STRATEGIES FOR SUSTAINABLE DEVELOPMENT OF BASIC EDUCATION IN DEVELOPING AREAS OF WESTERN CHINA

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Thesis Title Strategy for Sustainable Development of Basic Education in Developing Areas of Western China

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บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์: 1) เพื่อศึกษาสภาพปัจจุบันของการพัฒนาที่ยั่งยืนในระดับการศึกษาขั้นพื้นฐานในพื้นที่กำลังพัฒนาทางภาคตะวันตกของประเทศจีน 2) เพื่อพัฒนากลยุทธ์ที่ส่งเสริมการพัฒนาที่ยั่งยืนในระดับการศึกษาขั้นพื้นฐาน 3) เพื่อประเมินความเหมาะสมและความเป็นไปได้ของกลยุทธ์และข้อเสนอแนะที่นำเสนอ กำหนดขนาดตัวอย่าง โดยใช้ตารางของ Krejcie และ Morgan จำนวน 635 ประกอบด้วย ครู 265 คน ผู้บริหาร 225 คน และผู้มีส่วนได้ส่วนเสีย 145 คน โดยวิธีการสุ่มแบบแบ่งชั้นเครื่องมือที่ใชในการวิจัย คือ แบบสอบถามและการสัมภาษณ์ มีค่าความสอดคล้องระหว่าง 0.80 ถึง 1.00 สถิติที่ใชในการวิเคราะห์ ได้แก่ ร้อยละ ค่าเฉลี่ย และส่วนเบี่ยงเบนมาตรฐาน เครื่องมือการวิจัยรวมถึง: 1) แบบถาม, 2) คู่มือการสัมภาษณ์, 3) การหารือของกลุ่มโฟกัส และ 4) แบบฟอร์มการประเมิน

ผลการวิจัยพบว่า:

1. ระดับการพัฒนาที่ยั่งยืนในด้านการศึกษาขั้นพื้นฐานในพื้นที่กำลังพัฒนาของจีนตะวันตกอยู่ในระดับค่อนข้างสูง แต่ยังคงมีความไม่สมดุลในหลายแง่มุม 2.แนวทางการปรับปรุงถูกจัดหมวดหมู่ออกเป็น 9 กลยุทธ์หลัก ซึ่งประกอบด้วยมาตรการเฉพาะ 45 ข้อ 3.การประเมินความเหมาะสมและความเป็นไปได้ของกลยุทธ์ที่พัฒนาขึ้นได้รับการจัดอันดับในระดับสูง ผลการวิจัยนี้เป็นประโยชน์ต่อผู้กำหนดนโยบายและผู้บริหารด้านการศึกษาในระดับการศึกษาขั้นพื้นฐานเพื่อแก้ไขปัญหาที่มีอยู่และปรับแนวทางให้สอดคล้องกับมาตรฐานการศึกษาระดับชาติและสากล

คำสำคัญ : การศึกษาขั้นพื้นฐาน, การพัฒนาที่ยั่งยืน, พื้นที่กำลังพัฒนาของจีนตะวันตก, กลยุทธ์การส่งเสริม

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ABSTRACT

The purpose of this study is to: 1) investigate the current situation of sustainable development in basic education in developing countries in western China; 2) formulate strategies to promote sustainable development in basic education; 3) evaluate the applicability and feasibility of proposed strategies and recommendations. Use Krejcie and Morgan's 635 tables to determine sample size, including 265 teachers, 225 managers, and 145 stakeholders. Research tools include: 1) questionnaires, 2) interview guides, 3) focus group discussions, and 4) assessment forms. Random stratification method involves questionnaires and interviews. Consistency ranges from 0.8 to 1.00. Statistical data used in the analysis include mean percentage and standard deviation.

The results indicate that:

1. The level of sustainable development in basic education in developing areas of West China is relatively high. However, there are still imbalances in many aspects. 2. The improvement guidelines are categorized into 9 main strategies, which consist of 45 specific measures. The findings are useful for policymakers and education administrators at the basic education level to address existing problems and align approaches with national and international education standards.

Keywords: basic education, sustainable development, developing areas of western China, promotional strategies.

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Chen Xunwei

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Introduction

Rationale

Basic education is the cornerstone of the education system and serves as the foundational project for improving the quality of the population and cultivating talent for national development. Through the implementation of basic cultural knowledge education, basic education enhances the fundamental qualities of citizens, laying a solid foundation for their further education or vocational training, which is of great significance.

In October 1951, the Chinese government issued the "Decision on Reforming the Education System." During this period, the key focus of basic education was to popularize primary education, leading to rapid development in both primary and secondary education. In 1953, China began to implement its first Five-Year Plan for economic and social development. By the completion of the "First Five-Year Plan" in 1957, the enrollment rate of school-age children reached 61.7%, indicating a certain degree of popularization of primary education (China Education Yearbook, 1949-1981, 1984).

After entering the new century, the Chinese government has implemented the Western Development Strategy to reduce the disparities between the eastern and western regions. In terms of education, it has promoted educational reform and achieved "nine-year compulsory education," viewing this measure as a strategic means to alleviate poverty in developing areas of western China. The year 2020 marked the conclusion of China's 13th Five-Year Plan, during which significant breakthroughs were made in the development of basic education. The main goals set forth in the "13th Five-Year Plan" and the "Medium- and Long-Term Education Reform and Development Plan Outline" were successfully achieved, along with the phased objectives outlined in "China's Education Modernization 2035."

In the developing areas of western China, basic education has been continuously improving in terms of educational standards and quality, alongside the ongoing national education reform and governance system. The standardization of educational management has been increasingly enhanced, ensuring and elevating the equity, quality, and effectiveness of basic education. However, some issues have gradually emerged in the high-quality development of basic education in this region, which to some extent affect the progress and level of basic education development, profoundly impacting the comprehensive reform and system construction of basic education in the area. There are mainly four aspects of these issues:

1. There is an imbalance in educational development, particularly when comparing the Sichuan region to the eastern regions. Whether in urban or rural areas, or among schools of similar levels, the disparities in educational development remain significant. There is a pressing need to further improve the quality of basic education in Sichuan.

2. Educational equity needs to be enhanced. This issue is primarily reflected in the fairness of the educational process, such as the prominent problems of uneven distribution of educational resources, which affect students' ability to learn and achieve success.

3. Exam-oriented education remains a significant issue. Examinations have become the primary focus, with schools organizing their work around testing, often neglecting the improvement of students' overall quality and the development of their individuality.

4. Local governments need to establish a scientific perspective on educational development. Some local governments lack a correct understanding of the comprehensive development of youth, relying solely on exam results as the standard for measuring the quality of educational work, thereby overlooking the holistic development of young people's overall qualities.

In 2016, the Chinese government issued the "Opinions on Promoting the Integrated Reform and Development of Urban and Rural Compulsory Education in Counties," which emphasized the need to significantly improve the quality of rural

compulsory education and accelerate the reduction of the educational gap between urban and rural areas within counties. It called for the promotion of integrated development of urban and rural compulsory education and the coordinated allocation of educational resources, as well as the equalization of basic public education services, aiming to achieve balanced development of compulsory education in counties.

We pay close attention to the basic education in developing areas of western China and study how to promote the sustainable development of basic education in these areas. This is of practical significance, as it can contribute to efforts in promoting sustainable development in basic education and exploring solutions to the challenges faced by underdeveloped regions, thereby enhancing the role of basic education in serving the country's and society's economic development.

Research Questions

1. What is the condition of sustainable basic education development in developing areas of western China?

2. What should be the strategy for sustainable basic education development iin developing areas of western China?

3. Are the strategies for the sustainable development of basic education in developing areas of western China appropriate and feasible?

Objectives

1. To study the condition of sustainable development of basic education in developing areas of western China.

2. To build a strategy for the sustainable development of basic education in developing areas of western China.

3. 3.To Evaluate the feasibility and adaptability of strategies to promote sustainable development of basic education in developing areas of western China.

Scope of the Research

Population and the Sample Group

The Population

Based on the actual situation, researchers selected 10 basic education schools in the western region, including 5 primary schools, 3 junior high schools, and 2 high schools recognized by the Ministry of Education, as research subjects, including 1630 people, divided into:

1) Teachers: 850

2) Administrators: 550

3) Stakeholders: 230

The Sample Group

The sample size for this study was determined using the provided sample size formula (Krejcie & Morgan, 1970). A stratified random sampling method was employed to select 635 individuals from a total of 1630, specifically as follows:

1) Teachers: 265

2) Administrators: 225

3) Stakeholders: 145

Table 1.1 Samples for the survey

School Type	School Number	Teaches		Administrators		Stakeholders	
		Population	Sample Group	Population	Sample Group	Population	Sample Group
Elementary	1	95	30	60	25	25	16
School	2	95	30	60	25	25	16
Teachers	3	95	30	55	22	25	16
	4	95	30	50	20	25	16
	5	90	28	60	25	25	16
Middle	6	90	28	60	25	25	16
School	7	80	25	45	18	25	16
	8	80	25	50	20	20	12
High School	9	65	20	60	25	20	12
	10	65	19	50	20	15	9
Total	**850**	**265**	**550**	**225**	**230**	**145**	

Number corresponds to school name :

1. Leshan Experimental Primary School
2. Meishan Dongpo Primary School
3. Danling Urban Primary School
4. Ya'an Yucheng Primary School
5. Leibo County Chengguan Primary School
6. Huili City Shaba Junior Middle School
7. Luzhou Lantian Middle School
8. Jiajin County Mucheng Junior Middle School
9. Maanbian Middle School
10. Renshou High School

The Variable

Independent Variable

People-related factors: teachers, administrators, and stakeholders)

Factors related to policy and management:

factors related to strategies

strategic planning

strategic execution

strategic control and evaluatio

Dependent Variable

Strategic management model that is appropriate to Sustainable basic education in developing areas of western China.

Advantages

The advantages of this study can be categorized into three aspects based on its objectives:

1. Convenience of the research scope: The basic education system in the Western Development Region of China is rich in resources, providing concrete subjects for analysis. This information can be used to guide improvements and planning for the sustainable development of basic education.

2. Relevance of the research subjects: This project can promote the mutual support and enhancement of the components of basic education in the Western Development Region of China.

3. Practicality of the research results: By formulating strategies for promoting the sustainable development of basic education in the Western Development Region, the adaptability and feasibility of these strategies can be specifically applied in practice, leading to positive outcomes.

Definition of Terms

1. Basic education development refers to the implementation of various activities according to the workload structure and educational management of schools in developing areas of western China to achieve the four objectives: academic administration, budget administration, personnel administration, and general administration.

1.1 Academic administration refers to the implementation of learning activities to achieve the objectives of the curriculum and the desired characteristics according to the workload structure and academic administration specified by the educational institution, which has the following scope: the preparation of development plans, academic administration, the preparation of plans/projects leading to operations, the development of curriculum, educational institutions and the implementation of the curriculum, the learning management process, the development of media, innovation, technology, the organization of learning resources both inside and outside the school, measurement and evaluation according to the actual situation, supervision and monitoring, and educational quality assurance.

1.2 Budget administration refers to the implementation of financial and material systems to ensure flexibility, compliance with financial and material regulations, transparency, and accountability. According to the budget management workload structure that the educational institution has specified, the scope of work includes: budget management planning that is linked to the work of setting up and submitting budget requests, budget allocation, budget disbursement, accounting, material management, resource mobilization and investment for education, auditing, monitoring, and reporting annual expenditures.

1.3 Personnel management refers to the operations to enable school personnel to know and understand their roles, duties, and responsibilities, create a work atmosphere, and create cooperation in order to perform their work effectively. The scope of work includes: manpower planning and position determination, recruitment, assignment of duties and responsibilities, supervision and monitoring of

work performance, consideration of merit, discipline, and maintenance of ethics, and personnel development.

1.4 General administration refers to work related to the organization's system organization to achieve specified standards, quality, and objectives. The scope of work includes: administrative work, student affairs, community and local agency coordination, building and site work.

2. The management conditions of schools in developing areas of Western China refer to: The work on school management in developing areas of Western China in terms of academic administration, budget administration, personnel administration and general administration

3. Problems of school management in developing areas of Western China refer to obstacles or limitations in the work on school management in developing areas of Western China in terms of academic administration, budget administration, personnel administration and general administration.

4. Factors related to school management in developing areas of Western China refer to causes or factors that may affect the management or are related to the management of schools in developing areas of Western China, both positively and negatively, as follows:

4.1 Internal factors of schools in developing areas of Western China refer to things that occur within schools in developing areas of Western China and are related to The development of school management strategies in developing areas of western China consists of four factors: 1) personnel, 2) finance, 3) materials, and 4) management.

4.1.1 Personnel refers to the conditions related to the people who will work in education management, including the workforce, quality of personnel, morale, and skills in working.

4.1.2 Finance refers to the financial conditions that will support education management, including disbursement of money, fundraising, and self-reliance.

4.1.3 Materials refers to the necessary items, tools, equipment, materials, and equipment used in education management, as well as their maintenance to ensure they are ready for use.

4.1.4 Management refers to the management of schools to achieve the objectives set by the Office of the Basic Education Commission, including planning, operations, performance monitoring, information systems, communication and public relations, and creating an environment conducive to learning. Organizing learning resources in educational institutions

4.2 External factors of schools in developing areas of Western China refer to things that occur outside schools in developing areas of Western China and are related to the development of school management strategies in developing areas of Western China. They include six factors: 1) social and cultural aspects, 2) legal aspects, 3) economic aspects, 4) political aspects, 5) technological aspects, and 6) geographical environment aspects.

4.2.1 Social and cultural aspects refer to the social and cultural conditions of communities in developing areas of Western China, including gender, age, education level, religion, beliefs, the flow of urban culture, the demand for school attendance, cooperation in school development by communities and local organizations, and the lives of people in communities.

4.2.2 Legal aspects refer to government laws related to school management. Study of schools in developing areas of western China

4.2.3 Economic aspect refers to the economic conditions of communities in developing areas of western China, including occupation, income, employment rate in the area, trade situation, and cost of living in the area.

4.2.4 Political aspect refers to the political conditions of the government, local regions, government agencies at all levels in the area, and local administrative organizations that affect the management of education, including attitudes, influential advocacy groups, and the quality of local politicians, domestic and foreign human rights organizations.

4.2.5 Technology refers to the state of technology, innovation, invention or introduction of new techniques related to education management in developing areas of Western China, as well as the introduction of communication technology of government agencies.

4.2.6 Environmental geography refers to the topography, climate, physical characteristics, characteristics of the area, transportation, travel, transportation, routes, roads related to education management.

5. School management strategies in developing areas of Western China refer to the guidelines or methods of operation to be implemented to achieve the objectives in line with internal and external factors of schools in developing areas of Western China

6. Strategy examination refers to the examination to judge the quality of the school management strategies in developing areas of Western China in two aspects as follows:

6.1 Appropriateness refers to the characteristics of the strategy for improving the school management in developing areas of Western China that are academically correct, considering the use of language/phrases, the coverage of missions, and the presence of strengths.

6.2 Feasibility refers to the possibility or practicality of implementing something, emphasizing the potential or capability to make it happen or achieve success in practice. For example, it pertains to projects or plans that can be executed within the available resources, time, and conditions.

7. Sustainable development: As a core concept, it refers to achieving long-term and sustainable development goals while ensuring the protection of natural resources and the preservation of the social environment. In the context of China's national conditions, this concept emphasizes the harmonious unity of ecological civilization construction and economic and social development, reflecting the firm policy orientation of the Chinese government to promote green development, circular development, and low-carbon development. Sustainable development education is a continuous process of construction and improvement, aimed at

establishing a stable and effective education system that can deeply disseminate knowledge and concepts of sustainable development, cultivate future citizens with environmental awareness, social responsibility, and innovation capabilities, and support China's grand blueprint for achieving long-term sustainable development.

8. Developing area refer to those areas that are relatively lagging behind in economic and social development and face many challenges, including the scarcity of educational resources, widespread poverty, and limited natural resources. In the context of China's national conditions, such regions often correspond to rural areas in developing areas of western China, and are the focus of the Chinese government's policy measures such as regional coordinated development and rural revitalization. The aim is to promote the comprehensive economic and social development of these regions through policy support and resource allocation, gradually narrowing the regional development gap.

9.. Western China: refers to the vast area located in the western part of China's geographical map, which is composed of multiple provinces with complex and diverse terrain and landforms. This situation is an important consideration for the Chinese government in formulating and implementing regional coordinated development policies, aimed at accelerating the economic and social development of western China through policy support and resource allocation, in order to achieve balance and prosperity nationwide.

