
Study on the Mathematics Education Countermeasures of the Children of Migrant Workers in Junior High School

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Date of publication (dd/mm/yyyy): 22/04/2020

Abstract – Many cities in China have migrant workers, and in school education there are student groups made up of children of migrant workers. Due to differences in living environment and family, they have some learning problems, psychological problems and behavioral problems, which have a serious negative impact on their growth and development. According to the current situation of mathematics education of the children of migrant workers in junior high school in China, this paper analyzes the problems of the children of migrant workers in terms of study, psychology and behavior. Finally, the paper puts forward the cultivation countermeasures of mathematics education.

Keywords – Children of Migrant Workers, Mathematics Education, Junior High School.

I. EDUCATION STATUS OF CHILDREN OF MIGRANT WORKERS IN JUNIOR HIGH SCHOOL

With the rapid development of Chinese society, more and more working people in small and medium-sized cities in China choose to go out to work for their livelihood. For large and medium-sized cities with developed economies, these migrants are called migrant workers. The so-called migrant population, generally speaking, refers to a group of people who come to cities to work for a living. They engage in low-skilled labor services and are basically some manual laborers^[1]. And these workers choose to bring their children to the cities where they work to receive education in order that their children can have the same rich education resources and good education as children in big cities. Their children obviously also have a common name-children of migrant workers.

In order for their children to receive better education, parents let their children go to the city to study, but the current situation of their children's education is not very optimistic. The main performance is: academic performance is not ideal; Family education can't keep up; Personality qualities are defective, etc. Take math education in junior high school as an example. Mathematics is a difficult subject of knowledge. If students can't lay a solid foundation, it will be difficult to complete knowledge learning efficiently. This also leads to a high proportion of students with difficulty in learning mathematics among the children of migrant workers in junior high school, and students show serious aversion to learning^[2]. However, these conditions often make parents' expectations of their children's success fail. In the end, the family status quo is difficult to change, and their children can only earn a living by engaging in low-skilled manual labor just like their parents. Children have no achievements and families have no way out, which is undoubtedly a heavy blow to millions of migrant workers. In fact, there are a large number of migrant workers in the cities with rapid economic development in China, so there are a large number of children of migrant workers. In view of these situations, every mathematics educator in our country has the responsibility to help these students change the situation. We should pay attention to their learning problems, psychological problems and behavior problems, and help them to realize their own values smoothly and become qualified builders and successors in the motherland.

II. PROBLEMS AND CAUSES OF CHILDREN OF MIGRANT WORKERS IN JUNIOR HIGH SCHOOL

Parents hope to give their children more care and accompany, and look forward to their success. However, as the parents are tired of running from dawn to dusk, the children spend more time in a state of unattended natural growth. For them who are in junior high school, this is an important period to shape their character and values. And this important period is hitting their adolescence. The negligence of parents often causes students to have many psychological and behavioral problems. Behind these problems is the lack of family education and the inadequacy of school education. As mathematics educators, we must first find out the problems existing in this group in time and analyze the reasons, and then we can find countermeasures and remedies so that mathematics education can help these students grow up smoothly. The following is an analysis of the problems and causes of children of migrant workers at the junior high school level by searching relevant literature and summing up my own experience.

A. Learning Problems

In China, the foundation of most migrant workers' children is relatively weak, learning interest and enthusiasm are insufficient, and learning habits are not scientific^[2]. Therefore, a series of learning problems such as failure to complete homework on time, low mathematics scores, insufficient interest in mathematics learning, unscientific mathematics learning methods, and lack of good mathematics learning habits will arise. In view of the phenomenon that these children of migrant workers become students with mathematics learning difficulties, the main reasons are as follows.

1. Family Reasons

Migrant workers in China generally have low academic qualifications and receive limited education, so they cannot provide knowledge guidance or discuss knowledge with their children. Factors such as insufficient education awareness and busy work also lead to parents' inability to pay enough attention to their children's education, resulting in inadequate family supervision after students leave school. When children are learning, parents can't provide comfortable and quiet learning environment by watching mobile phones and playing games. Meanwhile, they can't set an example for their children, which is not conducive to cultivating good learning habits of students. In addition, parents also overemphasize and value the test results. At last, students study knowledge difficulty. They are helpless in the face of the results, and learning problems are increasingly prominent.

2. Personal Reasons

The main reasons for students lack of learning motivation in junior high school are their weak mathematical foundation, weak mathematical thinking ability, lack of systematic learning methods, no clear learning attitude, and no good learning habits. As the saying goes: Interest is the best teacher. If the students can't raise their interest in mathematics and have no desire to learn mathematics, no matter how many methods and skills can only cure symptoms but not root causes. It is impossible to change the current situation of students' mathematics learning.

