilities are completely unable to study the national unified curriculum. With the implementation of the Compulsory Education Law and the Regulations on Education for the Disabled (Revised), a higher proportion of students with multiple disabilities of the right age will receive compulsory education. The great difference of students in the same class brings challenges to the implementation of national unified curriculum scheme and subject standards, and brings difficulties to the traditional neat and uniform collective teaching method.

Foreign studies show that multiple disabilities with blindness and other disabilities mean that these children have multiple disabilities, and the comprehensive impact of the barriers has brought serious educational problems. In general, these children are very difficult to generalize, transfer and apply knowledge and skills due to the existence of multiple barriers, and they are slow to learn new skills. Moreover, multiple disabilities cannot be included in a certain category of special education objects, that is, any education program set up for a certain kind of disabled students can not fully meet their educational needs. Therefore, the education of these children with multiple disabilities is very different from that of children with single visual disability. In general, the education and teaching place more emphasis on student-centered and individualized teaching to the greatest extent. Instead of advocating standardized assessment, students' own progress and development are emphasized. Based on the experience of developed countries, the most effective approach is to develop and implement individual education programs for these students. The public law 94-142 promulgated by the United States in 1975 stipulated that each child should be provided with the least restricted environment and individual education plan should be developed for each child. Individual education plan eventually became an important concept of education for special children in the form of law[1]. This form of education, so that the potential of each child with special needs to be

developed, is undoubtedly an ideal form of education. However, due to the great difference between the concept of education, the atmosphere of education, the conditions of education, and the quality of teachers, we cannot copy the individual education plans of foreign countries, we must blaze a path of individualized education in line with China's national conditions.

Related to special education schools have been exploring the implementation of individualized education plan has accumulated rich experience, a large number of special education experts and scholars have carried out the theoretical exploration and research, but from the perspective of the actual situation of domestic blind implementation of individualized teaching, there are many problems, the specific performance in: (1) the individualized education plans and patterns are mostly imported from abroad, at the school level, implement is not suitable for China's national conditions. In foreign countries, special education teachers are usually provided according to the education needs of disabled students. However, in China, blind schools are basically short of teachers, with a serious shortage of teachers. Schools still need to implement the collective teaching system, and it is difficult to strictly follow the needs of disabled students to implement individual or group teaching. (2) there is a certain gap between the professional quality of teachers in blind schools and that of foreign countries. Although teachers can agree with the disabled students' need for individualized teaching in ideology, it is still difficult to implement it in practice, so it is difficult to guarantee the quality of individualized teaching. (3) there is no effective experience and model for individual teaching under the background of classroom teaching system.

In order to pay attention to the potential development and personality development of each visually impaired student, based on the concept and practical experience of foreign "individual education plan", we explored the individualized education mode suitable for blind children's schools in the form of class teaching, and The appropriate management norms and teaching methods enable each student's learning potential to be effectively utilized due to the teacher's special design and purposeful guidance, and ultimately determine the action research of the individualized education model of visually impaired students.

2. Research Issues, Methods and Processes

2.1 Research Issues

The individualized education program is sometimes called the "individualized education program", which is derived from the English "Individualized Education Program", referred to as "IEP". In a nutshell, individual education programs are based on the premise of adapting to children's differences, based on the current level of children, to meet the individual development needs of children, with clear development goals and specific learning task indicators, operational and easy to evaluate. A management tool for monitoring and training of visually impaired children in written form [2]. The individualized teaching is a kind of teaching according to the individual in order to meet the individual needs of the students. It takes group teaching as the main form and needs to adopt group teaching or individual teaching forms. The individualized education model referred to in this study refers to the fact that when the same teaching materials and teaching methods cannot meet the educational needs of all students in the class, teachers should be specially designed in the teaching process in order to take into account the individual's ability, interest and needs. Different groups of teaching plans, and effective implementation of class teaching programs for different groups of teaching programs. The "individual education plan" in western developed countries is aimed at individuals, while the "individualized education model" may target individuals or "small groups". The main reason is that the current blind school in China is basically class-teaching, and there is a shortage of teachers. It is difficult to develop an "individual education plan" for each visually impaired student and implement individualized teaching.