Research Framework

The researchers reviewed and integrated relevant literature, concepts, theories, and studies concerning the promotion of constructing a sustainable development system and mechanism for basic education in the western regions of China's large-scale development. The analysis includes research by Gu Mingyuan (1986), Li Sen (2004), Yuan Guiren (2013), Hu Huimin (2019), Zhou Tao (2020), Gu Mingyuan & Li Tingzhou (2024), Chu Jiangting (2021), and other scholars. Based on the standards established by these studies, features that appeared three times or more were selected to construct the framework for this research. Four research aspects

were determined: academic, budget, personnel, and general administration. Additionally, four internal factors impacting the development of basic education institutions in the region were identified: 1) personnel, 2) finance, 3) materials, and 4) management, along with six external factors: 1) society and culture, 2) law, 3) economy, 4) politics, 5) technology, and 6) geographical environment. As shown in Figure 1.1

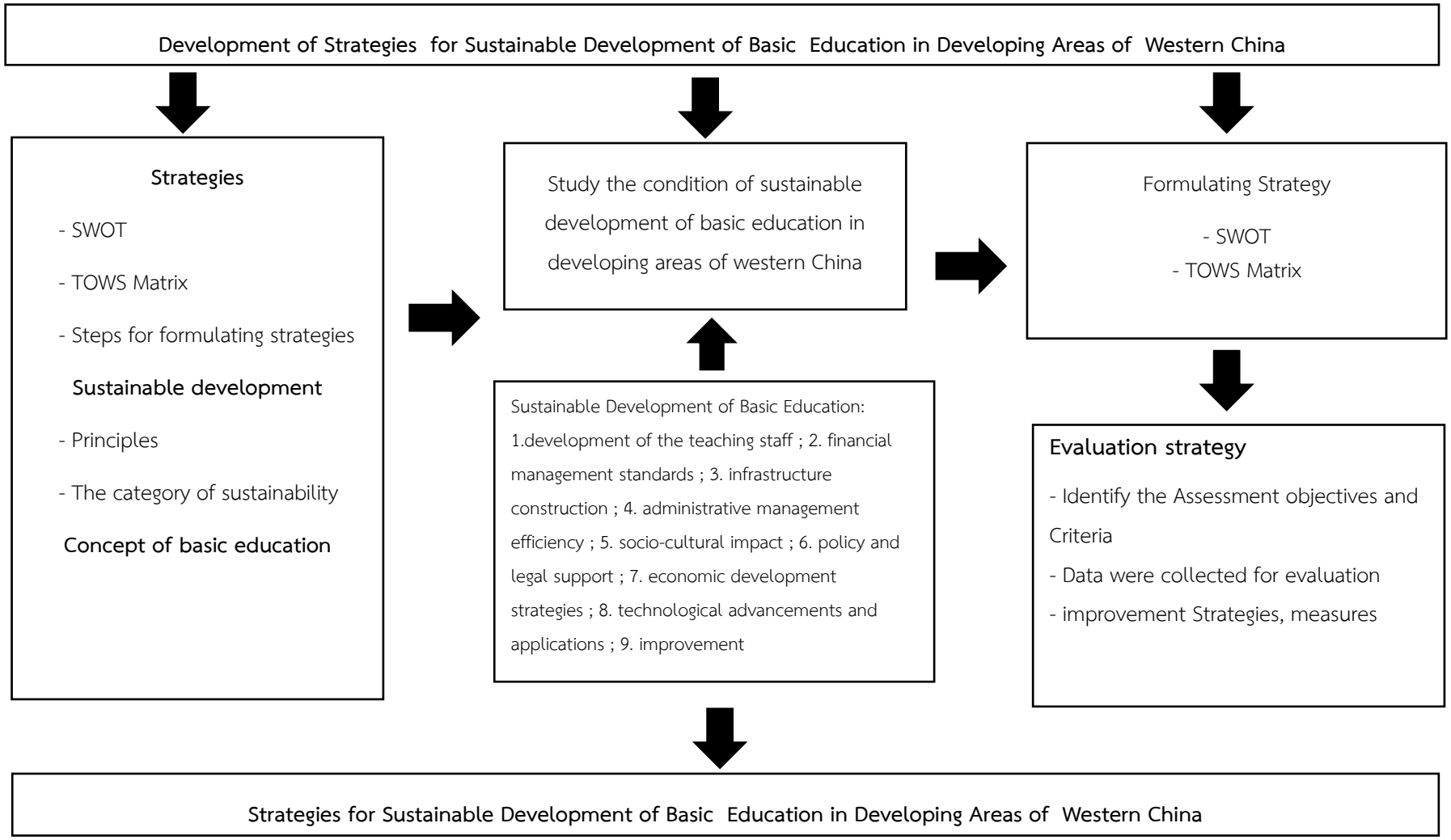


Figure 1.1 Research Framework

Chapter 2

Literature Review

Through literature research, many scholars and researchers have conducted relevant research on the sustainable development of basic education in the regions of China's western development. In these researches, most scholars and researchers have analyzed the significance of carrying out this research. Some scholars have conducted empirical research on the sustainable development of basic education in the regions of China's western development, and the investigation scope has been carried out in multiple provinces and cities. A few scholars have explored the innovative mechanisms of the sustainable development of basic education in the regions of China's western development. Many scholars and researchers have put forward their own views on the strategies to promote the sustainable development of basic education in the regions of China's western development.

1. Concept of basic education
2. Concept of sustainable development
3. Management and Application of Strategies
4. Related Research

The details are as follows.

Concept of basic education

According to the International Standard Classification of Education (ISCED 2011) by the United Nations Educational, Scientific and Cultural Organization (UNESCO), "basic education" encompasses the first four levels of the eight education levels, which are: Level 0 "early childhood education," Level 1 "primary education," Level 2 "lower secondary education," and Level 3 "upper secondary education." The World Conference for Education for All in Thailand in 1990 defined "basic education" as providing individuals with the minimum knowledge, skills, and attitudes necessary to understand and interact with their environment, receive education and training in

society, and participate more effectively in the economic, social, and cultural development of their communities. It emphasized that everyone should have the opportunity to benefit from education that meets their basic learning needs.

Gu, M. Y. (1986). believes that basic education is the education of basic general cultural knowledge for the people, the education of cultivating the basic qualities of citizens, and the education that lays the foundation for further education or vocational training. It generally refers to primary education, and some include junior high school education, with a duration of 5 years, 6 years to 9 years, often associated with compulsory education.

According toLi, S. (2004). basic education is the foundation for an individual's lifelong development. It is the minimum general education implemented for children and adolescents according to national regulations, aimed at cultivating the quality of citizens. This includes preschool education, primary education, junior high school education, and senior high school education.

Yuan, G. R. (2013). interprets basic education as the "minimum education" for everyone. He believes that basic education should focus on the development of social productivity, economy, and culture on one hand, and on the comprehensive development of individuals on the other. He argues that the more comprehensive the development of individuals, the more material and cultural wealth society will create. With more abundant material and cultural conditions, the comprehensive development of individuals can be further promoted. He particularly emphasizes that in contemporary society, the amount of knowledge is increasing rapidly and the rate of obsolescence is accelerating. Schools can only provide students with the most basic part of knowledge. More important than imparting knowledge is the transition from imparting knowledge to cultivating the ability to acquire knowledge, teaching students how to master knowledge, and learning the ability to independently acquire knowledge. This is called learning to learn, mastering learning methods, and cultivating learning ability.

basic education school

Basic education schools represent the foundational stage of the education system, encompassing elementary and middle schools (and some countries include high schools). They provide students with a solid academic foundation. These institutions not only teach core subjects such as language, mathematics, and science but also focus on developing students' overall qualities, including creativity, teamwork, and social responsibility. These schools serve as the starting point for students' personality development, interest cultivation, and future learning experiences, having a profound influence on shaping the pillars of society.

The concept of basic education schools

Basic education schools refer to educational institutions that provide basic education for children and adolescents. According to the definition given by Wang, B. Z. (2009). basic education schools include general education schools that provide preschool education, primary education, and secondary education. Generally, the duration of basic education schools includes six years of primary school, three years of junior high school, and three years of senior high school. Many countries require at least nine years of compulsory education, which is considered a foundational project for improving the overall quality of the entire population and building a modern civilized society.

Wang, Y. L., & Hu, H. M. (2019). believes that basic education schools typically include kindergarten, primary school, and junior high school, and sometimes also include high school. The goal of basic education schools is to provide students with a comprehensive education, including the cultivation of basic academic knowledge, skills, and values. The concept of basic education schools is to cultivate students' cognitive abilities, social skills, and emotional literacy through education, enabling them to possess critical thinking, problem-solving, and self-directed learning abilities. These schools typically adhere to national or regional education laws and curriculum standards to ensure that students receive an education that meets societal needs.

The explanation of basic education schools clarifies their scope and levels, helping various sectors of society to place greater emphasis on basic education. This

collective effort will promote the improvement of education quality, laying a solid foundation for the long-term development of society.

The educational content of basic education schools

The education content of basic education schools usually includes subjects such as language, mathematics, science, social sciences, arts, and physical education, aiming to provide students with comprehensive knowledge and skills. In addition, basic education schools also emphasize the cultivation of students' overall quality, including moral character, social responsibility, and teamwork skills. Many researchers have put forward their own views on this.

Jiang, Z. J., & Yang, Q. F. (2021). proposed the concept of Experiential learning ,The emphasis is on students acquiring knowledge through practice and experience, and cultivating their critical thinking and problem-solving abilities. Curriculum design: Finnish education expert Sahlberg, P. (2011). emphasizes that curriculum design should focus on interdisciplinary integration, allowing students to connect knowledge from different subjects during the learning process and promoting holistic thinking.

Chang, L. Y. (2012).believes that the main educational content of basic education schools mainly includes three aspects: first, subject knowledge, which includes knowledge education in various subjects such as culture, mathematics, science, sociology, art, and physical education; students learn basic knowledge and skills in these subjects, including reading, writing, calculation, experiments, geography, history, music, art, and physical education. Second, general education, she believes that basic education schools should focus on general education, including comprehensive knowledge dissemination to students, enabling them to possess basic knowledge in science, culture, history, geography, art, and other aspects, and cultivate students' comprehensive literacy. Third, skill development, in addition to subject knowledge, basic education schools should also focus on cultivating students' various skills, such as reading ability, writing ability, calculation ability, experimental ability, physical skills, as well as practical skills such as computer applications and handicraft skills.

Zhou, T. (2010). proposed that basic education schools should also carry out ideological education, mainly including two aspects: first, values education, schools should focus on cultivating students' good moral character and values, including education in moral cultivation, social responsibility, teamwork spirit, and civic awareness; second, innovation ability cultivation. He believes that modern basic education schools should also focus on cultivating students' innovation ability and practical ability, including inspiring students' creative thinking, problem-solving ability, and practical skills.

In general, primary and secondary schools are institutions that provide comprehensive education for students, aiming to cultivate their academic abilities, social skills, and personal qualities, and to lay a solid foundation for their future learning and life. The educational content of primary and secondary schools is diverse, including not only the imparting of subject knowledge, but also general education, skills training, values education, and the cultivation of innovative abilities, aiming to comprehensively develop students' cognitive abilities, social skills, and emotional literacy, enabling them to possess critical thinking, problem-solving, and self-directed learning abilities.

The functions of basic education schools

Basic education schools are an essential part of society, bearing the important responsibility of nurturing the talents of the next generation. These schools are not just places for imparting knowledge, but also crucial platforms for shaping students' character, fostering a sense of social responsibility, and nurturing innovative abilities. The significance of basic education schools lies in providing young people with a comprehensive learning and growth environment, laying a solid foundation for their future and the development of society.

Zhao, Y. Y. (2018). believes that the importance of basic education schools lies in providing students with a comprehensive learning environment. Students not only learn academic knowledge here, but also receive moral education, physical exercise, artistic cultivation, and other aspects of education. This comprehensive education helps students to develop comprehensively, cultivating talents with

diverse skills and qualities, thus serving two purposes: first, knowledge impartation and basic learning. Basic education schools are important places for children to acquire knowledge and lay the foundation for learning. Here, they learn basic knowledge in subjects such as mathematics, science, language, and social sciences, establishing a solid learning foundation. Second, socialization and character development. Schools are important places for children's socialization, where they learn to interact with others, cooperate, share, and respect. Schools also play a crucial role in shaping children's personalities and values.

Yang, D. L. (2018). believes that primary and secondary schools play an important role in cultivating students' sense of social responsibility and teamwork skills. This is because schools are important places for students' socialization, where they learn important skills such as getting along with others, respecting others, and teamwork. These skills are crucial for students' future career development and social interaction. On the one hand, primary and secondary schools lay the foundation for children's future development, and a good basic education can provide them with a solid foundation for their high school, college, and even professional careers. On the other hand, primary and secondary schools can cultivate more talented, knowledgeable, and responsible individuals for society, promoting social progress and development. Finally, primary and secondary schools are important means of popularizing education, providing equal learning opportunities for more children and promoting social fairness and inclusiveness.

In general, basic education schools are not only places for imparting knowledge, but also important platforms for cultivating students' comprehensive qualities, sense of social responsibility, and innovation ability. They play an irreplaceable role in shaping the talents and leaders of future society. Therefore, we should attach great importance to the construction and development of basic education schools, and provide better learning environments and educational resources for students.

Changes in China's Basic Education School System

Zhou, H. Y., & Liu, J. (2019). summarized the laws and characteristics of changes in China's basic education since modern times. They identified four key laws regarding the transformation of basic education in China: First, from a regulatory perspective, it serves as a cornerstone for national rejuvenation and social progress. It is constrained by the socio-political and economic systems of specific historical periods and is tailored to meet the demands of political and economic development. Second, it adapts to the level of productivity at certain historical periods and stages, actively influencing the development of productivity. Third, it is nurtured in a specific cultural environment and serves the continuity and development of culture. Fourth, it conforms to the developmental needs of individuals and promotes the realization of comprehensive human development. Finally, it is profoundly influenced by foreign educational theories and practices and contributes Chinese wisdom to the progress of global education.

At the same time, the two researchers believe that the changes in China's basic education have distinctive characteristics: first, the reform and development of basic education are constrained and influenced by both internal and external factors, changing with the evolution of these factors, while always aiming to serve these constraints; second, the reform and development of basic education continually transcend through adaptation, fully reflecting the proactive interplay of basic education with society and individuals; third, every significant reform and development in basic education is achieved based on the inheritance of China's excellent culture and a profound understanding of the country's current realities.

Yuan, Z. G., & Liu, S. Q. (2018). reviewed the development of basic education in China over the past 40 years and summarized four key points: first, the emphasis on compulsory education as a priority, the implementation of a three-step strategy to popularize education, significantly enhancing the quality of the populace while continuously strengthening educational investment, timely promoting the popularization of high school and preschool education, focusing on the reclassification and development of high school education, and emphasizing public

welfare and accessibility in preschool education; second, basic education has invigorated school operations by decentralizing management, streamlining administrative processes, enhancing local government responsibility, and increasing school autonomy, thereby driving curriculum and teaching reforms, with profound changes in teaching and learning methods and a significant increase in student choice and individuality; third, accelerating educational reform, promoting governance transformation, reducing administrative intervention, encouraging private education, forming a diversified educational structure, and facilitating the expansion of educational resources and the establishment of competitive mechanisms; fourth, the educational policy emphasizes comprehensive development in moral, intellectual, physical, aesthetic, and labor aspects, with a practical focus on core competencies, actively opening the teacher education system, strengthening teacher support, and promoting the upgrading of educational quality.

China's basic education has undergone a challenging exploration in its initial stage, gradually improving the education system. The curriculum has become increasingly rich, faculty strength has been continuously enhanced, and the quality of education has significantly improved. This transformation includes a shift from rudimentary teaching facilities to modern campus environments, from a single curriculum system to diversified teaching methods, and from a shortage of teachers to a continuous emergence of excellent educators.

The policies and strategies of the Chinese government regarding basic education

Gu, M. Y., & Li, T. Z. (2024). have summarized China's basic education policies and strategies, identifying four fundamental aspects:

Firstly, the state places high importance on education, establishing a strategy that prioritizes its development. From discussions on the "essence and function of education" to various policy planning, there is a strong emphasis on education's significance for national rejuvenation and social progress. This commitment ensures a substantial increase in educational spending, with national strategic planning and policy actions continuously promoting educational development, thereby laying a

solid foundation for building a strong education system and achieving the great rejuvenation of the Chinese nation.

Secondly, there is an active mobilization of public participation, realized through the "People's Education Managed by the People" model to achieve "universal nine-year compulsory education." Additionally, efforts are made to promote the development of basic education through social fundraising and private schooling while guiding social forces to engage in educational pursuits, forming a powerful societal backing for educational initiatives.

Thirdly, there is a focus on building a legal framework. A legal system regarding degrees, compulsory education, and teacher regulations is gradually being established, promoting rapid development in education legislation. This results in a legal system centered around the Constitution, with the Education Law as the foundational law, ensuring that governance is conducted according to law and that multi-dimensional governance becomes a trend, accompanied by a comprehensive strengthening of judicial protection for education.