3. Reasons for Mathematics Teachers

In China's school education, some math teachers pay little attention to the children of migrant workers in terms of psychology and study. Teachers do not pay attention to students' performance and reaction in class, and do not care about their knowledge and psychological barriers after class. Mathematics knowledge has rich spirit and

connotation, which is helpful to the formation of teenagers' thinking consciousness. Therefore, students should not only learn mathematics, but also learn mathematics well. Descartes once said: "The most valuable knowledge is knowledge about methods" [3]. Teachers are the people that students trust most. In view of their special circumstances, some teachers did not sort out the mathematics learning methods for them after class to make up for the lack of knowledge in their minds. Nor did it help them build confidence in learning mathematics, build interest in mathematics subjects, and allow them to develop into mathematically impoverished students. Learning problems could not be solved fundamentally.

B. *Psychological Problems*

Since entering the new chapter of the 21st century, Chinese society has undergone tremendous changes. For teenagers in urban and rural areas, everything is new and different when they come to live in a completely strange city with their parents. The huge difference between urban and rural areas and a series of external environments inevitably lead to a variety of psychological problems, among which loneliness, sensitivity, anxiety and inferiority are particularly prominent among this group.

1. *Loneliness*

As students come to a completely unfamiliar environment, people and things around them are quite different, and their lifestyle and habits have also changed. But at this age, students need social groups and peer groups, and the word "friend" means a lot to them. Leaving their friends, they are like lonely geese, making friends with new classmates not only takes time, but also needs to cross a huge "gap". In addition, parents are busy with their work, working long hours in the day, and coming home at night is already exhausted. So they have little time to communicate with their children and listen to them. Therefore, without the listening of relatives and the company of friends, students will have lonely feelings.

2. *Sensitivity*

At this time, the adolescent's inner self-defense mechanism is strong, and they care about others' opinion of them. Considering the life experience and external differences between themselves and their peers, students are worried and afraid of being treated differently by their classmates and teachers. Even think that students are not friendly enough, teachers are not kind enough, they are isolated, targeted, have been treated unfairly. In the end, they over-interpreted the joke among the classmates and the evaluation of teachers, which resulted in sensitive psychology.

3. *Anxiety*

For the children of migrant workers, their anxiety at this stage mainly comes from two aspects. First, parents take out their children when they go out to work, which means they have high expectations of their children and hope that they can achieve something. However, their parents' education level is generally not high, so they can not provide them with effective learning methods in real time. Some parents only pay attention to the student's test paper results. If the child fails the test, the parents will blame and even take action. Parents only know complain to their children how difficulties they are and how mediocre of students' performance, but they can't really help students go further. Therefore, on the one hand, students' anxiety comes from learning. On the other hand, their anxiety comes from themselves. Adolescents are more vulnerable to all aspects of confusion than adults at this

time. For example, a small contradiction between classmates, a sentence or a look of a teacher, changes in their physical and physical aspects, etc., all kinds of things happening around them will make students feel anxious.

4. *Inferiority*

Junior high school students are in a sensitive stage of self-esteem, the economic conditions of migrant workers' families are relatively poor, and the same classes have distinct social circles, which makes them marginalized^[4]. Family turmoil and marginalization in school have led to their lack of success and lack of recognition and praise from parents, teachers and classmates. It is easy to cause students to lose self-confidence and self-esteem. Over time, they are fragile and have an inferiority complex, feeling that they are useless.

C. *Behavioral Problems*

With the growth of age, junior high school students enter adolescence. At this time, they have strong rebellious psychology and are easily impulsive. They often work against their parents and often have some bad behaviors. For example: running away from home, getting into bad habits, etc.

1. *Run away From Home*

After entering puberty, students are not fully mature physically and mentally and still need parental instruction. But they often demand autonomy, independence, and anxious to break free from family constraints. They think they have grown up and no longer need their parents to manage them. At this time, the children will also be rebellious for the necessary teaching and management of their parents, and they think that reasonable reminders are also troublesome. In order to escape the constraints of their parents, some students will run away from their homes on impulse.

For students who run away from home, another important reason is that the family is not harmonious. The working environment of migrant workers in China is often poor, and the work they are engaged in is generally hard, which often leads to their depression and gloom. After returning home, the parents sometimes quarrel about the distribution of housework, or transfer their unhappiness to their children, and get angry at them. As a result, students with strong evasion and consciousness will also run away from home due to the unpleasant family atmosphere.

