

# Management Mode of Multi-source Precision Education for Forestry and Water Conservancy Majors Under the Background of Enrollment Expansion in Higher Vocational Colleges

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## **Abstract:**

In the context of Higher Vocational enrollment expansion, in the face of the diversity of students, colleges and universities should carry out precision teaching reform in forestry and water conservancy majors. In this paper, we build a student model, design a precise teaching goal, and conduct a modeling research on the precise education management of multiple students in forestry and water conservancy majors under the background of Higher Vocational enrollment expansion. By designing hierarchical and detailed teaching projects, arranging reasonable teaching time and content, and conducting accurate teaching evaluation, we can construct the teaching method of coexistence of generality and individuality. In order to ensure the quality of personnel training, we should work out different personnel training programs according to the characteristics of different students. At the same time, this paper proposes to implement the "precision" teaching mode, innovate the teaching organization and optimize the teaching evaluation mode, so as to ensure the quality of higher vocational personnel training. The experimental results show that the proposed method can improve the teaching quality and optimize the teaching effect.

**Keywords:** *Forestry and water conservancy majors, Higher vocational education, student diversity, precision teaching reform, teaching mode.*

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## I. INTRODUCTION

In recent years, the change of the source of students has brought an important influence on

the management of students in local higher vocational colleges [1-2]. The sharp decrease of the number of students, the increase of the complexity of the nature of students, the decline of the overall quality of students and other factors are undoubtedly another new challenge to the management of students. Is the old way of student management still effective or is it more and more unsuitable and eliminated [3]. The current situation of student management in recent years is enough to prove that the old student management methods can not be applied. It needs to inject new blood to face the local vocational colleges with complex changes in the source of students. For example, in recent years, the main source of students in local higher vocational colleges has changed from three-year junior college to five-year junior college. Facing the huge number of five-year junior college students, they are all from junior high school. They are young and not sensible [4-5]. We have always implemented the University's student work management model - self-discipline and self-management. That will only bring more trouble to student management. For another example, many local higher vocational colleges can now recruit students independently, and the nature of students is more diverse and complicated [6]. There are younger students who just graduated from junior high school, younger students who have worked outside for several years, older students who have worked with village leaders and bosses. In the face of such uneven students, how to improve our school management work is a problem that needs to be solved in our local higher vocational colleges. The change of the source of students, as well as the diversity of social needs. This is both an opportunity and a challenge. But it also puts forward higher requirements for the current student management of local higher vocational colleges [7]. The student management of local higher vocational colleges must actively adapt to this change, and actively explore a suitable student management mode of Local Higher Vocational Colleges under the background of popularization.

## **II. INVESTIGATION AND ANALYSIS ON THE CHANGE OF STUDENT SOURCE IN LOCAL HIGHER VOCATIONAL COLLEGES**

### **2.1 The current situation of students in Higher Vocational Colleges**

In recent years, the number of students in China's higher vocational colleges has been shrinking year by year. From the total number of students enrolled each year, it is not ideal, especially in the less developed local higher vocational colleges. In the wave of higher vocational college reform, the competition among higher vocational colleges is extremely fierce [8]. In order to survive and develop, the most important thing of higher vocational colleges is the development of enrollment. Therefore, based on the actual situation of the current society, the source of students in higher vocational colleges is more than a single channel, and the nature of the source of students also changes. At present, there are three main types of students in Higher Vocational Colleges in China: the first is the general high school students who have

passed the general college entrance examination; the second is the students who have passed the single entrance examination, that is, the technical secondary school students, the vocational high school students and the technical school students; the third is the five-year consistent system students, which are also divided into the technical secondary school students and the vocational secondary school students [9].

As far as these three kinds of students are concerned, the first kind of students come through three years of high school learning to take part in the college entrance examination, so their cultural knowledge level is higher. The reason why they go to vocational colleges is that their purpose is very clear. They come to learn a skill and become useful talents in the society [10]. At the same time, the Ministry of education has repeatedly proposed the importance and practicability of Vocational Technology in the society. The second kind of students are the few remaining students in technical secondary schools and technical schools in our country and the social youth who have passed the single enrollment in our school. These students have strong practical ability, but they lack the attitude and consciousness of learning. For example, most of the students who take the single enrollment come to get a college diploma. The third kind of students are those who graduated from junior high school and went to higher vocational colleges for further study. Their age, cultural knowledge and self-consciousness are relatively weak. Many students are also unable to pass the senior high school entrance examination, and those who are still young can only be trained in vocational schools first. To sum up, the diversified source of students in higher vocational colleges, the complex composition of students, uneven levels, weak awareness of all kinds, weak theoretical knowledge base and other status quo, many adverse factors are bound to bring great difficulties to education, teaching and daily management.