Fourthly, there is significant emphasis on the development of the teaching workforce, ensuring educational quality through the system of teaching researchers and promoting comprehensive improvements in institutional mechanisms, ultimately enhancing the quality of basic education.

Finally, basic education reform must continuously innovate, adopting a "pilot experiments - gradual promotion" model to effectively advance reforms, responding to changes in economic society and the needs of the people.

Zhu, X. H., & Cui, X. X. (2024). categorize China's basic education into three stages and conduct research on the national policies and guidelines for each stage, which mainly include:

The first stage is early childhood care. This stage in China has evolved from the popularization of nurseries during the planned economy era to the rise of early education institutions under the market economy. The Chinese government has alleviated some issues by promoting affordable kindergartens but still needs to

address the challenges faced by children who are not enrolled in school and the lack of daycare facilities for children aged 1-3.

The second stage is elementary education, where China has established a complete national basic education system. This stage advocates for respecting children's nature, nurturing civility and manners, and guiding the development of survival wisdom and skills for learning. Particularly in the era of artificial intelligence, inspiring children’s imagination and creativity has become crucial.

The third stage is secondary education, where the government focuses on guiding students to establish a positive life orientation. It encourages them to transcend academic pressure, integrate personal ideals with the tide of social change, and emphasizes broadening international perspectives. From the viewpoint of a shared human destiny, it motivates students to choose professions that serve humanity and to pursue noble life goals.

From the research conducted by the authors, it is evident that the Chinese government places great importance on basic education, establishing a priority development strategy for education and emphasizing its significance for national revitalization and social progress. Furthermore, the government is continually pushing for reforms and innovations in basic education to lay a solid foundation for nurturing future talents.

Basic Education Management

With the development of global informatization and the knowledge economy, countries around the world attach great importance to the reform and development of basic education management. Basic education management refers to a series of activities that organize, plan, coordinate, and supervise schools or educational institutions, aiming to ensure that educational institutions effectively and efficiently achieve their educational goals. This management process includes comprehensive management of all aspects of school operation, involving subject curriculum, teaching methods, student management, teacher development, resource allocation, financial management, community cooperation, and many other aspects.

The main goal of basic education management is to improve the quality of education and ensure the comprehensive development of students. Managers need to promote the coordinated and orderly work of the school through scientific planning and flexible management methods, so that students can receive comprehensive development in academic, moral, and physical education. In basic education management, managers need to communicate and cooperate with teachers, students, parents, the community, and relevant government agencies to jointly promote the development of the education cause.

Managers also need to adjust management strategies in a timely manner to adapt to the changes in the social, economic, and educational environment, in order to ensure that educational institutions can continue to provide high-quality educational services.

Kong, K. (2006). believes that the process of basic education management is very complex, and the basic education system needs to comprehensively meet the needs of educational goals, educational services, and educational operations, while also requiring constant adjustments to the educational operational mechanisms. Using the example of the United States' basic education system, Kong, K. (2006). points out that the scale of basic education in the United States is huge, and it operates under a system of decentralized education management. However, there is a common goal, which is to ensure that basic education management is aimed at "ensuring that every child has equal educational opportunities," placing a strong emphasis on ensuring educational equity.

Shi, Z. Y. (2006). proposed that basic education management is not simply the internal management of schools, but rather a collaborative effort involving multiple sectors such as schools, government, and social institutions. The existence of schools relies on the functioning of the social system for maintenance and support. From this perspective, basic education management can be divided into three levels: first, the self-management within the school, which belongs to the micro-level; second, the comprehensive system engineering of basic education management carried out in the area where the school is located; and third, the government guidance at the

national level, which involves top-level coordination and inter-departmental collaboration.

According to Zhang, L. T. (2021)., he believes that the key core of developing the management of basic education is for governments at all levels to shoulder the government responsibility for the high-quality development of basic education. The performance assessment of education management should shift from result-oriented to process-oriented, while increasing investment in all aspects and making the construction of a good educational ecosystem the primary task of management.

Qin, C. (2023). divides the development of China's basic education management into four periods for discussion: The first stage is the early period of reform and opening up. The goal of China's basic education management at that time was to rapidly popularize basic education, achieving universal primary and junior high school education nationwide. In 1985, the implementation of the nine-year compulsory education began, and the "Compulsory Education Law" was promulgated, leading basic education onto a path of standardization and legalization. The second stage is the 1990s. In 1991, the Chinese government proposed the Eighth Five-Year Plan, emphasizing the need to strengthen basic education. Based on the social and economic development levels of different regions, specific deployment of basic education management goals was made for each area. Subsequently, in 1996, the Chinese government put forward a policy to prioritize the development of education, emphasizing the key requirement of universalizing compulsory education. The third stage is since the 21st century, where the management goal of basic education has shifted to narrowing the gap and addressing the uneven development between regions. Efforts are made to gradually achieve fair, high-quality, and balanced development of basic education, with a focus on promoting quality education and continuing to improve the popularization of national education. For example, the comprehensive implementation of quality education was proposed by 2006, promoting the balanced development of compulsory education. Then, in 2011, there was a strong emphasis on promoting educational equity, coordinating the development of various types of education, emphasizing the development of quality

education, and promoting educational equity. In 2016, the planning outline proposed to promote the modernization of education and accelerate the vision of balanced and high-quality development of education, emphasizing fair and quality education. Since 2019, relevant policy documents have evolved from the proposal of high-quality development of basic education to the accelerated construction of a high-quality system, promoting the fair and quality development of basic education.

Overall, the management of basic education needs to start from the goal of cultivating people, establish a strict system of regulations, and construct a supervisory mechanism and accountability system for the management of basic education. It is necessary to delineate the responsibilities of each department, and the government's functions need to undergo a transformation in "differentiation" and "integration". This means respecting the scope of action and development space of other subjects, thus maintaining and guiding the functional differentiation of different social sectors. At the same time, it is also important to promote social integration, such as establishing a sound legal system for education, maintaining a good market participation order, and providing comprehensive guidance services for schools, in order to fundamentally solve the problems of basic education management.

The Evolution of Planning in the Management of Basic Education in China

Education planning is an important component of basic education management, which includes the formulation of educational goals, educational policies, and educational plans. This requires the rational allocation of educational resources to achieve educational objectives.

Guo, Y. S. (2022). believes that the planning and evolution of China's basic education management has mainly undergone four transitions:

1. The stage of popularizing basic education, mainly focusing on catching up in quantity and expanding scale as the main development goals. This was achieved by expanding the number of education recipients, the scale of education, and the quantity of education, as well as extending the length of time that young students spend in school. This significantly improved the level of education for the recipients, realizing the goal of "education for all" and transforming basic education from elite

education to mass education. However, it did not effectively address the issue of balanced development of education in different regions.

2. The stage of implementing execution, mainly achieved by increasing education investment, improving school conditions, implementing curriculum reforms, and implementing free admission, among other methods, to greatly improve the quality of basic education in practice, thus achieving basic balance in the planning of basic education management. The development driven by factors mainly discusses whether basic education has transitioned from a stage of balanced and sufficient development to a stage of basic balance, that is, the current situation of development with certain quality but not high quality.

3. The stage of emphasizing the development of students' individuality, starting from the level of educational planning, emphasizes structural optimization and innovation-driven development, and has initiated the construction of standardized basic education schools. This has promoted the improvement of disadvantaged schools, stimulated the vitality of school operation, and promoted teaching reforms, thereby achieving an overall improvement in the quality of basic education.

4. The stage of emphasizing both superior quality and balanced development, emphasizing the transition from balance to fair development, and from quality to high-quality development, striving to solve various problems in the development of basic education in reality.

Zhu, X. Y. (2013). believes that the management planning of basic education schools is also reflected in the departmental structure and job division of the school, which can be examined from four levels: namely, senior, middle, junior management positions, and grassroots staff positions. He believes that senior management positions are responsible for formulating overall goals and resource policies; middle management positions are responsible for formulating specific goals and implementing higher-level policies, as well as coordinating the work of lower-level staff; junior management positions are responsible for directing and coordinating

grassroots staff to implement decisions from higher levels; and grassroots staff positions are responsible for the actual execution of the work.

Based on the research of the scholars mentioned above, it can be observed that China's basic education planning has four characteristics: First, during the stage of popularizing basic education, the goal has been to catch up in quantity and expand in scale. Although the aim of ensuring that "everyone has access to education" has been achieved, the issue of regional educational equity has not been resolved. Second, in the stage of implementing effective execution, various methods have been employed to improve the quality of basic education and achieve a basic level of equity. Third, during the stage that emphasizes the individual development of students, there is a focus at the planning level on structural optimization and innovation-driven approaches, aimed at promoting improvements in disadvantaged schools, stimulating educational vitality, and reforming teaching practices, which leads to the overall enhancement of basic education quality. Fourth, in the stage where superior quality and balanced development are both prioritized, the emphasis is placed on transitioning from equity to fairness and from quality to high-quality development, addressing the practical issues in the development of basic education.

The Organizational Status of Basic Education Management in China

Educational management organizations include the organizational structure of basic education schools, the development of teaching staff, and student management. This requires effective organization and coordination of educational activities to ensure their smooth operation. The construction of the organizational structure of basic education schools is a complex process that needs to take into account multiple factors such as the characteristics, goals, and resources of the school.

Renowned organizational theorist Smiley, I. (2005). from Canada points out that organizations are actually multi-faceted entities. They can be seen as "machines," "brains," "cultures," as well as "political systems" and "instruments of domination." The nature of an organization is essentially a metaphor, and what is important is not what it is, but what it is not. "Organizations and organizational issues

can be viewed and understood in different ways. Limiting the scope of your attention and your thinking will limit your range of action."

Contemporary renowned education management scholars in the United States, Hoy, W. K., & Miskel, C. G. (2007)., proposed that schools should be viewed from an "integrated model" perspective, considering school organization as a social system. They believe that only through systemic thinking can we truly understand and grasp it.

According to the renowned Canadian management theorist Lu, J. H. (2009)., the organizational structure of a school is essentially a "sum of various methods for breaking down work into different tasks and then coordinating and integrating them to achieve work goals." He believes that as a way of dividing and coordinating tasks, the organizational structure of a school, with the increasing burden of school tasks, needs to address two basic issues: first, breaking down a human activity into different tasks, and second, coordinating and integrating these tasks to achieve the ultimate goal.

Zhao, M. (2023). believes that in the past decade, China's basic education school organizational structure has undergone a series of innovative reforms in curriculum teaching, campus management, and external cooperation and exchange. Initiatives such as establishing development planning offices in primary and secondary schools, setting up safety supervision offices, and establishing student affairs offices have all promoted the transformation of school management functions and service methods. He points out that many years ago, Chinese primary and secondary schools emphasized the division of subjects in order to better decompose and implement teaching tasks, resulting in a considerable emphasis on lower-level management positions such as teaching and research groups. Now, basic education schools emphasize the division of grades, resulting in grade-level departments becoming important carriers of task division and mutual cooperation in the school organizational system. As an example, with the expansion of school scale, the "grade director responsibility system" has been gradually implemented in management, leading to increased emphasis and strengthening of the management functions of grade-level departments, while the functions of teaching and research groups have

correspondingly weakened. This hierarchical structure is of great significance in the reform of school organizational structure.

It can be seen that the organizational situation of basic education management in China has undergone many innovative reforms over the past decade. These reforms emphasize the standards for subject classification and grade classification, optimizing the school organizational structure, enhancing management efficiency, and continuously exploring innovations to meet the demands of educational development.

The leadership system of basic education management in China

Yang, T. F., & Ling, W. Z. (2008). proposed the theory of servant leadership. In his view, to enableordinates to grow healthier, smarter, freer, and more autonomous, servant leaders empower theirordinates, who are likely to become servants themselves. They argues that organizational members who integrate their selves with their roles, and invest themselves physically, cognitively, and emotionally in their work performance display a sense of. Employee engagement, as a positive and fulfilling state of mind related to work, is closely related to the leadership style of superiors.

Based on this, Mu, Y. Z. (2001). pointed out that school leadership needs to enhance the employees' dedication, which is characterized by vigor, dedication, and focus. It is a temporary or specific state, nor does it focus on a specific object, event, individual, or behavior, but a more enduring and pervasive emotional-cognitive state. These behaviors will ultimately benefit the school's development and also reflect the leaders' ability in school management.

Bao, Y. (2007). pointed out that for a school, if the leaders and leadership mechanism can enable teachers to care about the development of the school, actively provide suggestions for the school's development, take the initiative to help colleagues, and actively cooperate with others, then the school will inevitably be a vibrant and cohesive one. It will also be a school that can meet the new requirements for talent development quality in the era. He stated that in recent years, servant leadership, as a new leadership behavior theory, has gradually become

a hot topic of concern in the academic community. In a servant leadership organization, because the autonomy and professional expertise of each member can be fully utilized, the motivation for members to voluntarily contribute to the organization will be enhanced.

Chen, Z. H. (2016). conducted research based on social constructionism. He pointed out that in the leadership of basic education schools, the "leader" is not "an individual," but a mechanism of coexistence of cooperation and leadership. The emphasis is not on the maximum exertion of individual abilities, but on the process of collective participation of organizational members. Specifically, the development of new educational reforms has put forward new requirements for school leadership and management. The role of the principal is no longer the sole role bearer of the school leader, but should move towards a "collaborative leadership mechanism" driven by the collective participation and sharing of school management-related entities, continuously improving school management practices. He advocates that in the management practice of primary and secondary schools, the principal and all teaching staff should establish a cooperative relationship of equal dialogue. The principal should change the role of the past as the authoritative leader of the school, and become the organizer and summarizer of dialogues among school members. The majority of teachers should also change their past focus only on education and teaching, neglecting the concept of school management affairs, and truly realize that they are also members of the school management at the ideological level. This will continuously establish a cooperative mechanism for effective sharing of experiences, ideals, suggestions, etc. among school members, enabling everyone to participate in the school's management work and continuously promote the improvement of school management.

Overall, China's basic education management leadership system emphasizes service-oriented leadership, values collaborative leadership, and actively constructs collaborative leadership mechanisms. This approach encourages all parties to participate in improving management practices. It also pays significant attention to the transformation of teachers' roles, striving to enhance school management

effectiveness and increase the vitality and cohesion of schools in order to meet the new demands of the times for the quality of talent development.

Participation in Basic Education Management

Participating in basic education management involves primarily the task of formulating educational objectives, policies, and plans for schools, as well as supervising and evaluating the implementation of these policies and plans. Basic education management is a systematic process that requires not only clear delineation of functions within the legal framework for government, schools, and social intermediary organizations, but also the establishment of necessary mechanisms for collaboration, and further delegation of power by government departments to provide channels for schools and parents to participate in educational management.

The involvement of the administrative department and schools in the management of basic education.

Chu, J. T. (2021). has conducted research on the reform of the management system of basic education in China in recent years. It was found that with the deepening of the reform of the education management system in China, in recent years, education administrative departments in various regions have carried out a lot of exploration in the comprehensive governance of schools. A number of effective demonstration schools have emerged, which have established school affairs committees composed of school leaders, teachers, students, parents, community representatives, etc., and initially constructed a diversified participation school management system mechanism, contributing to the overall development of the schools. At the same time, it also pointed out that in the process of reform exploration, there are some common problems: first, centralized government management is widespread, leading to the lack of division of powers. Some local education administrative departments are keen on exercising power but are insufficient in assuming responsibilities. Second, some local education administrative departments are overly direct and micro-manage, demanding, inspecting, and guiding every detail, resulting in cumbersome and slow procedures. The development of

social intermediary organizations is slow, and their independence and professionalism need to be strengthened. In participating in school education evaluation, education institution decision consultation, school network online services, etc., there are many issues regarding the quality of their services and their level of recognition.

Zhuang, J. H. (2020). conducted a study on school participation in basic education management. He pointed out that with the deepening of the modern school system construction and the new curriculum reform, basic education schools across the country have carried out varying degrees of reform exploration, and the vitality of running schools has also been improved to a certain extent. However, whenever schools need to combine their own reality and autonomously carry out management reforms, they will find that in the decision-making of some major issues, such as school property rights, personnel appointment and dismissal rights, and teacher appointment and dismissal rights, are still held by the education administrative department, and they cannot smoothly carry out their work. Due to the government's unified management of finances, staffing, and other aspects, as well as the stipulation and implementation of various assessments and evaluations of schools, the management matters are very numerous, leading to schools lacking autonomy in running schools, incomplete internal governance structure, and limited autonomy space and time.

In 2023, Yan, X. (2023). conducted research on the responsibilities of principals in basic education schools and found that although education departments across the country are implementing relevant policies and exploring new initiatives, due to various reasons, some school principals are unable to establish leadership teams based on their own educational philosophies and the existing development plans of the school. The assessment, appointment, and promotion of principals are all decided by the government, leading to a lack of autonomy and independence for principals in running the schools. As a result, they are unable to fully leverage the advantages and strengths of the school's education and teaching, with the majority of their time and energy being spent on dealing with various inspections, evaluations, and tasks assigned by higher authorities.