This research mainly focuses on three aspects: First, to explore how to implement individualized education mode under the conditions of class teaching, that is, to explore how to adjust teaching management, teaching organization, teaching methods, etc., so that students with different abilities can The task of completing classroom teaching; the second

is to explore the basic theories and basic laws of individualized education in visually impaired education, so that relevant theories can effectively lead the practice; the third is to explore the future development plan of visually impaired students and the current teaching tasks. Balance and coordinate so that visually impaired students, especially multi-disabled students, can learn useful skills and knowledge within their abilities to better adapt to future social life.

2.2 Research Methods and Processes

This study takes action research as the orientation, and repeatedly uses observation methods, interview methods, literature methods, comparative analysis methods and experimental research methods throughout the course of action research. In the course of action research, carefully observe and record the behavioral performance of teachers and students, use it for educational diagnosis and evaluation, and promote teaching research. In order to understand the true effect of each teaching reform, we will discuss with students and parents to understand the true feelings of each student and parents, so as to continuously adjust the research content. When encountering difficult problems, we should find the theoretical basis for various paradigms by searching the literature extensively, grasping the status of individualized teaching at home and abroad, and drawing on advanced educational concepts at home and abroad. At each stage of the research, through comparative analysis and evaluation, the adjustment and improvement of experimental tools are promoted, and the basic laws of individualized education in blind schools are explored through experiments. Action research has gone through three important phases:

The first stage: the stage of building an individualized education model (2002-2008). Based on the research results of the Shandong Provincial Project "Experimental and Research on Individualized Teaching Strategies for Blind Students", based on the students' learning ability and residual visual status, the individualized educational model is explored in the process of education and teaching in major subjects.

The second stage: the stage of forming an individualized education system (2008-2012). According to the results of the first phase, the research results are continuously improved, not only expanding the individualized education model from classroom teaching to extracurricular activities, but also expanding from the various disciplines of compulsory education to the field of vocational education, and gradually forming an individualized education system.

The third stage: the stage of individualized education model supported by new technologies (2012-present). With the support of new technologies, the school has combined the Internet with individualized education to explore the "Internet + individualized education" model.

3. Research Contents and Achievements

The blind children's school has commonality and speciality in the education and teaching of ordinary schools. At present, several teaching modes are popular in ordinary schools, such as Broome's mastery learning mode and Dulangkou Middle School's "three three six" independent learning mode. The teaching mode of "learning after school, training in the classroom" in Yangsi Middle School [3] also has a guiding role for blind schools. As a blind children's school, the goal of education and teaching is not to train top students, not to screen and eliminate, but to make every student learn and have healthy development through appropriate teaching and compensation methods. Therefore, this study combines the learning characteristics of visually impaired students with the current class status of blind schools, and mainly discusses the teaching mode suitable for the teaching characteristics of blind schools.

3.1 First Stage: Individualized Teaching in Major Subject Teaching

Because there are relatively many subject courses in the blind school, there are not only ordinary courses, such as mathematics, language, but also special courses, such as directional walking, life adaptation, etc., so in the first stage only in the compulsory education stage of major subjects such as language and mathematics. Explore the implementation

of individualized education models at all levels.

3. 1. 1 Classified Placement of Students

First of all, teachers should have a full understanding of the students. At the beginning of each semester, the teacher of the class teacher, together with all the teachers, needs to evaluate and analyze each student in the class to find out their advantages and disadvantages in learning, and then classify according to the advantages, according to whether the standard of the course can be completed. The content of learning is the principle, the students are divided into Class A (can complete the task of class), Class B (basic task can be completed under the individual coaching of the teacher), Class C (difficult to complete the task of class), press The student category is designed to design a long-term teaching goal for one semester, allowing students to conduct stratified learning.