## 2.2 Investigation and Analysis on the change of student source in Huaihua vocational and Technical College

### (1) Purpose of investigation

Huaihua vocational and technical college was founded in 2003 and has been running for 10 years. It is the only full-time higher vocational college in Huaihua City. Its predecessor is Anjiang agricultural school in Hunan Province. It is a key technical secondary school directly under the Department of agriculture of Hunan Province. Yuan Longping, the father of Hybrid Rice in the world, has worked in the school for 37 years and cultivated many talents for all walks of life. Based on the investigation of Huaihua vocational and technical college students' family situation and the basic situation of their attitude towards school management, combined with the reality, this paper points out the corresponding practical problems, so as to put forward the effective, perfect system and sustainable development countermeasures, so as to provide an objective basis for the reform and development of student management in local higher

vocational colleges.

(2) Investigation methods

SPSS17.0 statistical analysis software is used for statistical analysis.

(3) Analysis of survey results

The total enrollment of Huaihua vocational and technical college in 2010, 2011 and 2012 is 2215, 1850 and 1527 respectively, of which 1728, 980 and 327 are ordinary high school students.

Figure 1 is a survey of students' pressure in school. The survey shows that 36.9% of the pressure comes from interpersonal relationship. It can be imagined that today's post-90s college students are new to the society and begin to live independently. They are still immersed in their own personal world, and it is difficult to open their hearts to communicate with strangers from all over the world. The second is the pressure from employment. In the face of the severe employment situation in the society, and the fact that I am not qualified for a college diploma, how to find my own place in the society after graduation is the realistic pressure of every graduate who is about to face employment. This pressure is mainly reflected in the third grade students.

Figure 2 is the survey of students' cultural foundation. From the data, it is obvious that students' cultural foundation is low. In the survey, 59% of them are weak in cultural foundation, 22.3% in general, and 18.7% are solid. This shows that the overall cultural quality of higher vocational students entering the school is low, which is directly related to the change of students' source, as shown in the questionnaire induction. 59% of the students with weak cultural foundation, 90% of them are from five-year students, because these students come to vocational colleges because they can't afford high school because of their poor cultural achievements. 18.7% of the students with solid foundation are all from the starting point of high school. However, due to the expansion of higher education in recent years, there are almost no branches in higher vocational colleges, and the admission scores are extremely low. From my work experience, I can tell that in the five years from 2008 to 2013, I found that many students' scores in the college entrance examination archives were more than 400 points, but in the past two years, more than 95% of the students' scores in the college entrance examination were between 200 and 300 points.