Overall, China's basic education management leadership system emphasizes service-oriented leadership, values collaborative leadership, and actively constructs collaborative leadership mechanisms. This approach encourages all parties to participate in improving management practices. It also pays significant attention to the transformation of teachers' roles, striving to enhance school management effectiveness and increase the vitality and cohesion of schools in order to meet the new demands of the times for the quality of talent development.

Teachers participate in the management of basic education

In recent years, academia has introduced research topics such as "how to develop teacher leadership" and "the relationship between leadership and student success," placing the study of teacher leadership on the agenda. It is argued that cultivating teacher leadership and involving teachers in the management of basic education can play a significant role in the development of teachers themselves, as well as in the growth of schools and students.

Ruan, S. L., & Shen, Q. B. (2007). believes that in the internal leadership system of Chinese basic education schools, the position of the principal is very significant, which reinforces the traditional hierarchical leadership concept. This is not conducive to improving teachers' teaching performance through the cultivation of teacher leadership. Research on school leadership behavior in China is relatively weak compared to some Western countries, often focusing only on the study of the individual principal or leadership collective, neglecting other levels, especially the leadership behavior of teachers.

Bi, S. N. (2010). categorized teacher leadership into three types:

The first type regards teacher leadership as the "exercise of power," referring to the exercise of administrative decision-making power by teachers in educational work, mainly referring to the power possessed by teacher leaders with certain administrative authority. For example, Wu, Y. M. (2008). pointed out: "Teacher leadership refers to the formal roles of teachers appointed as school administrators, such as department heads, grade leaders, especially as school managers, exercising

management power. Their main role is to improve the efficiency of school management."

The second type regards teacher leadership as a "behavior," that is, the transformation of teaching and learning behavior in schools, which is based on learning to maintain the school community, promote the professional development and quality of life of the community. It is believed that teachers, as leaders, influence students' learning in the learning community, promote school improvement and practice, and encourage other teachers to participate in educational improvement activities. The most representative researcher in this definition is Harris, A. (2002). and her research team, who, through their research on teacher leadership, believe that teacher leadership is a leadership model, and any behavior that can promote school reform and development, improve student performance, and improve school culture construction is teacher leadership.

The third type regards teacher leadership as an "ability," a continuously improvable and developable ability that is manifested in different ways in different groups and in different situations. This ability can bring all teachers together, promote their professional growth and development, and improve the bond of educational services.

The Status of Chinese Parents' Participation in Basic Education Management

Jiang, Y. H., & Zeng, X. Y. (2000). research indicates that since the 1970s, there has been a wave of basic education reforms in Western countries due to economic development and technological competition. A common trend among these reforms is the increasing emphasis on strengthening the connection between schools, families, and society, with a growing emphasis on parental involvement in school management. Studies have shown that since the 1970s, countries such as France, Italy, and Belgium have successively passed laws aimed at ensuring broad parental and public participation in education management. Currently, most Western countries have national parent organizations, such as parent alliances and parent committees. Ireland has even established two national parent committees, whose

responsibilities include reflecting parental opinions to the education authorities and schools, promoting cooperation among parents, teachers, and school administrators, and playing an important and unique role in formulating education policies.

Liu, L. (1992). categorized parental involvement in school management into three forms: formal involvement, interpersonal involvement, and managerial involvement. Specifically, managerial involvement allows parents to participate in the daily teaching and management work of the school, mainly through the parent committee as a communication channel. Parents can participate in school decision-making and management processes, rather than just engaging in regular communication with teachers. They have a certain degree of discourse and decision-making power, and the level of involvement is high. Interpersonal involvement is led by the school, where parents participate in activities while also providing suggestions in two-way communication with teachers. This form mainly focuses on interactive communication between teachers and parents, and the level of involvement is moderate. Typically, formal involvement is completely led by the school, with parents participating in educational work in a supportive role, having little to no decision-making power, and a low level of involvement.

Xie, X. M. (2016). Citing the representative "overlapping influence threshold" theory, the collaboration between family and school is defined as "cooperation among schools, families, and communities," emphasizing the shared responsibility of schools, families, and communities for the education and development of children. This theory categorizes parental involvement in school education into six types:: (1) being a good parent, which emphasizes the cultivation of parental educational literacy and the creation of a conducive family environment and learning atmosphere for the child's growth and development; (2) communication, which requires the establishment of effective two-way communication mechanisms between parents and schools; (3) volunteering, which involves recruiting dedicated volunteers from parents to assist with the school's daily teaching and management work; (4) at-home learning, which requires schools to actively guide parents in supporting their children's at-home learning to ensure a better learning experience

and acquisition of more knowledge and skills; (5) decision-making involvement, which involves formal participation of parents in the school's management, such as through a "school board"; and (6) community collaboration, which emphasizes the full utilization of community resources and collaboration with the community to create a positive educational atmosphere.

Yang, M. (2009). Citing the theories of American scholars M. R. Langenbrunner and K. R. Thornburg, the roles of parental involvement in school education are classified into three types: (1) Supporters and learners require parents to provide certain support for the school's educational and teaching work. The main methods include parent training, family education counseling, etc. (2) Voluntary participants are required to recruit volunteers from parents, who can assist as class supervisors and provide extracurricular tutoring to students using their professional skills. The participants in school decision-making process are required to involve parents in the formulation, implementation, and supervision of school education decisions.

Zheng, X. W. (2021). pointed out in his research that the Chinese government promulgated the "National Medium and Long-term Education Reform and Development Plan Outline (2010-2020)" in 2010, which explicitly stipulated that each school should improve its own system and establish its own parent committee. In 2012, the Chinese Ministry of Education issued the "Guiding Opinions on Establishing Parent Committees in Primary and Secondary Schools (Draft for Soliciting Opinions)", which clearly defined the functions, roles, content, and working mechanisms of the parent committee. He believes that basic education is not a simple task, but a complex project. Parents are an important part of school education management, and the cooperation between home and school is an important platform for parents to participate in school education management. Only when parents participate in the school's education management and form a partnership between home and school, can they provide strong impetus for the school's education management and better promote students' growth. This requires the establishment of a smooth mechanism. He pointed out that the parent committee is an important form of this common mechanism. The construction of the parent committee is conducive to strengthening

the school's management and educational capabilities, enhancing the voice of parents, improving the internal management system of the school, promoting the formation of a sound supervision system in the school, and promoting the formation of a joint management mechanism between the school and parents. Without the participation of the parent committee in school education management, it cannot be considered modern education.

Based on the research conducted by the scholars mentioned above, we can find that Chinese parents' involvement in the management of basic education in schools is gradually advancing. This is beneficial for strengthening school management and teaching capabilities, establishing a supervisory system and a collaborative management mechanism to promote better development for students.

Participation of non-governmental organizations and international organizations in basic education management

Non-governmental organizations and international organizations play an important role in educational governance. In recent years, these organizations have become involved in basic education, demonstrating certain advantages in addressing the insufficient financial input from governments, supporting the diverse development of preschool education, and compensating for the needs of vulnerable groups. This has attracted the attention of some scholars who have initiated related research.

Zheng, Y. Z., & Wang, P. (2021). conducted a study on the involvement of non-governmental organizations (NGOs) in rural preschool education governance. They identified three main advantages of NGO participation in basic education governance: First, NGOs can help alleviate financial pressures on the government by raising resources through diverse channels, thus compensating for inadequate fiscal investments. Second, NGOs meet diverse needs by flexibly responding to the specific requirements of different populations and regions. Third, the contributions of NGOs, such as educational resources and volunteer teachers, effectively supplement government educational investments, enhance education quality, and promote educational equity.

At the same time, the researchers pointed out the challenges that NGOs face in participating in basic education management: First, NGOs encounter difficulties in preschool education due to imperfect legal frameworks, insufficient oversight, and resource mobilization challenges stemming from excessive government regulation. Second, NGOs struggle with poor internal management, limited governance content, and inadequate public welfare efforts, which restrict their ability to fulfill their governance roles effectively.

Liu, H. X. (2018). conducted research on the participation of non-governmental organizations (NGOs) in rural poverty alleviation education, highlighting the challenges NGOs face, including low effectiveness, insufficient social recognition and credibility, limited government support, and uneven regional development. The short duration of development and inadequate internal mechanisms affect the strength and efficiency of NGOs' poverty alleviation efforts. Low social recognition makes fundraising difficult; insufficient government policy support, lack of laws and regulations, and limited financial investment restrict their development. Additionally, uneven regional development results in a low number of NGOs and poor service quality in impoverished areas.

Wu, Xiaochao, & Chen, Mei. (2024). Focusing on organizations such as UNESCO, the World Bank, and the World Trade Organization, this study suggests that international organizations play a crucial role in participating in the governance of basic education by providing development assistance, formulating education policies, promoting knowledge production and dissemination, and fostering international understanding and cooperation. They not only pay attention to the role of education in driving economic development but also increasingly emphasize its impact on enhancing social welfare, promoting human rights, and achieving social justice. International organizations offer guidance for educational reform in various countries through financial support, project assistance, policy advice, and empirical research, thereby promoting the continuous improvement and development of the global education governance system. Additionally, they contribute to building a more just

and harmonious world by advocating for educational equity and fostering social integration.

Zhang, S. (2024). examined the evolution of policies and future strategies between China and the World Bank in the field of global education governance. The study reveals a significant transition in China from a focus on financial aid to a core emphasis on knowledge collaboration. In the past, China primarily relied on financial assistance from the World Bank to bridge the funding gap in education development. However, as cooperation deepened, both parties began to prioritize knowledge sharing and the utilization of intellectual resources, jointly promoting education policy formulation and reform. This shift has not only enhanced China's capacity for education governance but also strengthened its influence on the international education stage.

Overall, non-governmental organizations and international organizations play a significant role in basic education governance by addressing financial shortfalls, meeting diverse needs, improving education quality, and promoting educational equity. Additionally, international organizations contribute to the improvement of the global education governance system through development assistance, policy formulation, and knowledge dissemination, advocating for educational equity and social integration, and contributing to the creation of a just and harmonious world.

Basic Education Conditions

Basic education is the cornerstone of a country's future development, and the sustainable development of basic education requires support in a range of conditions, mainly including policies, investment, teaching staff, curriculum, technology, and other aspects.

Policy support and guarantee

Chen, Z. M. (2004). based on the theory of policy instruments, believes that policy instruments are specific means and methods adopted to achieve policy goals. Policy instruments are the basic approach to achieving the policy goal of balanced development of compulsory education. The choice of policy instruments has a direct impact on the implementation of the policy for the balanced development of

compulsory education. In the early 1980s, the Geelhoed Committee in the Netherlands demonstrated through research that "the lack of knowledge and inadequacy of policy instruments are important reasons for policy failure."

Currently, there are two representative viewpoints in the academic community regarding the concept of policy tools: instrumentalism and mechanistic. Scholars who hold the instrumentalist view believe that policy tools are essentially the means to achieve policy objectives. For example, Salamon, L. M., & Anheier, H. K. (1998). considers policy tools as methods or approaches for collective action to address public issues. Scholar Chen, Z. M. (2004). defines policy tools as "means to achieve policy objectives or solve social problems." On the other hand, the mechanistic view posits that the essence of policy tools is to regulate and implement government behavior. Hughes, O. E. (2004). suggests that "policy tools refer to the means of government intervention, and to a certain extent, it is also a mechanism for legitimizing government behavior."

Domestic and foreign scholars not only have different expressions of the concept of policy tools, but also have diversified research on the classification of policy tools. Among them, in the field of education policy tools, the following are the main classifications of policy tools that have a significant impact and high application frequency:

First, Howlett, M., & Ramesh, M. (2009). classify policy tools into mandatory tools, hybrid tools, and voluntary tools based on the strength of government intervention.

Second, Smith, F. M. (1982). divide policy tools into environmental tools, supply tools, and demand tools according to the three different effects of policy tools on technological innovation, namely, driving, promoting, and influencing.

Third, Elmore, R. F., Peterson, P. L., & Mccarthey, S. J. (1996). classify policy tools into five types based on the behavior of the target group guided by the government, namely, authoritative tools, incentive tools, capacity-building tools, symbolic and persuasive tools, and learning tools.

Fourth, Alecia, & Magnifico. (2016). propose five categories of policy tools based on the conditions under which the tools are expected to be effective, namely, directive, incentive, capacity-building, persuasive, and systemic change tools.

According to Gao Gao, S. Y. (2021)., policy support is one of the important conditions for the sustainable development of basic education. The government can directly influence the quality and sustainable development of basic education by formulating guiding policies and relevant regulations. On the one hand, the government can establish long-term educational development plans to clarify the development goals and pathways of basic education. On the other hand, the government can ensure investment in basic education through policies and regulations, guaranteeing fair distribution of educational resources to improve the accessibility and quality of basic education. Finally, the government can strengthen supervision and evaluation of basic education through policies and regulations, establish a sound education quality assessment system, and promote continuous improvement in the teaching standards of basic education.

Liu, T., & Cheng, J. K. (2018). reviewed the Chinese government's policy support for basic education over the past forty years, including: the promulgation of the "Compulsory Education Law of the People's Republic of China" in 1986, which provided a legal basis for the government to carry out compulsory education activities and protected the right to education of all school-age children and adolescents in the compulsory education stage; the "Outline of China's Education Reform and Development" in 1993 and the "Decision on Deepening Education Reform and Promoting Quality Education" in 1999, which promoted the popularization of compulsory education; the 2002 notice from the Chinese Ministry of Education on strengthening the management of basic education, proposing the goal of "actively promoting the balanced development of schools in the compulsory education stage"; the "National Medium and Long-term Education Reform and Development Plan (2010-2020)" issued in 2010, which explained the balanced development of basic education from the three main dimensions of narrowing regional gaps, urban-rural gaps, and inter-school gaps; the 2016 issuance of the "Opinions on Coordinating

and Promoting the Integrated Reform and Development of Urban and Rural Education within Counties" by the Chinese government, which has achieved basic balanced development of compulsory education in counties; the issuance of the "Overall Plan for Deepening the Reform of Educational Evaluation in the New Era" in 2020, which takes the reform of educational evaluation as a key point and explicitly requires the promotion of the modernization of compulsory education management; and the "Guidelines for Quality Evaluation of Compulsory Education" jointly issued by the Chinese Ministry of Education and five other departments in 2021, further strengthening the supervision and evaluation of basic education and promoting the sustainable development of basic education.

Training and development of teaching staff

The "father of modern management" Drucker, P. F. (1985). proposed and clearly defined the concept of human resources in his seminal work "The Practice of Management." He believed that, compared to other resources, human resources are unique in that they require effective incentive mechanisms to be developed and utilized. At the same time, the essence of human resources lies in people, which is fundamentally different from other resources.

Feng, L. J. (2021). introduces the concept of human resources in her research, pointing out that teacher resources refer to personnel with professional teaching positions. Teacher resources are distinct from natural resources, as they are human resources with ideological, fluid, and creative characteristics. Teachers are the most important human resources in educational activities, and teacher resources are an important part of basic educational resources. She believes that the quality of teacher resources directly determines the quality of basic education. The teaching staff is the key to the development of any school, determining the quality and level of talent cultivation.

The stability and quality of the teaching staff are prerequisites for the healthy development of basic education. In the 21st century, foreign experts and scholars have already discovered the issue of instability in the teaching staff at the basic education stage in the United States. Problems such as an unreasonable subject

structure, an aging teaching staff, and a shortage of teachers have become increasingly prominent. Saegert, S. (2003) through research on the shortage of teachers, unreasonable mobility, and lack of effective teaching environment in the United States, found that low teacher income and difficulties in promotion led to teacher turnover. She pointed out the need to improve the teacher mobility mechanism and proposed a series of measures to increase the number of teachers and improve quality. Monk, D. H. (2007). found that the level of teacher staff construction is not high, which is a problem in rural education in most countries. He suggested strengthening research on teacher policies in numerous educational studies and paying attention to the future development of the teacher community. Darling-Hammond, L. (2006). clearly established the close connection between the quality of teachers and the improvement of the quality of basic education in her research. She advocated shifting focus and attention to improving the comprehensive quality of teachers, and, based on achieving high-quality development of teachers' professional competence, vigorously enhancing teaching quality to ensure that the strength of the teaching staff and the level of teaching can develop in the same direction.

Guarantee and allocation of resources

In July 2012, the Chinese government issued the "Twelfth Five-Year Plan for the National Basic Public Service System," which defines basic public services as: social norms of life and development established for all citizens in accordance with government regulations, through standardized services and models, thereby ensuring people's basic living needs. At the operational level, important national standards have been formulated, with key objectives identified: effectively expand supply, develop more balanced services, enhance convenience, increase public satisfaction, and ensure greater equity in basic public services.