Secondly, make different placement decisions according to the specific situation of students. Usually, A and Class A students are the main body of class teaching, and the course teaching is basically implemented in the class. For B and Class students or students with serious partial subjects, subject classes will be conducted according to the academic level of which grade, and classes will be held according to which grade. Other subject contents can follow the class. The school guidance office will adjust the curriculum schedule for them separately. For students with special needs, multiple disabilities of Class C and Class C, the school will implement individualized teaching. On the basis of education diagnosis and evaluation, a group of teachers will set long-term training objectives (one semester) and short-term training objectives for them, and conduct teaching and training according to the contents of individual education plans, and carry out evaluation and target adjustment at the end of the term. For these students, some subjects can be taught together with other students in the class, and some subjects, especially those that cannot keep up with the progress, can go to “Special Needs Classroom ” Individual or group teaching and training according to the content of individualized education plan[4]. Each of these students has his own curriculum.

Some courses are taught collectively by classes, some courses are taught in groups, and some courses are directed or trained individually.

3. 1. 2 Construction of Individualized Teaching Mode

In order to reduce the number of class C students and improve the effectiveness of classroom teaching, the school explores the implementation of the “two analysis, four preparation courses, four links, three levels” of the “2443” individualized teaching mode. First of all, teachers should analyze textbooks and analyze students before class. The analysis of students can not be based on the description of students’ general characteristics based on experience. It is necessary to combine the teaching materials and the cognitive characteristics of students to understand the cognitive difficulties of different levels of blind students in the newly-created content, so as to conduct in-depth analysis. Secondly, teachers should prepare classified teaching objectives, classified teaching activities, feedback design and classification teaching aids in the course of preparing lessons, and fully consider the different needs of students A, B and C. Third, in the classroom teaching process, we must grasp the four steps of classification preparation, centralized teaching, classification practice, and classification operation. Fourth, after-school homework is arranged in three levels: consolidation, extension and individual tutoring. The “2443” individualized teaching mode combines pre-course, in-class and after-school activities to unify teaching and learning, standardize the individualized teaching behavior of teachers, and ultimately improve the efficiency of classroom teaching [5].

3. 2 Second Stage : Individualized Teaching in the Field of Vocational Education

After the establishment of the individualized teaching model, the individualized teaching concept will be extended to vocational education, with the students' needs and abilities as the center, and the individual's future development plan will be formulated according to the students’ abilities and interests, and the “one pass and two creations will reach the standard”. Individualized vocational skills training system.

"One pass" refers to the individualized teaching of theoretical classes. At present, the vocational education of the school is mainly massage massage. On the basis of the evaluation of the learning ability of each student, the individualized teaching objectives are classified, the A category is targeted at independent diagnosis and treatment, and the B category is targeted at diagnosis and treatment. Health care individual training is the goal. In the course of teaching, the teaching and examination are carried out according to the "2443" individualized teaching mode. Finally, the teaching department classifies the examinations, and strives to ensure that each student can reach the theoretical course in his or her own ability. The purpose is to promote Each student lays a theoretical foundation.

"Two Star" is the individualized teaching of clinical courses. In the course of clinical course study, students receive one-on-one guidance from a professional teacher or help from their peers according to their own learning goals. Each class is finished, and the school team will comprehensively evaluate each student according to the evaluation plan, 90 points or more. Only get 1 star. Each assessment result is accumulated in the individual's star rating. When entering the clinical internship in the future, the time of the trainee and internship is determined according to the number of stars.

"Three standards" is an individualized guidance for clinical practice. The school has a massage clinic, which is open to the public and has a high social reputation. The clinic is mainly based on diagnosis and treatment, supplemented by health care. It is divided into 6 clinics, including pediatrics and pedicure. Students choose an internship clinic according to their professional expertise and ability. The teachers set up according to the situation of each student's "passing through" and "creating the stars" in the previous two years. Traineeship and internship program, hands-on teaching, on-time completion of internship tasks, to conduct "reaching standards" assessment.

Individualized vocational skills training is the result of our school's years of exploration of individualized teaching outside the national curriculum field. It not only fully exploits the potential of top students, but also makes other students learn something, so that each student can integrate into society, seek jobs, make a living and seek happiness.

