# Current Situation and Countermeasures of County School Predicament: Taking Yixian Middle School as an Example

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**Abstract.** This paper presents a case study of Yixian Middle School (YMS) in China, discussing the challenges faced by county high schools (CHS) and how it affects education quality and resources. The reasons for the county school predicament (CSP) are analysed, and the strategies employed by YMS to deal with it are discussed in detail. These include strengthening school connotation, optimizing environmental conditions, and leveraging university support. The results show improvements in education quality, social reputation, and satisfaction among parents. The experiences of YMS provide valuable insights for similar CHS facing the CSP.

keywords: County school predicament; Yixian middle school; county revitalization; assistance action

### 1 Introduction

As an important component of China's basic education, CHS bear the important task of cultivating reserve talents for national development [1,2]. They also lead compulsory education within the county, playing an important supporting role in guiding and promoting the high-quality and balanced development of compulsory education in the county and serving the strategy of rural revitalization. However, due to various factors such as history, geography, economy, and society, many COHS have experienced a large outflow of excellent teachers and high-quality students, forming a development dilemma characterized by the vicious cycle of the outflow of high-quality educational resources and the decline in education quality [3-5]. Many once-renowned county schools have also been overall dissolved under the squeeze of some super high schools. Therefore, addressing the CSP, improving the quality of education in county schools, and helping them overcome their difficulties and achieve comprehensive revitalization have become urgent tasks for education reform and development during the "14th Five-Year Plan" period [6,7].

Yixian Middle School (YMS) is the only regular high school located in Yixian County, a mountainous area in southern Anhui. Although there are well-known tourist attractions such as Xidi

and Hongcun within the county, due to poor location conditions and uneven development, the overall economic level is not high and education resources are limited. For some time, YMS has been experiencing a constant outflow of excellent teachers (with 9 outstanding young and middle-aged teachers leaving in the past five years), and young teachers are not willing to come. The teaching staff has been experiencing a two-way "degeneration," and coupled with the small total enrollment and the continuous outflow of high-quality students, it is facing many development problems and is in a county school dilemma [8].

By analyzing the case of YMS's dilemma, we can better understand the general reasons of CSP. By summarizing and discussing effective solutions for YMS's dilemma, we can provide reference and guidance for the development of YMS and similar county schools.

# 2 Overview and Challenges of YMS

YMS has a long history, founded in 1944 as Yixian County Junior High School, and renamed Anhui Province Yixian Junior High School after the liberation. In 1958, the school started its high school department and was officially named Anhui Province Yixian High School. In 2012, it was named a provincial demonstration high school.

#### 2.1 Shortage of Faculty and Staff in YMS

Currently, YMS has a total of 89 faculty and staff, including 86 full-time teachers, 36 senior teachers, 27 first-level teachers, and 19 second-level teachers. Although the overall student-teacher ratio is up to standard and less than 10:1, there are serious structural problems with the teaching staff.

The age structure of the faculty is relatively old. Among the teachers at YMS, there are 19 people over the age of 55, 17 people in the 50-55 age group, 26 people in the 40-49 age group, 20 people in the 30-39 age group, and 7 people under the age of 30. The average age of the faculty is close to 46 years old, and 10 people are approaching retirement, with 26 people set to retire within the next five years (see Fig.1.). Therefore, it is urgent to recruit young teachers

The subject structure is unreasonable. Under the background of the new college entrance examination reform, the teaching mode of subject selection and class-based teaching is implemented, and it is difficult to accurately predict students' subject choices. In addition, teachers' illnesses, retirements, and other factors have led to insufficient reserves of some subject teachers, which cannot meet the diverse subject selection needs of students. There is currently a shortage of teachers in subjects such as Chinese, English, geography, music and psychological course and general course (see Fig.2.).

The level structure is low. Although YMS has city-level distinguished teachers, academic leaders, and backbone teachers, the overall level is not high, and there are no high-level talents such as special-grade teachers or senior teachers. The overall level of the teaching staff needs to be improved.