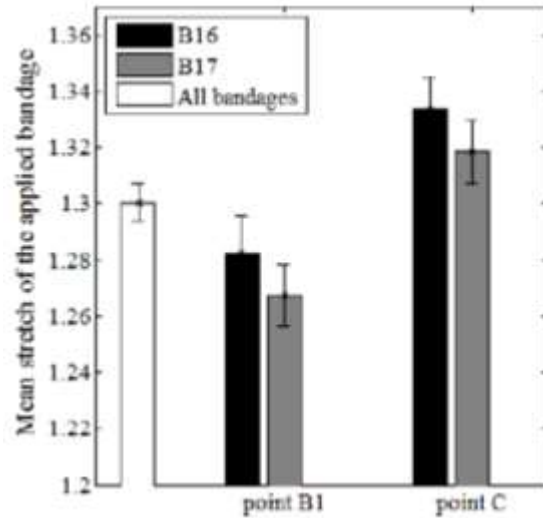


Fig 1: Investigation of students' pressure in school

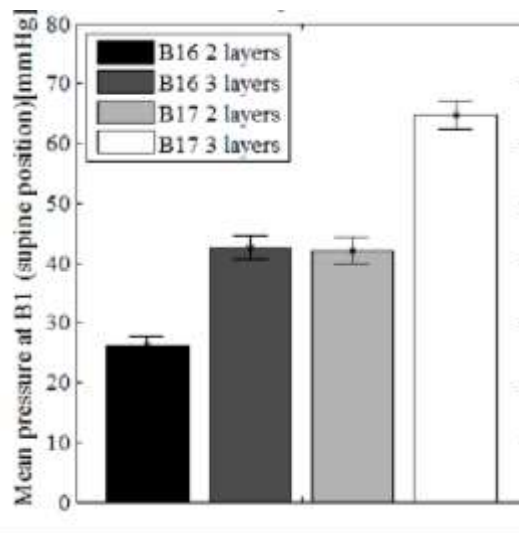


Fig 2: Survey of students' cultural foundation

### III. ANALYSIS ON THE CURRENT SITUATION OF STUDENT MANAGEMENT IN LOCAL HIGHER VOCATIONAL COLLEGES

#### 3.1 The current situation of student management in Higher Vocational Colleges

China's colleges and universities are generally divided into two parts, one is ordinary colleges and universities, the other is higher vocational schools. Higher vocational schools in China's early proportion is small, started late, in the past are in the form of secondary vocational

schools, with the development of society, higher vocational schools have developed rapidly, now has become half of the sky of China's higher education, is one of the important types of higher education in China, compared with ordinary undergraduate colleges and universities, each has its own characteristics. Vocational colleges emphasize the occupation, strong pertinence, and pay attention to the cultivation of vocational ability and skills. It is also a skilled applied talent base advocated by the society. Generally speaking, student management in higher vocational colleges has the following characteristics:

1. Student management is people-oriented and aims at serving the talents of higher vocational education. The times are progressing, the individual differences of students are changing, and the needs of students put forward more requirements to the society. The school ideas of the old Chinese era no longer exist, such as the sacred supremacy of the school, the class nature of teachers and students, and the antagonism. Now the school is covered with the color of the new era, the students' bold and independent personality is full of every corner of the campus, the students are now against the management of the whip style, the pursuit of freedom, so the management education of human text is the inevitable product of the progress of the times, but also the only way of student management in higher vocational colleges. Why higher vocational education can occupy half of the sky of higher education in our country is because it is the need of the society and the higher requirements put forward by the current society. At the same time, higher vocational colleges also have an important position in the society, because it is the application-oriented talents that are in short supply in the society and pay attention to the cultivation of professional ability and comprehensive ability.

2. Student management methods are flexible and diversified. The diversity of students in Higher Vocational Colleges leads to the fact that the method of student management is not single, otherwise it can not adapt to the changes of students. In the face of three different types of students in higher vocational colleges, more attention should be paid to the individual differences of students, teaching students in accordance with their aptitude and paying attention to guidance. Different students, some of them are not mature in age, some of them are mature in psychosomatic development, and some of them are not mature in psychology, so their outlook on life and world are not the same. Therefore, there is only one method of student management in a higher vocational college to guide three different types of students, which is unreasonable and impractical. In the student management of many higher vocational colleges, there are many kinds of staff management means, which are not uniform. Due to the diversity of higher vocational students, many levels and individual differences, the diversification of student management methods and means is one of the characteristics of higher vocational student management.

### 3.2 Characteristics of students in Huaihua vocational and Technical College

Through the survey, it is not difficult to see the overall situation of the students in Huaihua vocational and technical college. The students are diverse, the composition of students is complex, the level is uneven, the admission score is not high, and the theoretical knowledge base is quite weak:

1. Characteristics of higher vocational students (the last two years of three-year system and five-year system): this kind of students in higher vocational colleges are top class soldiers, aged between - years old, because after three years of high school study, their cultural knowledge is relatively comprehensive. However, according to the survey, their college entrance examination scores are not high. From this perspective, their high school learning is generally biased. For this reason, they are only responsible for the majors they are interested in. But for them, learning is a headache, which is totally inappropriate. For example, most students are not interested in College English learning, and even hate to take this course. As a result, there are more students in mining class. In our school, there are people from Inner Mongolia, the northernmost part of our country, and Hainan Island, the southernmost part of our country. Because of geographical differences, there are many differences in living together. Naturally, communication is not so smooth. Some students have been in school for two years, and they can't even name their classmates. For contemporary college students, this is not a good phenomenon - they are not good at communication.