Wang, J. J., & Xu, H. (2011). based on the theory of optimizing resource allocation, divides the fair distribution of educational resources into three levels: first, fair distribution of educational resources, that is, the distribution of various educational resources and donations, and the right to receive education is the right

of every citizen without violating the law; second, equal access to education, that is, everyone has the right to receive formal education; third, creating social impact, that is, society must provide a positive and sustainable system to the public, ensuring that everyone has equal educational opportunities.

The government providing basic public services is an important guarantee for the development of basic education, including classrooms, textbooks, learning materials, laboratory equipment, information technology equipment, etc. The adequacy and quality of these resources are crucial for students' learning. In July 2012, the Chinese government issued the "Twelfth Five-Year Plan for the National Basic Public Service System," defining basic public services as: "The whole population establishes social norms of life and development according to the standards and models stipulated by the government, so as to guarantee the basic living needs of the people." At the operational level, important national standards have been formulated, and the main goals have been determined: effectively expanding supply, developing more balanced services, providing more convenient services, ensuring greater public satisfaction, and promoting greater equality in basic public services.

Zhao, X. (2013). believes that achieving a balance of universal public services is a dynamic process based on the theory of equalization of basic public services. It requires gradual development of universal public service balance between regions, cities, and rural areas. He proposes that the equalization of basic public services should meet four conditions: first, providing basic services to the public, such as the right to education; second, providing living and working conditions for the people; third, providing basic public services in the form of free services to citizens; and fourth, the government must strive to create equal conditions to meet the basic needs of the people.

Quality assurance and innovation

Tian, T. F. (2015). believes that the improvement of education quality is the core of sustainable development in basic education. This includes various guarantees such as the scientific nature of teaching content, diversity of teaching methods, and fairness in student assessment. He has summarized the common definitions in the

academic community that represent the guarantee of education quality, mainly including: the concept of education quality proposed by American educator William H. Schmidt, which emphasizes the actual learning outcomes of students in terms of knowledge, skills, and abilities, and focuses on the actual learning outcomes of students in subjects such as mathematics and science, rather than just curriculum design and teaching methods; the "education process and environment standards" proposed by Finnish education scholar Pasi Sahlberg, which defines education quality as the quality of teaching processes and learning environments, emphasizing the relationship between education quality and teacher professional development, school management, curriculum design, and learning environment, considering these factors to be crucial for education quality; the "student engagement and satisfaction standards" proposed by British education scholar Peter Mortimore, which defines education quality as student engagement and satisfaction, emphasizing the active participation and satisfaction of students in the teaching process, considering this as one of the important criteria for evaluating education quality; UNESCO emphasizes "social equity and inclusiveness standards," defining education quality as the degree to which the education system promotes social equity and inclusiveness, emphasizing that education quality should include attention to gender equality, minority ethnic groups, and vulnerable populations, as well as the pursuit of equal educational opportunities.

Zhang, S. C. (2023). believes that social forces are an important factor in ensuring the quality of basic education, mainly manifested in the diversification of the main body and the diversity of the situation, specifically reflected in two aspects: first, the social forces ensuring the quality of basic education are more diverse in structure and quantity, including parents, communities, news media, public opinion, public welfare organizations, educational associations, educational theoretical research organizations, cultural traditions, and foreign non-profit educational organizations; second, the diversification of the situation affecting the main body's guarantee of the quality of basic education, manifested in the different social factors

ensuring the quality of basic education in different situations, and the same social factor can ensure the quality of basic education in multiple situations.

He, X.C. (2019). advocates actively carrying out quality monitoring of basic education to promote the improvement of its quality. He believes that through continuous quality monitoring, the current situation of basic education quality can be understood, providing objective basis for timely revision and improvement of relevant policies. It can also make scientific diagnosis of the existing problems in education quality and provide work suggestions, guiding governments at all levels and education administrative departments to focus on strengthening the teaching process and improving education quality in educational decision-making. At the same time, he advocates establishing a system of "separation of management and evaluation" in basic education, actively carrying out educational supervision, guiding schools to standardize their operation, and improving the level of school management and the quality of education and teaching.

Problems in Basic Education

Basic education in underdeveloped areas faces severe challenges, such as a scarcity of qualified teachers, making it difficult to attract and retain excellent educators. There is also a shortage of educational resources, which limits learning conditions. Additionally, outdated school infrastructure negatively impacts student motivation and learning outcomes, highlighting the urgent need for improvement. These issues are key areas of focus for researchers.

The insufficient investment in educational resources

In his research, Li, X. C. (2019). found that the basic education environment in Developing areas of central and western China has been effectively improved in recent years, with a significant increase in teaching standards. Particularly, there has been a notable improvement in the construction of basic education facilities in primary and secondary schools, which has promoted students' learning efficiency and teachers' enthusiasm. At the same time, he believes that despite the continuous improvement in the construction of basic education facilities in Developing areas , there are still significant issues that cannot be ignored. These include inadequate

investment and construction of facilities, a large funding gap for educational infrastructure in some areas, serious aging of school buildings and their supporting facilities, and some facilities and equipment being idle and useless. Overall, there is a shortage of educational resources in Developing areas.

Li,Z.G. (2010). believes that from an overall perspective, Developing areas in western China still generally suffer from insufficient funding, which is directly related to the government's lack of investment in basic education. In the western regions, the formulation of curriculum plans, teacher standards, education evaluation implementation, and financial expenditure for basic education are all under the control of the state. However, the investment in basic education is far less compared to higher education, accounting for only 2% of the total education expenditure. It is also pointed out that the insufficient investment in rural basic education is particularly prominent, especially in Developing areas, and the uneven allocation of educational resources has a certain degree of negative impact on the development of rural basic education.

Unequal distribution of educational resources

Wei Xie & Yang Zhi (2015) argue that the issue of unequal distribution and supply of educational resources in China is evident at both macro and micro levels. At the macro level, there is an uneven distribution of educational resources between regions, with significant disparities between the eastern and western parts of the country, as well as between urban and rural areas. Economically developed regions and urban centers tend to have access to more educational resources. At the micro level, a family's socioeconomic status and cultural capital significantly influence the educational attainment of their children, with children from higher social classes being more advantaged in accessing high-quality educational resources. Furthermore, educational expansion has not fully eliminated inequalities in education related to class, gender, and urban-rural divides; factors such as family structure, gender differences, and urban-rural disparities continue to impact educational access. Overall, the phenomenon of unequal distribution and supply of educational resources is widespread in China, necessitating joint efforts from the government and

society. Through policy adjustments and optimization of resource allocation, efforts should be made to gradually narrow the educational gap and promote educational equity.

Wei, X., & Yang, Z. (2015). provided the following summary of the uneven distribution of educational resources between urban and rural areas:

1. Differences in Hardware Facilities: There are significant disparities in basic education hardware facilities between urban and rural areas. Urban schools often possess more advanced teaching equipment and better campus facilities, while rural schools are relatively underdeveloped.

2. Unequal Teacher Resources: The quality of teaching staff in rural areas is generally inferior to that in urban areas. Outstanding teachers tend to prefer urban or developed regions, making it difficult to improve the quality of education in rural schools.

3. Uneven Distribution of Educational Funding: There is also an imbalance in the allocation of educational funding between urban and rural areas. Urban schools are able to secure more financial support and educational resources, whereas rural schools face financial constraints.

4. Inequality of Educational Opportunities: Due to the aforementioned disparities, rural students are at a disadvantage compared to urban students when it comes to accessing high-quality educational resources and opportunities, which affects their academic achievements and future development.

5. Far-reaching Social Consequences: The uneven distribution of educational resources between urban and rural areas not only exacerbates the educational gap but also further widens the socio-economic divide between cities and rural areas, negatively impacting social equity and stability. Additionally, this inequality may lead to a series of social issues, such as the solidification of social classes and imbalanced urban-rural development.

Scholars have revealed the imbalances in the distribution and supply of educational resources in China through empirical research and data analysis, particularly highlighting the disparities between urban and rural areas. These studies

not only provide detailed data support and a solid theoretical foundation but also, through specific cases and analyses, help the public and government gain a clearer understanding of the seriousness and urgency of the issue.

The teaching staff at the school is insufficient.

Teacher resources play a crucial role in the development of basic education, particularly in the western regions of China where the education level is generally low due to factors such as economic development, resource allocation, and talent drain.

Wu, L. Y. (2012). found in his research that the development of the quality of the basic education talent team will have a significant impact on the regional economic development. If the phenomenon of the loss of primary and secondary school teachers in a region is still serious, it will not only restrict the development of education, but also become a challenge to social progress.

Jing, J. (2005). cited data from the World Bank in the 1970s and early 1980s, showing that the average social rate of return to primary education in 26 developing countries was 28%, far higher than the 13% return on physical capital. This indicates that in the early stages of economic development, low labor quality can suppress the marginal productivity of physical capital and natural resources. It suggests that what developing countries and underdeveloped regions truly lack is a high-quality labor force, rather than tangible physical capital. In economically Developing areas , the reason for underdevelopment is not a lack of resources, but a lack of talent. Highly skilled teachers from other areas cannot be attracted, and there is a significant outflow of local teaching talent, with a prominent trend of teachers moving from rural to urban areas and from economically underdeveloped regions to economically developed ones.

Li, Z. G. (2010). found in his research that in the underdeveloped rural areas of China, due to relatively difficult economic conditions, the working conditions for rural teachers are not very favorable. They have heavy teaching responsibilities and face harsh living environments, leading to a loss of rural teaching resources. Most rural schools in Developing areas suffer from a lack of qualified teachers. In terms of

the quality of the teaching staff, there is an overall weakness in the foundation and a lower level of education. Additionally, rural basic education teachers lack opportunities for training and improvement, making it difficult for them to enhance their personal capabilities.

The professional quality and teaching ability of teachers directly impact students' learning outcomes and overall development. High-quality teachers can offer a higher standard of education, helping students better acquire knowledge and skills, which in turn enhances the overall education level. Therefore, optimizing teacher resources is an important task.

Teacher training and career development dilemma

Teacher professional development has a profound impact on both educators and education. On one hand, it offers teachers opportunities for continuous learning and skill enhancement; on the other hand, it actively contributes to the overall reform and innovation of the education system.

Chen, X. Y. (2024). summarized the challenges faced in building a teaching workforce for basic education in rural areas: First, there is an imbalance in structure, characterized by an insufficient number of teachers, varying levels of quality, and a lack of high-quality professional educators, which adversely affects the sustainable development of educational quality; second, there is a severe loss of teachers and a lack of intrinsic motivation. Teachers across different basic education fields have a weak awareness of professional development, face inadequate material conditions, and receive insufficient institutional support, leading to low enthusiasm and difficulties in retaining and attracting outstanding teachers; third, the training system is inadequate. Due to limited funding and insufficient management awareness, teachers in the basic education field lack systematic and specialized training opportunities, making it challenging to meet modern educational demands and hindering professional development. These issues are interrelated and severely restrict the improvement of educational quality and the sustainable development of the teaching workforce.

Ma, D.F., Wang, A. Q., & Xian, F. L. (2024). summarized the challenges faced in building a teaching workforce for basic education in rural areas: First, there is an imbalance in structure, characterized by an insufficient number of teachers, varying levels of quality, and a lack of high-quality professional educators, which adversely affects the sustainable development of educational quality; second, there is a severe loss of teachers and a lack of intrinsic motivation. Teachers across different basic education fields have a weak awareness of professional development, face inadequate material conditions, and receive insufficient institutional support, leading to low enthusiasm and difficulties in retaining and attracting outstanding teachers; third, the training system is inadequate. Due to limited funding and insufficient management awareness, teachers in the basic education field lack systematic and specialized training opportunities, making it challenging to meet modern educational demands and hindering professional development. These issues are interrelated and severely restrict the improvement of educational quality and the sustainable development of the teaching workforce.

Zhao, P., Deng, H., & Hu, Y. M. (2024). proposed three main approaches to strengthen professional training for teachers in their research. The first approach is policy guidance, where the government and educational departments should formulate relevant policies to guide and encourage teachers to participate in training and development activities. This can be achieved through the establishment of special funds, provision of training subsidies, and the creation of incentive mechanisms to stimulate teachers' enthusiasm and participation. The second approach is school support, where schools should establish a comprehensive teacher training system and development mechanisms to provide necessary resources and support for teachers. The third approach is self-improvement, where teachers should cultivate a lifelong learning mindset and continuously strive for self-enhancement and development. This can be accomplished through reading professional literature, attending academic conferences, and conducting educational research to broaden their knowledge and academic horizons.

Overall, relevant scholars have conducted an in-depth analysis of the development of the teacher workforce in basic education, examining the current status and challenges of teacher resources from multiple dimensions, including structural imbalances, severe attrition, incomplete training systems, crises in professional identity, insufficient information technology skills, and inadequate institutional frameworks. These studies not only reveal the complexity of the issues but also propose practical solutions such as policy guidance, school support, and self-improvement, providing valuable references for enhancing the quality of basic education and promoting the sustainable development of the teaching workforce. In general, these studies carry significant real-world implications and profound educational value.

The educational philosophy of parents is outdated.

The educational philosophy of parents plays a crucial role in foundational education. As a child's first educators, parents' perspectives, attitudes, and values significantly influence their development. A positive educational philosophy can foster children's curiosity and exploration, encouraging them to engage actively in learning.

Tao, J. H., & Zhao, Q. L. (2007). found in his research that parents' insufficient understanding of basic education and neglect of their children's education issues are important factors affecting the development of basic education. Some parents even support the idea that "reading is useless." In underdeveloped rural areas in western China, some parents have insufficient understanding of the purpose of education, believing that sending their children to school is a waste of money. Even if their children are admitted to college, the high cost of education adds to the family's financial burden. Moreover, college graduates face difficulties in finding employment, ultimately leading them to seek work outside their hometowns. Some parents believe that it is more practical to work directly instead of spending money on education, as the end result is still working as laborers.

Li, Z. G. (2010). believes that due to the influence of the feudal society's concept of "favoring boys over girls," some parents believe that it is useless for girls

to study. Additionally, there are parents who work outside for long periods of time, neglecting their children's education and unable to attend to their children's learning. Although there are also parents who value their children's education, the limitations of the local economic conditions restrict the educational concepts, methods, and conditions, resulting in a significant gap between the local basic education and that of other developed areas. This gap fails to meet the needs of students' learning and growth.

Chen, H.B. (2005). believes that some parents mistakenly think that "educating students is the teacher's responsibility," which leads to many parents not realizing that education requires the cooperation of the family, school, government, and community in order to be successful. Instead, they believe that once they have sent their children to school, they are only responsible for solving their children's living problems, and that what their children learn in school, how they learn, and the effectiveness of their learning is solely the teacher's responsibility. As a result, they hardly ever visit the school to understand their children's learning, living, and thinking conditions, and they rarely communicate or interact with the teachers. Consequently, the family and the school fail to establish a good cooperative relationship.

Families that value education typically provide ample learning resources and support, creating a conducive learning environment. Good communication between parents and schools, along with respect for educators' professional opinions, enhances collaboration, benefiting children's growth and academic success. This partnership fosters a resonance of educational philosophies, creating a collective effort in education.

The Concept of School Management

There is a close relationship between management and school management, which is significant for enhancing educational quality and promoting sustainable development in schools. Management, as a process of organization and coordination, is equally important in school management. Effective school management focuses on the proper allocation of educational resources, the organization of teaching activities, and the coordination of teacher-student relationships, all of which directly

impact educational outcomes and the school environment. Many scholars have provided suggestions for promoting the development of basic education from the perspective of school management.

The Meaning of Management

Yu, D. D. (2006). states that management refers to a series of responsibilities that determine how to effectively and efficiently utilize various resources to achieve organizational goals.

Robbins, S.P. (1998). suggest that management involves the tasks that managers or administrators must perform, which relate to coordinating, supervising work, and implementing various activities of others to ensure that these tasks and activities are completed efficiently and effectively.

In summary, management means implementing activities through individual or group collaboration to effectively and efficiently create maximum benefits and achieve goals by utilizing resources, managing processes, and considering important factors such as people, funds, materials, equipment, and management.

Management Principles

Management is both a science and an art. In other words, management is a systematic organization based on reliable principles and theories derived from scientific research. From this perspective, management is a science. However, if we consider management in terms of the knowledge, skills, experience, and capabilities required of each executive to achieve established goals, it involves applying knowledge, principles, and theories to operations in order to adapt to situations and environments; thus, management is also an art. Therefore, management requires managers to direct and allocate work to organizational members, who generally monitor and supervise the work until completion. Successful managers must apply both the science and art of management based on principles and theories, conducting research until they have a clear understanding and truly recognize that professional development is always ongoing. Modern educational managers must become academic leaders, guiding educational reform in accordance with national regulations. In particular, educational managers must possess the ability for "school management," which means being able

to coordinate the involvement of teachers, parents, school board members, the community, and other relevant parties, mobilizing resources to achieve efficient and effective management. The management of educational institutions is a form of public or governmental management that focuses on the public interest to achieve the benefit of the community.