2. *Get into Bad Habits*

Junior high school students often come into contact with new things because of curiosity, but their ability to distinguish things is limited, so they often get bad habits. In China, the living environment of migrant workers is generally poor, and there are more people with bad habits around. Parents' own bad behaviors, such as smoking and drinking, are always "generous" in front of their children and never evade. There are too many bad "role models" around the students, and they lack good guidance. Compared with their peers, they are more likely to be infected with harmful behaviors such as smoking and drinking.

Bad living environment, not harmonious family atmosphere, small transparency in school and other factors will also cause their impulsiveness, irritability and bad temper. They will like to fight when their brains are hot. And parents neglect to discipline of children, it is easy to attract the attention of the undesirable social groups. Over time, children will become unmotivated, depressed, and have the idea of giving up learning, eventually becoming a student with learning difficulties^[5]. Deviate from the path of healthy growth.

D. Addicted to the Internet

Compared with mathematics learning, network is extremely good for junior high school students. They are keen to surfing the Internet world, but the harm of improper use of the Internet to students is also huge. Online games, science fiction, and everything they are interested in are available on mobile phones and computers. For students with poor self-control, they will be lost in the network, addicted to the network can not extricate themselves. In the end, the limited energy is not enough for learning. Migrant workers often have delays in caring for their children, sometimes they fail to take care of their children's daily status. If the family and school management is not enough, they will be obsessed with the Internet all day, or even often skipping classes and abandoning their studies.

When students return home, their parents always play games with their mobile phones and lack communication with their children. Therefore, the lack of family care is also an important reason for students to indulge in the Internet.

In a word, the reason for the problems mentioned above is to a large extent that migrant workers have insufficient family education for their children and do not pay attention to their own example power. Their limited cultural heritage leads them to ignore their children's psychological changes and not pay enough attention to their behavior changes in this special period of junior high school. In addition, in school education, teachers do not pay enough attention to this group, and do not give enough help to students' body, mind and study. Mathematics is a discipline that develops student thinking and values. In the mathematics education of the children of migrant workers in junior high school, the mathematics teachers have not really played the mathematics subject value and lack of guidance to the students. In order to completely change the problems existing in this group, mathematics teachers need to pay more attention to love students and implement the concept of mathematics education at the same time.

III. COUNTERMEASURES OF MATHEMATICS EDUCATION FOR CHILDREN OF MIGRANT WORKERS IN JUNIOR HIGH SCHOOL

In view of the above mentioned education problems of children of migrant workers in junior high school in China and the analysis of the causes, this paper will put forward corresponding solving strategies for students from the following three aspects with the perspective of mathematics, so as to help students improve the quality of mathematics learning and improve the overall learning level.

A. Strategies for Learning Problems

First of all, for mathematics teachers, because these students did not master the correct mathematics learning methods in the previous study, they lack of thinking about mathematics. Therefore, teachers should effectively grasp classroom teaching and be good at summarizing the characteristics of mathematical knowledge. And add more mathematical common sense to students after class, so that students know more about mathematics. In order for students to "learn" and form good habits, it is necessary to strengthen the guidance of learning methods. Guidance can be given from the aspects of making plans, preview before class, method of listening to lectures, method of reviewing, completion of homework, summary and so on ^[6]. Teachers can also make students pay attention to the wrong questions, teach students the correct way to deal with wrong questions. And cultivate the spirit of not afraid of failure and the courage to face up to mistakes.

Secondly, for students themselves, only with interest can they have the desire to learn mathematics, and then they can learn mathematics well. Teachers should find the motivation for them to learn mathematics and enhance the interest of learning mathematics. At the same time, teachers should guide the students to correct their learning attitude, help them form the consciousness of independent learning, let them actively mobilize their subjective initiative, and consciously carry out mathematics learning. It is also possible to use the examples of peers or mathematicians as their role models, and use the power of role models to promote the formation of students' learning habits and standardize their learning behaviors at all times.

Finally, these students still have to return home after school, so family education cannot be ignored. Mathematics teachers should pay attention to the actual situation of students at home, avoid the "double-faced" behavior of students. Students should do the same at home. This requires teachers to communicate with parents frequently, impart necessary education methods to parents, and clarify parental behavior. Remind parents to take the time to properly supervise their children instead of just exerting pressure. It is important for parents to understand that not all of their children's learning is done in school, and that teachers cannot be solely responsible for their children's learning. How children learn at home is also important.

B. Countermeasures against Psychological Problems

Adolescence is the key period of shaping people's character and concept. To solve the psychological feelings of loneliness, sensitivity, anxiety and inferiority of junior high school students in adolescence, both teachers and parents need to take active action.