3.3 Third Stage : Individualized Teaching Optimized by Information Technology

In recent years, information technology has been more and more widely used in teaching work 。 Proper use of information technology can help teachers to better implement individualized teaching.

In the process of implementing the individualized teaching mode, the "concentrated teaching" of classroom teaching is the most challenging for some students. Because of the large differences in students' learning ability, not every student can understand the content of teacher teaching. How to make breakthroughs and make classroom teaching more effective, information technology can play a big role. The school gradually promotes the use of "autonomous learning task list" and "micro video" technology in the course of the subject. With the help of the Internet, teachers can record the knowledge points to be recorded and design "guide books". Students can learn, expand and improve together in their own way and their own progress. Teachers can pay full attention to each individual and provide one-on-one individual guidance to students with relatively low learning ability. Individualized teaching has been achieved [6].

4. Research Inspiration and Reflection

The Special Education Promotion Plan (2017-2020) proposes "to adhere to respect for differences and diversified development. Respect individual differences among students with disabilities, focus on potential development and defect compensation, and improve the pertinence of special education. Promote the individualized development of students with disabilities, To lay a solid foundation for them to adapt to society and integrate into society." In recent years, the diversified and complicated characteristics of the types and degrees of disability of blind school students have determined that it is imperative to implement individualized education in blind schools in the future.

4.1 The ability and accomplishment of special teachers restrict the implementation of individualized teaching

The individual differences of blind school students are relatively large, and the educational goals are not the same.

When the same teaching materials and teaching methods can not meet the differences in the degree of students in the class teaching, teachers must specially design different teaching plans in the teaching process, so the individualization is implemented. Teaching requirements for teachers are relatively high, not only requiring teachers to establish the concept of “meeting the needs of each individual”, but also having a better grasp of the course content, having a stronger teaching ability and proficiency in the use of modern teaching techniques and equipment. Ability, etc. At present, the biggest challenge in implementing individualized teaching is teacher awareness, attitude and ability. It is expected that in the future, the state will be able to increase the training on individualized teaching skills in the training and training of special education teachers, improve the professional level of teachers, and enable each student to achieve healthy development.

4.2 Class Teaching System Management in Blind Schools Brings Challenges to Individualized Teaching Implementation

Although the blind schools implement small class teaching, the management of class teaching system restricts the implementation of individualized teaching. Most blind schools basically do not consider the learning ability of students in the class, whether there is residual vision, age, etc., and uniformly implement the national curriculum and curriculum standards, resulting in some students with poor learning ability or multiple disabilities “mixed study with class”. Therefore, the current traditional class teaching system in blind schools restricts the implementation of individualized teaching. In fact, if we strengthen professional guidance and the cultivation and training of teachers’ professional qualities, the “small class size” of blind schools is more convenient than the “large class size” to popularize and implement individualized teaching. Blind schools should give full play to the advantages of “small class size” and fully explore the connection between students' future and current teaching tasks, so that each student can get maximum development within the scope of their abilities.

4.3 Individualized education must be supported by a complete evaluation system.

Individualized education is rooted in respecting the individuality of students. Education based on teaching materials and teachers is a student-centered education that truly cares for each student's potential development and personality development. Therefore, the comprehensive evaluation of students is development. To lay the foundation for individualized training objectives, it can be said that there is no scientific, reasonable and effective evaluation system, and individualized education is difficult to implement effectively. At present, most blind schools, like ordinary ordinary schools, have a relatively simple evaluation method and are basically evaluated by means of teachers' examinations. Our school has developed a set of “eight skills assessment scales for blind school students”, requiring teachers to conduct multiple assessments of students [7-8]. However, due to this multi-assessment method, teachers have increased their workload. At present, blind school teachers are generally in short supply, and the workload is heavy. There is still room for improvement in the implementation process. It is expected that with the development of special education, the shortage of teachers in special education schools will be alleviated, and the assessment of diversification can be truly implemented, thereby promoting the development of individualized education.

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