Tan, R. (2013) referred to bureaucratic organizations, considering them as organizations that operate on the principles of rationality and efficiency. They function by adhering to principles, laws, and order, with the characteristics of a civil service organization as follows:

1. Clear division of labor. In this context, tasks are clearly defined, and workers perform their duties under high skill conditions.

2. Clear hierarchy of authority. The authority and responsibilities of each position are defined, and each position reports to a higher level of command.

3. Formal rules and procedures, which refer to written policies regarding work behavior and decision-making processes, as well as records of past data.

4. Impersonality principle, where practices must be fair and equally applicable.

5. Performance-based career advancement, where employees are selected and promoted based on their abilities and performance. Executives will be recruited from employees who have grown within the organization.

Therefore, the operation of government agencies or government officials must involve fundamental factors such as people, money, materials, and management, covering the following management aspects:

1. Policy management
2. Authority management
3. Personnel management
4. Budget management
5. Management
6. Material management
7. Guidance

Wang, Y. (2012). believes that the management processes or factors play a crucial role in the administration of government agencies related to people, money, materials, and management. It encompasses the following aspects of management:

1. Human Resource Management (People)
2. Financial Management (Funds)
3. General Management (Management)
4. Material Management (Materials)
5. Time Management (Minutes)
6. Public Service Management (Market)
7. Information Management (Information)

Ye, Y. (2003). points out that management principles utilize essential processes and factors as guidelines for operations, covering management content to make it easy to understand, clear, and academic, including:

1. Human Resource Management (People)
2. Financial Management (Funds)
3. General Management (Management)

The Basic Education Commission (2009) established a structure based on the workload of school management, focusing on the fundamental management factors of personnel, funds, materials, and equipment, specifically as follows:

1. Academic Management
2. Budget Management
3. Personnel Management
4. General Management

Through a review of the literature, the researchers have applied the principles of workload management according to four types of school management structures to serve as a guiding framework for school management content in the development regions of western China, namely: 1) academic management, 2) budget management, 3) personnel management, and 4) general management.

Academic Management

Academic work is related to the implementation of the curriculum to achieve the school's curriculum goals. Yang, T., & Xia, X. (2013) believe it including the specified expected characteristics, namely:

1. Development of the school curriculum

2. Implementation of the school curriculum and design of learning management

3. Promoting teaching and learning according to a comprehensive learning reform approach, with an emphasis on critical thinking skills

4. Encouraging teachers to create and utilize learning plans

5. Procurement of educational media and technology

6. Organization of extracurricular activities

7. Organization of reading corners, libraries, and learning resources

8. Measurement and assessment based on actual conditions

9. Remedial teaching

10. Research on educational development

11. Facilitating teachers in creating individual student data profiles

12. Assessment of the quality of school education

13. Organization of audiovisual centers

Personnel Management

Personnel management involves the operations that ensure school staff understand and comprehend their responsibilities and tasks, monitor and assist in the successful and effective execution of assigned duties, create a work atmosphere that encourages colleagues to recognize their responsibilities, and foster collaboration in fulfilling those duties. Chen, X. (2022). believe it promotes the self-development of school personnel and enhances their performance capabilities, including:

Human resource planning and job identification Identifying needs, responsibilities, and accountabilities

1. Assigning duties and responsibilities

2. Orientation for new employees

3. Welfare arrangements
4. Performance supervision and monitoring
5. Promotion of personnel development and further education
6. Performance evaluation
7. Performance considerations
8. Discipline and maintenance of discipline

Budget Management

Budget management can help schools plan and allocate resources effectively. By creating a detailed budget, schools can identify spending priorities and ensure funds are directed towards the most critical areas, such as teaching facilities, teacher training, and student activities. This strategic allocation of resources can significantly enhance the quality of education.

Li, W. (2014) believes that budget work related to financial and material systems includes:

1. Preparation of the annual action plan
2. Formulation and application of the annual budget
3. Budget allocation
4. Budget expenditure reporting
5. Mobilization and investment of educational resources
6. Auditing, monitoring, and evaluating management efficiency

Good budget management can also enhance a school's resilience to risks. When facing unforeseen events or economic fluctuations, schools can better respond to challenges and ensure the continuity of educational activities through flexible budget adjustments.

General Management

General management encompasses tasks related to administrative systems that have specific legal requirements and methods. Subtasks include: paperwork, student affairs, building and location management, and community coordination. Liu, X. (2018) believes that the scope of integrated management includes:

1. Administrative and document management
2. Registration and reporting
3. Information and public relations
4. School facilities and environment
5. Enrollment of compulsory education children
6. Organization of various school activities
7. Coordination with the community and local agencies

Management-Related Factors

In addition to the primary factors mentioned above, there are also other related factors. Hu,Z.Y. (2003). argues that organizational management is a task that must involve both internal and external factors, as government organizations are situated within communities. The government must persuade the community to participate in order to systematize and enhance the effectiveness of the organization's management and achieve its goals. The environmental factors affecting management are categorized into internal factors, which include 1) personnel, 2) budget, 3) materials and equipment, and 4) management. External factors encompass 1) social and cultural aspects, 2) legal considerations, 3) economic conditions, 4) political influences, 5) technology, and 6) geographical environment. The environmental factors of an organization, whether internal or external, are interrelated, as illustrated in Figure 2. 1

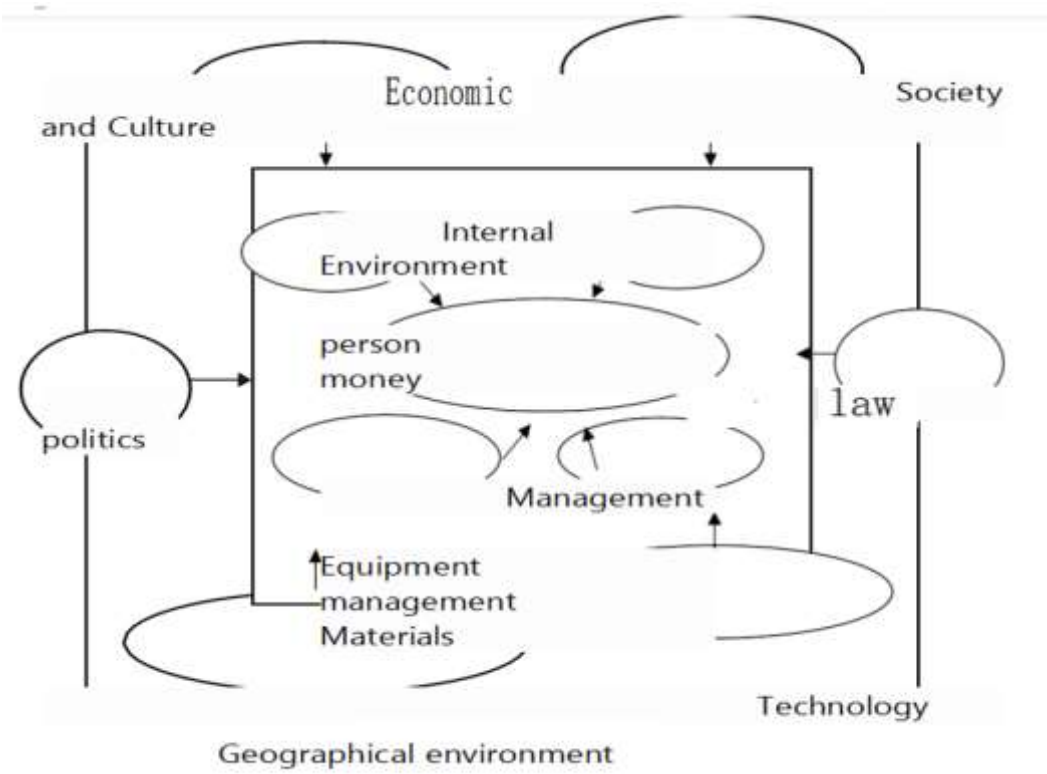


Figure 2.1 Environmental factors affecting organizations.

Source: Yu, D. D. (2006).

The environment is constantly changing. Therefore, organizational executives must monitor, research, and analyze the environmental trends that impact the organization in order to adjust operational strategies, including the organization's direction or objectives, skills, and available resources, to align with these changes. This alignment enables the organization to grow in various environments or to ensure that the environment has the most positive impact or opportunities for the organization.

Internal Environmental Factors

Internal factors significantly influence the management of basic education institutions and have long been a focus of researchers. There is extensive research on various aspects such as school culture, teacher quality, internal resource allocation, and team management. In summary, internal factors play a crucial role in the management of basic education institutions.

Zhu,W. Y., & Zhou, S. S. (2005). believes that effective management must utilize management resources to achieve objectives. The management process is illustrated in Figure 2.2

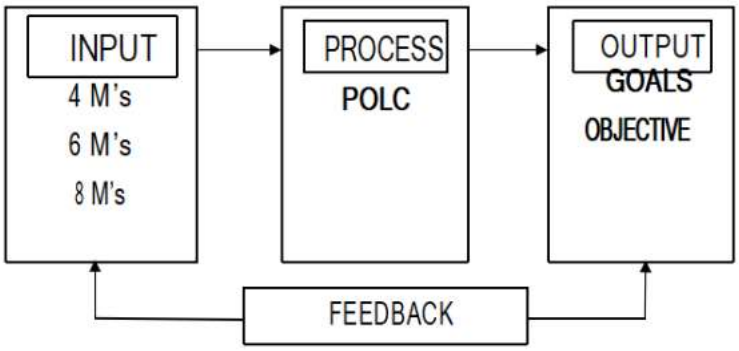


Figure 2.2 Effective management process

Source: Zhu,W. Y., & Zhou, S. S. (2005).

Zhu,W. Y., & Zhou, S. S. (2005). believe that INPUT is the introduction of management resources, consisting of 4 M's, consisting of people (Man), money (Money), materials/raw materials (Material), and methods/management (Method Management). In the rapidly growing manufacturing and service industries, only 4 resources are not enough for the goals. Therefore, 2 more M's are added, making it 6 M's: machines (Machine) and marketing (Market). At the same time, work that takes into account the importance or value of the workers' minds is increasing, so morale and encouragement (Morale) are increased to 7 M's. And when the world enters the era of globalization (Globalization), the borderless communication system that is connected as a global system, information (Message) is added to the production process, totaling 8 M's. These resources will increase The development of the bureaucracy will continue without end as long as the production and distribution of services will continue to develop continuously. In the civil service system, the 4 M's are still used as basic resources for administration and management.

The process is a continuous management process consisting of four steps: planning, organizing, leading, and controlling, as shown in Figure 2.3 (Robbins, & Stephen. P. (1998).

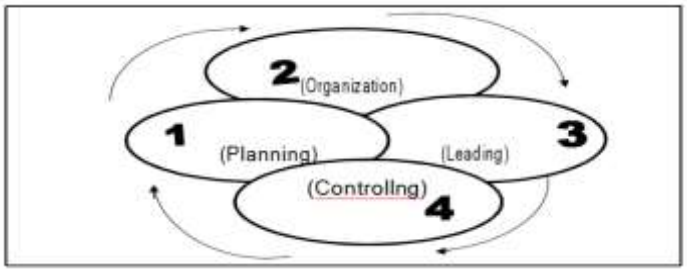


Figure 2.3 The Relationship of the Four Basic Management Functions

Source: Robbins, & Stephen. P. (1998).

Hou, X. H. (2008). suggests that, generally speaking, there are four interrelated management functions. During the planning phase, responsibilities must be assigned, clearly defining who will do what. The next step involves issuing directives and guiding employees to act according to the plan. The final step is control, to ensure the plan is executed. The responsibilities of these four steps are explained as follows:

1. Planning is the process of setting objectives and considering what should be done to achieve those objectives. This involves establishing goals, the purpose of the organization, and the methods to achieve these goals. Managers must plan based on three main reasons:

1) To set a direction for the organization's future, such as increasing profits, expanding market share, and fulfilling social responsibilities.

2) To identify the organizational resources needed to achieve the goals.

3) To determine the tasks that must be completed to reach the objectives.

2. Organizing management is the process of deciding who does what and who reports directly to whom. This involves the proper utilization of human resources

(staffing), or refers to the process of designing jobs, allocating resources, and coordinating work activities.

3. Leading is the act of guiding others to achieve organizational goals by motivating them to work. In this leadership process, managers must apply motivational principles and also have appropriate directives or incentives to encourage employees to strive for the objectives.

4. Controlling is the step of monitoring the work of individuals, groups, or the organization and taking corrective actions, or in other words, it is a process of measuring work outcomes and making corrections to ensure the desired results are achieved. Control includes the following important steps:

1) Setting work standards

2) Measuring current work outcomes and comparing them to the standards

3) Taking corrective actions to address deviations from the established standards

4) Taking necessary corrective actions on the standards

Li, Z. (2011). explained that, in addition to the four management functions, there are five appropriate organizational management rules or responsibilities, which are as follows:

1) Forecasting: Completing future plans and adhering to them.

2) Organizing: Acquiring and mobilizing resources to achieve objectives.

3) Commanding: Leading, selecting, and evaluating labor to achieve optimal work performance according to the plan.

4) Coordinating: Adjusting diverse efforts to ensure information sharing and problem-solving.

5) Controlling: Ensuring that plans are followed and making improvements when necessary.

These five management rules will guide management actions and must be clearly defined from top to bottom in the organizational chain of command, known as the principle of unity of command, which means that employees receive

directives from only one supervisor; the principle of unity of direction means that a group has multiple activities but must have the same goals and plans. Unlike the situation with only one supervisor, this principle is more related to management rather than individuals.

External Environmental Factors

External factors significantly impact the management of basic education schools. Many scholars have researched this issue from various perspectives, including policies and regulations, economic environment, technological advancements, and community organizations, providing valuable insights and suggestions.

Zhou, J. L., & Song, J. (2007). analyzed the external factors affecting education using Thailand as a case study. He argued that a database should be established by analyzing five important external factors that influence educational management, as detailed below:

1. Technological Factors: Advances in technology affect the qualifications and quality of future workers. Continuous developments in information technology, transportation technology, production technology, nanotechnology, and biotechnology are beneficial for enhancing a country's competitive potential. Therefore, educational management must incorporate knowledge of new technologies into the curriculum and update it to keep pace with technological changes.

2. Economic Factors: Economic factors influence the labor market and the education market, determining the characteristics of the required workforce. For instance, the new economy will compete with new innovations, necessitating research and development. Education must cultivate individuals with research skills to create new innovations that are valuable to the economic system. The liberalization of trade and investment has led to an increased flow of goods and capital from abroad. Countries must not only reduce competitive barriers but also compete with high-quality products, which requires a skilled workforce with diverse

skills and capabilities, such as technical knowledge, foreign languages, and management. Educational managers are responsible for nurturing high-quality talent.

3. Bureaucratic Factors: Past educational reforms have faced difficulties due to bureaucratic obstacles that lead to delays in coordination. Working within the Thai bureaucratic system often results in a lack of collaboration. Additionally, there is an excessive centralization of power. The rigid adherence to fixed rules and regulations in bureaucratic work lacks flexibility, making it difficult for some educational managers and teachers to adapt.

4. Political Factors: The success or failure of educational management reforms or developments is more dependent on political factors than on methods and approaches. However, specific political conditions that hinder progress can lead to stagnation in educational reforms or failure to achieve desired success. For example, individuals in management positions may lack genuine expertise in education, or the goals of educational management may not align with those of many politicians.

5. Cultural Factors: Cultural factors have a profound impact on educational management, shaping educational values, curriculum objectives, teaching methods, and evaluation systems. A multicultural background requires educational management to be more inclusive, respecting differences and promoting cultural exchange and integration. At the same time, cultural traditions influence the formulation and implementation of educational policies, ensuring that educational content aligns with local culture, thereby enhancing the social adaptability and effectiveness of education.

Overall, external factors have a profound and complex impact on the management of basic education institutions. Schools must respond flexibly to better serve students and society.

Stakeholder Relationship Management

Stakeholder management plays a crucial role in the administration of basic education schools. Stakeholders typically include students, parents, teachers, the community, and educational authorities. Their involvement in school management enhances the transparency and legitimacy of decision-making. By soliciting and

considering diverse opinions, schools can better meet stakeholders' needs, ultimately improving the quality of education services.

Qu,Y.R. (2021). posits that stakeholders are individuals or institutions affected by an organization's decisions and operations, which in turn may also influence the organization. Stakeholders have a significant impact on organizational operations. Establishing good relationships with stakeholders will facilitate smoother and more successful management of the organization, including customers, employees, local communities, and shareholders. Although the relationship between the organization and its stakeholders is interdependent, not all stakeholders are equal. In other words, each stakeholder has different levels of influence. The organization will rely on those who are most valuable and important. Conversely, high dependency will increase the commitment of the most influential individuals to the organization. Managers must seek ways to ensure harmonious coexistence between the organization and its stakeholders.