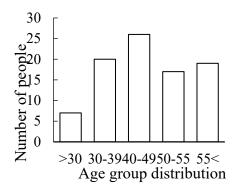


Fig. 1. Age distribution of teachers in YMS (2022).

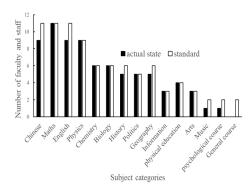


Fig. 2. Composition of faculty and staffs with subject categories in YMS.

## 2.2 Outdated school hardware facilities in YMS

YMS covers an area of 116,074 square meters, with a total building area of 25,687 square meters. The school currently has one 400-meter plastic sports field, three teaching buildings, one male and one female student dormitory, one cafeteria, and basic teaching facilities such as an observatory, computer room, recording room, general technology laboratory, and physical and chemical laboratory. However, according to the requirements of the "14th Five-Year Plan" county-level general high school development and improvement action speech jointly issued by the Anhui Provincial Department of Education and nine other departments in March 2022 YMS still faces some problems.

Most of the school buildings at YMS have been in use for decades, and old buildings are prone to problems such as leaking roofs, broken water pipes, aging wiring, and falling ceilings and walls, which bring inconvenience to education and teaching and pose safety hazards. The infrastructure is incomplete, and there is no large indoor assembly venue. Students cannot have physical education classes on rainy days, and various educational and teaching activities such as meetings, lectures, and reports must be held on the open-air field, often resulting in cancellations due to weather conditions. The school often has to borrow other schools' auditoriums to hold various educational and teaching activities. The school also lacks a library and reading room. In

2021, Anhui Province entered into comprehensive reform of the college entrance examination, and the new college entrance examination reform requires subject classrooms, innovation laboratories, experimental equipment, and information technology teaching conditions, campus network systems, campus broadcasting systems, teaching recording systems, and various multifunctional classrooms, etc., which are severely inadequate. The campus road network is also severely damaged due to long-term use, and the campus layout is unreasonable.

# 2.3 Students' comprehensive quality is not high in YMS

Yixian County is a small county with a population of only 70,000. YMS's school scale itself is relatively small, coupled with the outflow of students (according to regulations, the top 34 students in the county's high school entrance examination results must be sent to Tunxi No.1 Middle School), resulting in students' comprehensive quality not being high. Although YMS has achieved relatively ideal college entrance examination results in recent years under the conditions of serious loss of high-quality students and continuous decline in the quality of students, initially achieving the established goal of "high admission and high graduation rates for excellent students, and high admission and low graduation rates for low students", due to weak foundation, more backward students, insufficient development momentum, it is difficult to form a qualitative leap, resulting in the situation where the admission rate to undergraduate institutions is still acceptable, but the admitted colleges and majors are not ideal enough. Students' selfmanagement and life skills are insufficient in YMS. According to interview results, nearly 30% of students said they did not have good time management skills and self-discipline, and lacked regular routines and habits, which had a negative impact on their physical and mental health and personal development. Interpersonal communication skills are not strong enough in YMS. According to interview results, about 40% of students said they have problems in communicating with others, such as difficulty in communication, shyness, and lack of confidence.

# 3 Strategies of YMS to deal with the CSP

The deep-seated reasons behind the CSP include not only the continuous loss of teachers and students due to the imbalance of economic and social development and the uneven distribution of educational resources, but also the policy constraints at the



Fig. 3. Strategies for dealing with the dilemma of YMS.

government level. In the face of the reality where resource shortages are difficult to make up for, more attention should be paid to optimizing the regional educational ecology, tapping the potential of school internal management, and stimulating the internal dynamics of teachers and students [9,10]. YMS mainly responds to the CSP from three aspects: connotation construction, environmental conditions, and support from universities (see Fig.3.).