Mathematics is a delicate thought process. Mathematics teachers should also take care of these flowing flowers in the same detail, give them more attention, and cultivate them to develop an optimistic state of mind that is naturally useful. Mathematics teachers can work with psychology teachers to provide small-scale comprehensive lectures on mathematics and psychology for these junior high school students. For example: the psychological activities of mathematicians when they encounter difficulties. Through the theme lectures, teachers can popularize mental health knowledge for students, help them open their hearts, overcome bad emotions and build up self-confidence. It is necessary for a person to have self-confidence in success. With self-confidence, students' psychological problems are half solved. For the special students, teachers can also talk with them alone, and use the mathematical story to effectively one-on-one remove the psychological barrier, so as to help the students get through adolescence smoothly.

Moreover, teachers also should communicate more with parents, timely exchange. Teachers can explain to parents what psychological feelings children of this age are likely to have in the current situation, remind parents to pay attention to their children's mood and expression, care and accompany their children, and regularly carry out family communication and parent-child communication. Parents should give their children understanding, create a good family atmosphere for their children, and establish a happy parent-child relationship with them. Positive upward guidance is better than hands-on and blame at all times. For students' psychological problems, the best solution has always been family education. Parents should be taught not to always talk about scores, but to see the highlights of their children in their studies, to find the advantages of children with appreciative eyes, and to cultivate their children's self-confidence^[7]. Three hundred and sixty lines, each line out of the champion. Teachers should guide parents to understand their children in all directions, develop strengths and avoid weaknesses. Teachers should also do a good job of connecting, so that parents and teachers both know students' situation. This

is helpful to master the students' psychological state and activities in the first time and take appropriate measures to correct them in time.

C. Countermeasures against Behavior Problems

As for the bad behavior of the students mentioned above, most of them are caused by the lack of family restraint and self-restraint. Therefore, for mathematics teachers, not only should they pay more attention to the performance of the students in the school, but also use mathematicians or classmates with good moral character to set a correct example for them. So that they can together with excellent friends and integrate into a good growth environment. It is because of their strong imitation in this age group that the power of role models can bring the most benefits. Similarly, parents are also the object of children's imitation, and their examples are also very important to reduce the bad behavior of students. Parents themselves should put an end to some bad habits that children are easy to catch, and set a good example for children, so that children will naturally develop towards a healthy direction^[7]. Teachers should also go to the place where migrant workers live to understand the growth environment of the students. If the living environment is too bad, they should communicate with parents in time and explain the importance of the environment to the growth of students. "The mother of Mencius moved three times" is this truth. If parents are unable to change their place of residence, teachers should advise parents to pay more attention to the growth of children, restrain and educate them, and guide them to develop healthily. Once the students have any behavior problems, parents must pay attention to them and contact the teachers for home-school cooperation management in time to avoid causing irreparable regrets.

In fact, network problem is also a kind of behavior problem. In schools, mathematics teachers can make more use of network when giving lessons, so that students can feel the benefits of the network. And teachers should guide students to view and use the network correctly. Teachers should also guide parents to have a healthy mind about the Internet and avoid the unreasonable use of the Internet in front of their children at home. Since the network is a double-edged sword, there are advantages and disadvantages. We can not let the students completely from the bad factors, that should let the good side of the network more show in front of the students.

In short, what mathematics teachers can provide is only scientific methods and daily care. To a large extent, to really solve these problems, we must start with family education. Teachers should use school education to drive family education and form a model of home-school cooperation. Teachers focus not only on students, but also on their families. For the children of migrant workers, teachers should formulate "one person, one case" training countermeasures, and irrigate this flowing flower from multiple angles. On the basis that students can learn mathematics well, teachers should also believe that they can learn other subjects well. In the end, students will be their own managers and decision makers then have a bright and colorful tomorrow.

IV. CONCLUSION

Student groups composed by children of migrant workers make up a significant proportion in junior high school education in China, and attention should be paid to them. Due to the factors of growing environment and family, most of their learning problems, psychological problems and behavior problems are caused by the lack of family education and the negligence of teachers in school education. Therefore, mathematics teachers should share more mathematics thinking and methods with them in school education. Teachers should also be good at using mathematics education to help students develop good learning habits and daily behaviors. At the same time,

mathematics teachers should often communicate with their parents, and influence parents' education methods with a calm and rigorous attitude. Teachers should give necessary help and friendly reminders to guide migrant workers to understand the importance of family education and attach importance to education methods. Make every effort to ensure that children of migrant workers have a healthy and complete family education in junior high school. In short, in the future, the education of the children of migrant workers in China should be strengthened from both the school and the family.

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