Effective and reasonable stakeholder management is a key guarantee for the successful administration of basic education schools, providing a solid foundation for the school's development.

Concept of Sustainable Development

The United Nations Conference on the Human Environment (Stockholm, 1972) proposed that the international community should pay attention to the issue of sustainable development. In the 1980s, the concept of "sustainable development" began to emerge. "Sustainable development" is one of the increasingly frequent terms used in recent years and has become one of the themes of our time. The issue of sustainable development is a common challenge faced by humanity worldwide. Sustainable development has become a dominant element in the new scientific development concept. Over the past few decades, the United Nations has successively formulated and promulgated a series of important documents such as the "Declaration of the Human Environment," the "Rio Declaration on Environment and Development," and the "Agenda 21." In 2002, the Johannesburg World Summit

on Sustainable Development further established economic development, social progress, and environmental protection as the cornerstones of promoting sustainable development.

Connection between sustainable development and basic education

Basic education is the cornerstone for cultivating future social citizens, disseminating knowledge, and enhancing skills and literacy. It has immeasurable value in shaping individual abilities, promoting social progress, and driving sustainable economic development. In recent years, scholars have conducted increasingly in-depth research on the relationship between sustainable development and basic education.

Stables, A., & Scott, W. (2010). believes that the role of education in promoting sustainable development is mainly reflected in five aspects: (1) it can inspire the belief that each of us has the ability and responsibility to achieve positive global change; (2) It is the main means of sustainable development transformation, which can enhance people's ability to turn ideas into reality; (3) Being able to cultivate the values, behaviors, and lifestyles needed for a sustainable future (4) is a process of learning how to make decisions; (5) Can build the ability to think for the future.

Ma, H. B. (2013). believes that education for sustainable development is about maintaining and improving our quality of life, as well as the quality of life for future generations. Its purpose is to enable individuals, communities, groups, businesses, and governments to live and act sustainably while also understanding the associated environmental, social, and economic issues. Education for sustainable development also prepares us for the new century, ensuring that we do not fall into difficulties.

Li, P. T., & Chen, S. J. (2024). shows that as China develops economically and socially, the changes in population dynamics exhibit trends such as low fertility rates, aging, and regional population fluctuations. The main contradiction regarding population has shifted from total quantity pressure to structural challenges, which affects the balanced development and quality enhancement of society. He posits

that improving foundational education can enhance the scientific, cultural, health, and moral qualities of the population. This can play a positive role in regulating population numbers, adjusting population structures, and improving population quality, thus promoting high-quality population development that is sufficient in quantity, optimized in structure, rationally distributed, and of excellent quality, thereby supporting Chinese-style modernization.

The research indicates that foundational education is not only a platform for imparting knowledge but also a crucial stage for cultivating awareness and capability for sustainable development. The education system can strengthen students' environmental awareness and sense of social responsibility by integrating content on environmental education and social responsibility, thereby laying a solid foundation for sustainable development.

The Sustainable Development Status of Basic Education in China

In recent years, the sustainable development of basic education in China has garnered significant attention, leading to numerous academic studies. These studies primarily focus on areas such as educational equity, curriculum reform, teacher professional development, educational mechanism construction, and the application of educational technology. Overall, academic research on the sustainable development of basic education in China is deepening and exploring multiple dimensions.

Zhu, Z., & Yuan, D. Y. (2023). point out in their research that the concept of sustainable development education promoted by UNESCO has received a positive response in China. China is actively integrating sustainable development education into its education system through participation in international conferences and the formulation of national policies. To achieve this, the Chinese government has implemented several measures: first, by establishing a National Task Force that focuses on key areas such as teacher training, school construction, and curriculum development to promote the in-depth implementation of sustainable development education; second, in terms of training, organizing multi-level and diverse training activities to enhance educators' concepts and skills; third, regarding the curriculum,

actively developing relevant teaching materials and courses based on local and school-based curricula, such as the "Environmental and Sustainable Development Education" textbook developed by the Beijing Academy of Educational Sciences; fourth, by formulating the "Guidelines for China's Sustainable Development Education Program," which integrates sustainable development education into quality education, encourages the incorporation of national curricula and extracurricular topics into teaching, and combines with curriculum reform and moral education to enhance the overall quality of school education.

Liu, Y. N. (2024). believes that China's basic education has made significant achievements in sustainable development, mainly including: first, through the implementation of the strategy for strengthening the education power, the consolidation rate of nine-year compulsory education and the gross enrollment rates for preschool and high school education have increased substantially; second, on the international stage, China actively participates in global education governance, establishing the UNESCO International STEM Education Research Institute, promoting global education for girls and women, gaining international recognition for smart education platforms, proposing a plan to build a community with a shared future for mankind, facilitating international cooperation and exchange in education, and driving global educational reform. Particularly, it provides international solutions and references in areas such as education poverty alleviation and online education, and the international influence of education continues to rise.

Liu, C. L., & Zuo, Y. S. (2023). point out in their study that China's basic education still faces numerous challenges in achieving sustainable development. First, the intense competition for education and the scarcity of quality educational resources lead to immense pressure on students to succeed academically, resulting in heavy burdens. Although the government has issued various policies aimed at reducing this burden, these often only scratch the surface and fail to address the underlying issues. Second, the entrenched examination-oriented education system poses significant challenges in implementing the concept of quality education, which, despite being proposed for many years, has struggled to gain widespread application.

Moreover, the commercialization and marketization of the educational environment have exacerbated this burden, with the proliferation of extracurricular training institutions emerging as a new source of strain on students. These issues not only affect students' physical and mental health but also hinder the improvement of educational quality and the realization of educational equity, presenting severe challenges to the sustainable development of basic education in China.

Relevant studies indicate that while there have been significant achievements in the sustainable development of basic education in China, multiple challenges remain. Research highlights that despite the government's active promotion of sustainable development education through the establishment of dedicated institutions, enhanced teacher training, and the development of relevant curricula and teaching materials, problems such as intense educational competition, scarce quality resources, and an entrenched examination-oriented system still persist. Therefore, further deepening educational reforms is necessary to fundamentally address these issues and promote a comprehensive, coordinated, and sustainable development of basic education in the future.

Successful Cases of Sustainable Development Education

Li, J. (2022). The research in 2022 shows that Shanghai actively promotes the impact of basic education on external implementation through a series of policy designs and implementations. Firstly, clarify policy support, such as the "Shanghai Medium - and Long Term Education Reform and Development Plan Outline" and other documents that encourage high-level universities and primary and secondary schools to establish branch campuses or learning centers overseas. Secondly, actively respond to the national "the Belt and Road" initiative, strengthen education exchanges and cooperation with countries and regions along the Belt and Road, and expand influence through special education cooperation plans. At the same time, Shanghai also focuses on enhancing its international competitiveness and regional radiation, supporting schools to independently explore overseas education, and exploring the construction of a "Shanghai curriculum" that integrates Chinese and foreign education, in order to contribute Chinese wisdom to international education

governance. These measures together constitute the comprehensive strategy of Shanghai's basic education "going global", aimed at promoting the dissemination and application of the Chinese education model internationally.

Cao, S. J., & Li, Q. (2018). Taking South Korea as an example, they argue that the country's prioritization of basic education, particularly primary education, plays a crucial role in national development. Firstly, the widespread implementation of free compulsory education significantly increased enrollment rates among school-age children, cultivating a large workforce equipped with basic literacy, numeracy skills, and a sense of rules, which supported the rapid growth of labor-intensive industries in the 1960s. Secondly, the government’s ongoing investment in education, especially in funding for school construction, classroom renovations, and textbook provision, has notably improved the conditions of primary education, enhancing the quality of teaching and learning. This not only ensured educational equity but also laid a solid foundation for the long-term accumulation of human resources in the country. Ultimately, the development of basic education has promoted the overall enhancement of South Korea's educational level, providing strong support for the nation's economic, social, and cultural development.

Chen, Y. W. (2006). researched the development of sustainable education in Brazil, finding that significant progress had been made in basic education over the past decade. Measures such as the establishment of the FUNDEF fund, improved teacher salaries, and reduced dropout rates have successfully increased both the accessibility and quality of education. Specifically, the Brazilian government has emphasized educational equity, implementing targeted programs for impoverished areas, thus narrowing the educational gap. At the same time, it has encouraged a diversified educational system to meet the needs of different students. These initiatives have not only elevated the level of basic education in Brazil but have also provided strong support for socio-economic development, promoting sustainable development. Brazil's experience indicates that the government should place a high priority on basic education and promote educational accessibility, quality

improvement, and equity through multiple approaches, using education as a driving force for comprehensive national development.

The studies conducted by the scholars showcased the practical advancements in sustainable education development in various countries and regions. These research findings collectively illustrate that the government's strong commitment to and multi-faceted efforts in advancing basic education are key pathways to achieving sustainable educational development and promoting overall national progress.

Factors affecting the sustainable development of basic education

In the process of researchers studying the sustainable development of basic education, the influencing factors that they often emphasize and frequently mention mainly include the distribution of educational resources, the quality of the teaching staff, economic factors, educational systems and policies, educational informatization, and international exchange and cooperation, among others.

Wan, G. W. (2011). By comparing the urban-rural and regional differences in the welfare policies of preschool education in China, it has been found that there are significant disparities in preschool education across urban and rural areas, with urban-rural differences being greater than regional differences, particularly in terms of facilities, materials, and teachers. The material conditions and infrastructure in the eastern regions are significantly better than those in the central and western regions, showing a gradual deterioration from east to west. However, regarding teacher quality, although the eastern regions hold a slight advantage, the differentiation between regions is not particularly severe, and a pronounced "east superior, west inferior" situation has not formed. Overall, the distribution of preschool education resources is uneven between urban and rural areas as well as across regions, necessitating measures to promote balanced development.

Wang, H. Y., & Ma, T. (2022). argue that the quality of the teaching workforce is the cornerstone of sustainable development in basic education. They highlight that the educational level and teaching ability are at the core of teacher quality, directly influencing teaching effectiveness and student growth. It is difficult for low-level and

inexperienced teachers to inspire students' potential, thus limiting the possibilities for students' comprehensive development. At the same time, they advocate for the establishment of a well-rounded incentive mechanism, believing that this can not only stimulate teachers' professional enthusiasm and promote the continuous enhancement of their professional skills but also effectively stabilize the teaching workforce, attract and retain outstanding talent, thus injecting a continuous stream of vitality and momentum into basic education, ultimately driving an overall improvement in educational quality and sustainable development.

Rong, Z. K. (2018). argues that economic factors have a profound and multidimensional impact on the sustainable development of basic education. First, the level of economic development determines the scale and intensity of educational investment, which directly affects the allocation and utilization efficiency of educational resources. Economic prosperity can encourage the government and various sectors of society to increase investment in basic education, improve educational facilities, and enhance teacher quality, thereby providing students with better educational services. Second, economic development also influences changes in educational demand; as the economy grows, the demand for high-quality talent in society increases, necessitating continuous reform and innovation in basic education to meet the needs of socio-economic development. Finally, the improvement in the quality of basic education can, in turn, benefit the economy by cultivating more individuals with innovative spirit and practical skills, thus promoting sustained and healthy economic development. Therefore, there exists a close relationship of mutual reinforcement and interdependence between economic factors and basic education.

Ma, J., & Wang, H. H. (2024). conducted a study on the evolution of the research system in China's basic education. The research shows that from the early days of the founding of the country with a "teacher-led" approach, to research management focused on "teaching," and then to curriculum reform practices based on "school-centered" models, the policy directions in each stage have directly driven the improvement and transformation of the research system. The formulation and

implementation of these policies not only standardized the order of education and teaching but also promoted the development of the teaching workforce and the enhancement of educational quality. At the same time, with changes in the internal and external environments of education, the educational system and policies are continuously being adjusted and optimized to meet the demands of sustainable development in basic education. This process reflects the importance of policy stability and scientific rigor, as well as the crucial role of institutional improvement in the development of basic education.

Bai, X., Wen, J. Q., Fang, D., & Chen, Z. H. (2023). argues through research that the impact of information technology on the development of basic education is profound and significant. Firstly, it greatly enriches teaching resources and methods, making the educational content more diverse and engaging, which helps to stimulate students' interest and enthusiasm for learning. Secondly, information technology breaks the limitations of time and space, providing teachers and students with more flexible and convenient learning methods, promoting personalized learning and the development of lifelong learning. Furthermore, through data analysis and feedback, information technology can assist teachers in understanding students' learning situations more accurately, optimizing teaching strategies, and improving teaching effectiveness. However, to fully leverage the advantages of information technology, it is necessary to strengthen the integration and sharing of educational resources, enhance teachers' capabilities in applying information technology, and ensure a deep integration of technology with education. In conclusion, information technology is a key force driving the high-quality development of basic education.

Du, X. X. (2016). conducted a study on the internationalization of basic education in Beijing and Shanghai, suggesting that related practices not only introduced advanced international educational concepts and methods but also promoted interaction between teachers, students, and the international education community, thereby enhancing the quality of education and international competitiveness. The author believes that such exchanges and collaborations broaden the international perspectives of teachers and students, cultivate their

intercultural communication skills, and contribute to the development of more globally competitive talents.

In summary, when scholars explore the sustainable development of basic education, they typically conduct in-depth analyses from multiple dimensions, including educational resources, teacher workforce, student burdens, educational systems and policies, economic factors, sociocultural factors, educational informationization, and international exchanges and cooperation. These factors are interrelated and interact with each other, collectively influencing the sustainable development of basic education.

Management and Application of Strategies

Chen, X. (2010). believes that the term "strategy" originally comes from Greek, where it was a military term. In modern times, it primarily refers to the planning and guidance of military leaders regarding the overall situation of warfare. The scope of modern strategy is much broader, leading to the introduction of a series of concepts such as "grand strategy," "national strategy," and "global strategy." In the early 20th century, practitioners like Fayol, who were also founders of the management process school, emerged. They proposed the concept of "strategic management" by summarizing their experiences and research findings.

Definition of Strategic Management

The modern theory of strategic management is generally considered to have originated in the United States during the 1960s. Although its evolution over nearly sixty years is relatively short, it has demonstrated significant development potential. Coupled with the widespread implementation of strategic management practices, this theoretical research has yielded fruitful results and has shown a prosperous trend characterized by a convergence of various perspectives.

Table 2.1 The main points defining strategic managemen

Name	Main points.
Kotler, P. (2011).	introduced the concept of positioning strategy management, advocating that companies gain competitive advantage by selecting specific market positions. This strategy emphasizes the need for companies to find a unique position in the market to meet specific customer needs and gain a competitive advantage.
Mintzberg, H. (1980).	believes that strategic management focuses more on the generation of entirely new strategic outcomes. Strategic management theory involves the management of a series of processes such as strategic formulation, implementation, evaluation, summary, feedback, and adjustment.
Weick, K. E. (1979).	proposed the concept of conceptual strategy management, emphasizing the management approach of strategic thinking and conceptualization. This approach highlights the need for managers to have the ability to conceptualize and abstract strategic issues in order to better understand and address complex strategic challenges.
Mintzberg, H. (1980).	proposed the concept of patterned strategy management, emphasizing the organization's pattern recognition and learning of the external environment and internal resources in order to formulate strategies. This type of strategy emphasizes sensitivity to environmental changes and the analysis of historical patterns to make flexible strategic adjustments.
Yang, F. Q. (1998).	believes that strategic management is the process of analyzing the internal and external environment of an organization, setting goals, making strategic choices, and implementing them to ensure the long-term development and competitive advantage of the organization.
Chi, B. D. (2004).	believes that strategic management is the process through which an organization utilizes its resources to achieve its vision and mission, while addressing internal and external challenges in a constantly changing environment.

Table 2.1 (Continued)

Name	Main points.
Liu, Z. (2011).	points out that strategic management is the process through which an organization analyzes and responds to its internal and external environment when determining its long-term goals and devising ways to achieve them.
Irene P. Tobis, & Michael Tobis. (2003).	from a strategic research perspective, categorizes strategic management models into strategic planning, strategic control, and financial control. Specifically, the strategic planning model generally guides the organization's business through strategies and directions, with a focus on central organizational control, planning long-term strategies, and implementation. The strategic control model is a relatively centralized management model characterized by "focusing on major issues while letting go of minor ones," falling between the other two management models. The financial control model primarily manages through financial indicators, while also focusing on the development of strategic processes and goals.

From the above perspective, it is evident that strategic management particularly involves the planning, implementation, evaluation, and adjustment of strategies, emphasizing the organization's ability to identify and seize development opportunities and threats during the management practice process.

Characteristics of Effective Strategy Management

Bettis, R. A., & Burton, R. M. (2002). stresses that a strategy should be adaptive, capable of flexibly responding to changes in the external environment, thus avoiding rigidity and excessive planning. The adaptability of strategic criteria refers to the need for the standards of strategy formulation and execution to be able to adjust to the constantly changing demands of the external environment and the internal resources and capabilities. This concept highlights the flexibility and

adaptability of strategies in response to the ever-changing market conditions, competitive landscape, and internal organizational changes.