2. Characteristics of higher vocational students in five-year system (the first three years): the primary characteristics of these students are that they are still young, and are generally between years old. Because of their age, many aspects are not mature. First, their cultural knowledge is only at the junior high school level, and their attitude towards learning is not correct; Secondly, these students are all the only children after 90. They are the emperors in the family. They are the treasures of parents. They have not done any housework. In my work as a class teacher, I found that the students' life can not be self-care sometimes, the dormitory is not cleaned, their quilts will not be arranged, the money is not paid, and there is no plan. The only good thing is to be very personal and easy to get along with others. Of course, it has something to do with the same region, because these students are from local areas. Finally, these students are in adolescence, unstable, impulsive, and lack of ability to distinguish right from wrong, easily contradict with classmates, and even fight and fight.

### 3.3 The current situation and problems of student management in Huaihua vocational and Technical College

(1) The student management mode is relatively single, and the setting of management

department is unreasonable

The traditional college student management mode is adapted to the academic year system. The most remarkable feature is that students take the class as the basic unit (study and life), student work is equipped with counselors or class leaders according to the class, and the college has a vice president in charge of student work. But he is only responsible for the student department, and there may be more departments. That is to say, he has to be responsible for more than two or more departments. Huaihua vocational and technical college is no exception. For example, the student dormitory is managed by the Logistics Department of the college, the security department is managed by the Armed Forces Department, and the employment department is an independent administrative department. The student management mode of Huaihua vocational and technical college is only reflected in relying too much on the work experience of teaching and treatment workers, ignoring students' own needs and information exchange outside the management system. Although the level of management system is clear - two-level management of colleges and departments, the real points are fixed in the corresponding individual classes, and many management points can not achieve macro-control.

(2) The quality of teaching staff is low, lack of service consciousness

Higher vocational education is the interactive process of teachers and students. Students are not only the objects of education management, but also the objects of school service. Student management should be contained in the service work. Without good service, there will be no good environment for education and students to become talents. But now quite a number of school student workers, due to the administrative way of student education and management, lead to more discipline for students, less service and protection of rights and interests, more management affairs, and less service consciousness. In my work, I once met a teacher who blindly pursued material interests. In April 2010, eight students in my 2008 mechanical and electrical class were cheated by a teacher in the name of upgrading from junior college to undergraduate. In September 2010, a student athlete was going to represent his school in the Universiade. He needed the approval form for admission. As a result, he was disqualified because of the staff's unwillingness to cooperate.

(3) The system is not perfect, and the system, continuity and coordination of student management are not strong

The current student management work is still in the situation of "missing and patching up" and "missing and patching up samples", which can not get rid of the "fire" type of work situation, resulting in a certain degree of volatility in student education management work, and most students feel more formalistic about the work. After consulting, Huaihua vocational and technical college, except for a student manual of Huaihua vocational and technical college, does not have a real document system for related matters, such as the management regulations of



student dormitory, and many "dirty, messy and poor" phenomena appear soon after the inspection of places such as student dormitory, which is the true reflection of this problem. The root cause of the problems lies in the fact that we can't really understand the nature, objectives and tasks of student education management from the perspective of cultivating high-quality talents. We often stay in the state of solving local problems, completing single task and dealing with work inspection, and can't adapt to high-quality education.

#### **IV. SUGGESTIONS ON IMPROVING STUDENT MANAGEMENT IN LOCAL HIGHER VOCATIONAL COLLEGES**

4.1 Improve the quality of students and promote the development of students' quality and ability

(1) To improve the quality of students should strictly control the enrollment

Due to the tight source of students and the great social competition in higher vocational colleges, there is almost no threshold for enrollment in Local Higher Vocational Colleges in recent years. As a result, the quality of students in all aspects is generally low, and the quality of students is uneven, especially for five-year students and single enrollment. Most of the five-year students are poor achievers who can't afford to go to high school. They are still young, so they have to learn some skills in school first. Most of the students are social youth, without previous student files, they don't know anything about the situation. Because of these reasons, the proportion of collective fighting and psychological problems on campus increases every year, which brings great trouble to the management of students. Therefore, in the process of enrollment, strict control, so that the overall quality of the students to a higher level, this is undoubtedly a good magic weapon for student management to change to decompression.