### 3.1 Strengthening the Construction of School Connotation

YMS emphasizes the formulation and implementation of teaching management systems, which provide a reliable guarantee for the scientific and standardized management of the school.YMS strengthens the management of teaching routines, focusing on classroom teaching, homework, and exam management, ensuring effective control of the teaching process and standardized teaching order. YMS prioritizes teachers' professional learning and communication, organizing them to study relevant materials, participate in training, and engage in open class and collective lesson preparation activities, creating a conducive environment for teacher growth and improving classroom teaching quality. YMS promotes multi-party cooperation, both internally among subject teachers through collective lesson preparation activities, and externally by fostering communication and collaboration among teachers from different subjects. It also establishes effective communication channels with families through parent committees, home visits by homeroom teachers, and parent-teacher conferences. YMS adapts teaching to individual differences by providing special guidance for critical students, managing fragmented time for students with poor self-awareness, and reinforcing family-school cooperation to ensure students' study time and motivation.

## 3.2 Regenerate response Optimizing the environmental conditions

YMS strengthens infrastructure construction by introducing advanced teaching equipment, upgrading network equipment, and building intelligent and multimedia classrooms. An information management system is established for efficient school management. Campus security

facilities are improved with the completion of the teaching building renovation. The second phase of campus expansion and renovation is underway, including the construction of a new library, comprehensive building, gymnasium, dormitories, and canteen renovation. Water, electricity, road network improvements, and sports field construction are also planned.

YMS focuses on strengthening campus culture construction in conjunction with the campus expansion and renovation projects. Emphasizing the overall goal of a high-standard campus and high-quality education, a positive and vibrant campus culture environment is cultivated. Through diverse and engaging cultural activities, YMS aims to create a safe, literary, green, civilized, and law-abiding school, ultimately realizing the vision of students enjoying learning, teachers enjoying teaching, and the school developing its connotation.

## 3.3 Leveraging the Help of Universities to Promote County Development

In response to the CSP and the County High School Development and Promotion Action Plan for the 14th Five-Year Plan, Huangshan City and Huangshan University initiated the Assistance of Local Universities in County Revitalization Action. Ten young teachers from Huangshan University were dispatched to YMS as deputy principals. With their assistance, YMS achieved several positive outcomes. Firstly, a Parent-Teacher Association was established to strengthen the integration of family and school education. Secondly, efforts were focused on transforming underachieving students to enhance moral education. Thirdly, the Biyang Academy was repaired to enrich campus culture and support moral education. Fourthly, YMS prioritized the health and safety of teachers and students during the pandemic. Fifthly, practical labor bases like "Peach Garden" and "Mushroom Planting" were established, guided by the expertise of the dispatched teachers. Sixthly, YMS actively promoted teaching research and encouraged teachers to participate in project applications and discussions. Notably, YMS collaborated on a key research project in Anhui Province related to the assistance of local universities in county revitalization. Furthermore, the YMS public account was updated and improved for enhanced external publicity. As a result of these efforts, YMS has experienced improvements in its conditions, education quality, social reputation, and parental satisfaction.

### 4 Conclusions

Overall, YMS in southern Anhui has successfully implemented various strategies to address the challenges posed by the CSP, including the shortage of faculty and outdated facilities. By prioritizing teaching management and infrastructure improvements, as well as leveraging support from an external university, YMS has been able to maintain and enhance education quality, improve social reputation, and increase parental satisfaction.

The success of YMS serves as a valuable case study for other county schools facing similar challenges. The strategies employed by YMS can serve as a roadmap for other schools looking to improve their conditions and overcome the CSP. Additionally, this study highlights the importance of external support and collaboration for achieving educational success.

Further research is needed to assess the long-term sustainability of these strategies and to determine their effectiveness in other contexts beyond YMS in southern Anhui. Overall, this study

contributes to the broader conversation on addressing the challenges of the CSP and improving education quality in rural areas.

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