(2) To improve the quality of students

According to the survey, the overall quality of Huaihua vocational and technical college students in grade 2010, 2011, and 2012 did not reach the standard of college students. In the past five years of my work, the school seems to be very weak in the development of students' quality. The student work always stays in the situation where students have problems to solve. I didn't want to completely eradicate some stubborn problems that often appear in the student work. Therefore, it is necessary to strengthen the quality education for the students in school, and at the same time to implement the strict quality development work for the students in school.

4.2 Improve the internal mechanism of the school and the construction of the student management system

(1) Perfect the establishment of student management department

At present, the management of higher vocational students not only stays in the simple management in the past, they should do a good job in the service from entering to graduation, in the comfort and safety medicine of learning in school, and find the ideal job after graduation, which is a whole process of management and education. Therefore, it is not easy for dozens of student workers to do it well. It needs a huge administrative organization to implement it. The student department should set up student work office, psychological counseling center, residential management service center, security office, Youth League Committee, employment service center, student financial aid center, student one-stop service, etc., so as to make the student management work move towards the track of whole process education.

(2) Establish a hierarchical management mode suitable for the current situation of students, people-oriented, individualized

At present, the online enrollment of high school students in higher vocational colleges can adopt the management mode of autonomy and self-discipline because of their relatively high cultural level and quality starting point. Five year program has always been students, because they are still young, underage, no legal guardian around them, immature in all aspects, impulsive and so on, we should adopt the closed tracking mode: single recruit students, the disadvantage is that the cultural foundation is weak, but the social experience is rich, so we should adopt the confidence teaching management mode. The premise of this hierarchical management mode is people-oriented, teaching students in accordance with their aptitude, so that each student can realize their own value. The hierarchical humanistic management education reflects the unique attraction of the school. The final mining results are shown in Table 1.

**TABLE I. The final mining results**

	Managem ent attitude	Managem ent ability	Managem ent method	Management efficiency	Sample number
Cluster 1 (better)	0.77	0.77	0.74	0.79	36
Cluster 2 (medium)	0.61	0.57	0.54	0.56	74
Cluster 3 (poor)	0.31	0.31	0.28	0.30	10

(3) Standardization and strictness of students' Entrance Education

Just as the so-called good start decides success, so does the school. The first day students

enter the school, they have to manage well, and then they have to do a good job in entrance education. Entrance education includes basic moral and legal knowledge learning, basic system knowledge learning, basic military knowledge learning and entrance examination. It is very important to do a good job in entrance education, so that all students can realize the strictness of school management, which will lead to admiration and worship. The standardization and strictness of entrance education is the cornerstone of good school spirit in the future. If a good school spirit is formed, the student management will naturally succeed.

(4) Standardizing the system of rewards and punishments for students and promoting the mainline of students' daily behavior management

National scholarship, national inspirational scholarship, school scholarship and other incentive system should be well used. In addition, we should also develop a variety of incentive mechanisms, focusing on encouragement, seize the main line, optimize the daily management behavior of students, put an end to black box operation, and play tricks to disturb the evaluation process of the incentive mechanism. Let students realize the purity, justice, fairness and openness of campus. The school's punishment system should also keep up. Although punishment is not the ultimate goal of the school, it is necessary to severely crack down on the students who disturb the school's public order, violate the school's discipline and rules, and persist in teaching and treatment.

#### 4.3 Improve the construction of student management team

Student counselors and class teachers are important bridges for communication between schools and students, and are the direct leaders of students. They often deal with students and are the first-line teachers of student management team. Without the support of excellent political theory, it is difficult to communicate with students, let alone how to educate students. In addition to the relevant regulations of student management and the corresponding national document policies, there are quite a lot of them. This requires teachers in our front line to strengthen their study. At the same time, we can strictly assess this when recruiting counselors and class directors.

## V. CONCLUSION

This paper mainly takes Huaihua vocational and Technical College as an example, investigates and analyzes the current situation of the change of student source in local vocational colleges and the corresponding status of student management, so as to analyze some problems and challenges faced by the student management in local vocational colleges, and finally summarizes the current suggestions and Countermeasures of student management in Local Vocational Colleges under the change of student source.

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