Drucker, P. F. (1999). posits that feasibility is one of the criteria for a strategy; it must be actionable, meaning that the organization must have the capacity to implement the strategy, including sufficient resources and management capabilities. He emphasizes the importance of the practicality and operability of strategic planning, arguing that a strategy should not merely be an idealized vision but should also take into account whether the organization's internal resources, capabilities, and management levels can support the implementation of the strategy.

Mintzberg, H. (1974). Emphasizes that strategy should be adaptive, capable of flexibly responding to changes in the external environment, and avoiding rigidity and excessive planning. The adaptability of strategic standards refers to the need for the criteria for strategy formulation and execution to accommodate the ever-changing demands of the external environment and internal resources and capabilities. This concept highlights the flexibility and adaptability of strategy to respond to the constantly changing market conditions, competitive environments, and internal changes within the organization.

Barney, J. B. (1991). argues that a strategy should enable an organization to achieve a competitive advantage, which can include cost leadership, differentiation, or specialization strategies. The superiority of strategic standards refers to the advantages and value that the standards employed in the formulation and execution of strategies should possess. These standards should provide the organization with clear direction and objectives, while also enabling it to gain a competitive edge in a highly competitive market environment.

Prahalad, Gary, & Hamel. (1994). believes that the standards for strategy also include sustainability, which refers to the concept of sustainable development. He argues that strategies should take into account environmental, social, and economic sustainability, avoiding short-term gains that could harm long-term development. Additionally, strategies must be effective, meaning they should be able to achieve the organization's long-term goals and mission.

Method for Formulating Strategies

Scholars have conducted extensive research on how to carry out a task and develop effective strategies, proposing numerous theories, some of which are widely applied.

Weihrich, H. (1982). proposed the SWOT analysis method, which is a strategic tool that can analyze and study the actual situation of an organization in a more objective and accurate manner. The four letters in SWOT stand for Strengths, Weaknesses, Opportunities, and Threats. This method can be divided into two core parts: the first part, SW, primarily focuses on analyzing internal conditions; the second part, OT, is mainly used to analyze external conditions. By prioritizing and ranking various factors obtained from surveys based on their significance or impact, a SWOT matrix can be constructed. Once the environmental factors analysis and the SWOT matrix have been completed, corresponding action plans can be formulated. The basic approach to developing a strategy is to fully leverage strengths, strive to overcome weaknesses, actively seize opportunities, and effectively mitigate threats; at the same time, it is important to consider the past, focus on the present, and look to the future. By using a systematic analysis approach to comprehensively analyze and combine various environmental factors, a series of feasible options for the company's future development can be derived.

The TOWS analysis method, proposed by William S. Haris and Terry J. St. Peters, is a strategic analysis tool designed to help companies assess their internal and external environments in order to develop effective strategies. Unlike traditional SWOT analysis, TOWS analysis places greater emphasis on utilizing combinations of internal and external factors to formulate response strategies. TOWS analysis focuses on four main aspects: strengths, weaknesses, opportunities, and threats. By cross-combining these factors, businesses can devise four strategies: SO (using strengths to seize opportunities), ST (using strengths to avoid threats), WO (improving weaknesses to capitalize on opportunities), and WT (minimizing weaknesses to mitigate threats). This approach provides a systematic framework for companies to identify

opportunities and challenges in a complex business environment, thereby optimizing strategic decision-making.

According to current research, strategic analysis methods primarily include SWOT analysis and TOWS analysis. SWOT analysis focuses on identifying the strengths and weaknesses within the internal environment, as well as the opportunities and threats present in the external environment. This method emphasizes an independent assessment of each factor, helping businesses gain a comprehensive understanding of themselves and the market situation. In contrast, TOWS analysis builds on the foundation of SWOT analysis, emphasizing the integration of internal and external factors to formulate appropriate strategies. TOWS analysis provides a deeper perspective on strategic decision-making by cross-referencing four elements: strengths with opportunities, strengths with threats, weaknesses with opportunities, and weaknesses with threats. This paper will utilize the SWOT analysis method to assess the internal resources and capabilities that affect the sustainable development of basic education in the western region of China and will employ TOWS analysis to develop specific response strategies for the external environment, aiming to help basic education in the western region of China gain a competitive advantage.

Steps for Developing a Strategy

Formulating strategies is a key element in achieving organizational goals. This process helps clarify direction and objectives, facilitates effective resource allocation, and enhances the organization's ability to respond to changes. As external environments evolve, the ability to flexibly adjust strategies enables organizations to identify new opportunities and challenges, thereby improving adaptability and competitiveness. In line with the needs of this research, the researcher has organized the opinions of relevant scholars.

Kaiser, D., Christensen, I., & Foust, J. (2011). defines strategy formulation as the process by which a business or organization establishes long-term development directions and goals, as well as the strategic choices and action plans to achieve these goals, in response to changes in the external environment and internal

resource conditions. This involves environmental analysis, internal resource assessment, and future forecasting.

Andrews, K. R. (1971). emphasizes the dynamic nature of strategy formulation, arguing that organizations must continuously evaluate their external environment and internal resources to adapt to changing conditions.

Adams, J. L. (1974). proposed the "Intent, Action, Outcome" model of strategy formulation, highlighting the need for clear intentions, effective actions, and measurable results in the strategy formulation process.

Mintzberg, H. (2009). views strategy formulation as a complex process, stressing that it is a multifaceted endeavor that requires consideration of various factors and methods.

Zhuo, Y. J. (2021). believes that strategy formulation can be approached from several aspects:

1. Environmental Analysis: Companies need to conduct an in-depth analysis of the external environment, including industry competition, market demand, and regulatory factors, to understand changes and trends in the external landscape.

2. Internal Resource Assessment: Companies should evaluate their own resources and capabilities, including financial, human, technological, and brand aspects, to identify their strengths and weaknesses.

3. Goal Setting: Based on the understanding of the external environment and internal resources, companies need to establish long-term development goals and visions, clarifying their future direction.

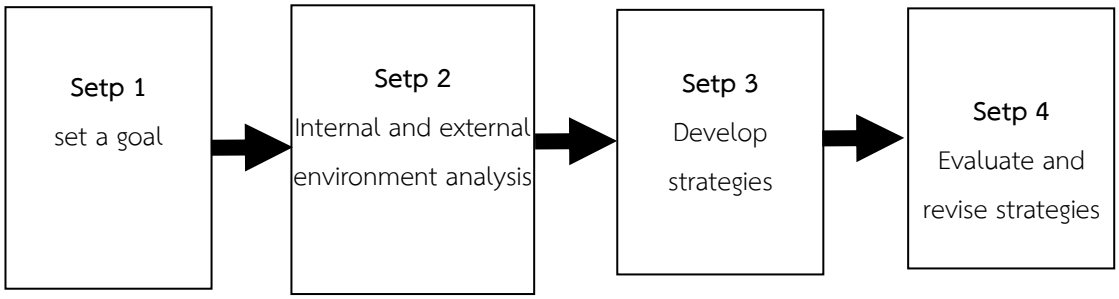
4. Strategy Selection: Companies must choose strategies that align with their goals and environmental analysis, including market positioning, product development, and partnerships.

5. Action Plan: After determining the strategic direction, companies need to develop specific action plans, including resource allocation, organizational adjustments, and market promotion, to achieve strategic objectives.

6. Implementation and Monitoring: Finally, companies need to implement the formulated strategies and continuously monitor the progress of strategy execution, making timely adjustments to ensure effective implementation.

In summary, strategy formulation is a systematic process that requires a comprehensive consideration of external environments and internal resource conditions, clear long-term development goals, the selection of appropriate strategic directions, and the development of effective action plans, ultimately leading to implementation and ongoing monitoring of strategy execution.

Table 2.2 Develop strategy steps



Related Research

The sustainable development of basic education in China's western region faces multiple challenges, including resource scarcity, insufficient educational funding, issues of equity in education amidst diverse cultural backgrounds, and lagging infrastructure. Scholars emphasize that the government and various social sectors must work together through effective policy support and resource integration to enhance regional cooperation and sharing. They highlight the close relationship between education and social development, suggesting that promoting educational equity and improving education quality will not only elevate the living standards of residents in the western region but also provide a solid foundation for the country's overall stability and long-term development.

Geographical and social context of western China

The Historical and Geographic Characteristics of Western China

Tian, Y., & Fang, N. (2001). conducted a detailed review of the history and geography of western China, mainly including three aspects:

Firstly, the western region of China has a long history and was once one of the birthplaces of civilization. From the Xia, Shang, and Zhou dynasties to the Qin, Han, and Tang dynasties, the political and economic prosperity of the western region, especially the Guanzhong and Chengdu plains, made the Silk Road an important channel connecting the east and west. However, since the late Tang and early Song dynasties, the western region gradually fell behind the eastern region due to complex reasons: the An Lushan Rebellion dealt a heavy blow to the economy, and the political and economic center shifted eastward after the Song dynasty; Geographically, the western region is characterized by steep terrain, inconvenient transportation, worsening climate aridification, and scarce resources; In terms of technology, the transportation and resource advantages of coastal areas have become prominent with the improvement of productivity, and the rise of the Maritime Silk Road has further exacerbated the economic gap between the western and eastern regions.

Secondly, the western region holds significant importance for China's national security. Its vast territory and long border lines are important channels connecting multiple regions, directly related to the overall security of the country. In history, the tranquility of the western region was the cornerstone of a country's prosperity. Since modern times, crises in the western frontier have occurred frequently, highlighting their importance. After the founding of the People's Republic of China, efforts were made to strengthen the construction of the northwest border, such as advancing into Xinjiang and military reclamation, which not only consolidated national defense, but also promoted ethnic unity and economic development, laying a solid foundation for the long-term stability of the country.

Thirdly, the western region has a complex geography, with many karst landforms and desert areas. The natural environment is harsh, and transportation

and water resources have become bottlenecks for development. Although there are historical roads such as the ancient Silk Road, they are blocked by natural dangers and transportation is inconvenient. After the establishment of the People's Republic of China, although it was vigorously developed, it still lagged behind the Eastern tribes. In terms of water resources, although the Qinghai Tibet Plateau is the source of rivers, its distribution is uneven, groundwater is scarce, and rainfall is small, resulting in widespread water shortage in the western region and severely restricting economic development.

Liu, J. J. (2017). The study focuses on the characteristics of ethnic groups and religions in the western region of China. He argues that:

First, the western region of China is a multi-ethnic and multi-religious area. It is home to 55 ethnic minorities, which account for the vast majority of the minority population in the country and are widely distributed in border areas and the central and western provinces, covering over 60% of the national territory. These ethnic groups are intermingled in large clusters and small communities, forming a unique pattern of ethnic distribution.

Second, in terms of religion, the western region is diverse in its religious practices, encompassing global religions such as Islam, Christianity, Buddhism, and Catholicism, as well as indigenous Taoism and folk religions. Religious beliefs are deeply rooted in these areas, with nearly the entire population adhering to some form of faith, which profoundly influences the production, lifestyle, psychological well-being, and habits of the minority communities.

Third, the issues surrounding ethnicity and religion in the western region of China are intertwined and complex. Properly addressing the relationship between ethnic and religious matters is crucial for maintaining national unity, promoting ethnic cohesion, and achieving social harmony. It requires collaborative efforts from the government and all sectors of society to implement effective measures that foster economic and social development in the western region, enhance mutual understanding and respect among different ethnic groups, and create a harmonious and stable environment for ethnic and religious coexistence.

Social and economic structures in western China Challenges and Development Opportunities in the Region

Zhao, X. (1998). This study offers an in-depth analysis of the socio-economic structure in the western regions of China, which is representative in several aspects:

1. Lack of Diversified Industrial Structure: The western region primarily relies on the primary industry, particularly agriculture and animal husbandry, which constitutes a significant portion of its economy. The secondary industry is mainly concentrated in resource-based cities, while the tertiary industry remains relatively weak. This industrial structure limits the development of economic diversification.

2. Insufficient Transformation of Resource Advantages: The western region is rich in resources such as minerals, natural tourism, and unique ethnic cultures; however, many of these resources have not been effectively converted into economic advantages, hindering rapid regional economic growth.

3. Relatively Low Technological Level: The western region lags in the development of high-tech industries, with a low contribution of technological progress to economic growth. This limitation affects the upgrading of the industrial structure and the improvement of economic quality.

4. Insufficient Degree of Openness: Compared to the eastern regions, the western areas have yet to expand their scope and level of openness. The establishment of an open economic structure requires time, impacting the introduction of external resources and the internationalization of the regional economy.

5. Backward Agricultural Production Methods: Agriculture in the western region still exists in the natural economy stage, with low prevalence of modern production methods and suboptimal agricultural productivity, constraining the overall development of the rural economy.

6. Low Level of Urbanization: The urbanization process in the western region is slow, with the proportion of urban population significantly below the national average. This limitation restricts the formation and expansion of the domestic demand market, impacting sustained economic growth.

Chen, X. Y. (2010). conducted a study that shows the economic development of China's western regions since the reform and opening up has been notably characterized by an emphasis on the quality of economic growth rather than merely pursuing speed. During this period, the achievements of economic development in the western regions are more reflected in the comprehensive improvement of people's living standards rather than just the increase in total economic output. This characteristic has profound theoretical and practical significance for guiding the western regions in improving their economic growth patterns, enhancing the quality of life for the people, and further advancing the strategy of large-scale development in the west. It demonstrates a firm commitment to transitioning the economy of the western regions towards high-quality development.

In recent years, a study has been conducted on the development of an open economy in China's western region. Liu, Y. K., Ren, G. P., & Zhang, W. Y. (2021). believe that there is a significant gap between the western region and the eastern and central regions, displaying a pattern of higher development in the east, lower in the west, and stronger development in the south compared to the north. The western region faces shortcomings such as outdated thinking, a lack of international talent, inadequate infrastructure, limited open channels, insufficient regional cooperation, and a business environment that needs optimization.

Researchers suggest that to narrow the gap and promote coordinated regional development, the country needs to increase policy support and enhance the division of labor and resource sharing among the eastern, central, and western regions. At the same time, the western region should take initiative to update its development concepts, innovate its systems and mechanisms, strengthen talent development, particularly in cultivating and introducing international talent, and strive to create a first-class business environment to attract foreign investment and advanced technologies. This will enhance regional competitiveness and aim to catch up in the new round of reform and opening-up, as well as the new development pattern of dual circulation, achieving leapfrog development.

These conditions indicate that while the western region faces numerous challenges in economic development, it also holds significant potential for growth.

Opportunities and Challenges for Development in Western China

Xu, X., & Zhang, L. (2019)., an in-depth study was conducted on the economic development advantages of western China, which they believed were mainly reflected in the abundant labor resources and continuously improving capital factors. Firstly, the western region has a sufficient population and abundant labor resources, providing a solid foundation for economic development. Secondly, with the increase of education investment, the quality of labor force gradually improves, further enhancing the potential of labor resources. Again, in terms of capital factors, the western region actively raises funds for infrastructure and major engineering projects through issuing corporate bonds and other means, significantly improving its financing capacity. At the same time, the fixed assets investment of the whole society in the western region has increased year by year, and the proportion of foreign direct investment and other investments has also gradually increased, showing a strong ability to attract foreign capital and injecting new vitality into economic development. Finally, some provinces and cities such as Chongqing, Sichuan, and Shaanxi rely on university resources to improve their technical capabilities, but their overall research and development capabilities are weak. Therefore, it is necessary to strengthen technical exchanges and increase research and development investment to enhance their technological level and promote sustainable economic development.

Meanwhile, the above two scholars also pointed out the development challenges faced by the western region of China in their research:

One is the challenge of infrastructure construction: as an important ecological protection area, the complex geographical environment and fragile ecological carrying capacity in the western region make infrastructure construction more difficult. At the same time, it is necessary to balance the relationship between development and environmental protection to avoid ecological damage. In addition,

there is a huge demand for infrastructure construction funds, making financing and investment difficult.

But the risk assessment system is not perfect: there is no mature risk assessment and risk early warning mechanism, which makes it difficult to comprehensively assess the political, economic and legal environment of countries along the "the Belt and Road", increasing the uncertainty and risk of cooperation.

The third is the complex and ever-changing political environment: the western region is adjacent to multiple countries, and the surrounding political environment is complex and ever-changing. Political turmoil in countries such as Thailand may affect cooperation. At the same time, we need to be vigilant about the political pressure of Western countries on China's allied countries to ensure a peaceful and stable cooperation environment.

The impact of economic and social development on education

Scarcity of higher education resources: There are few higher education institutions in the west, insufficient capacity for cultivating high-level talents, a scarcity of doctoral and master's programs, poor conditions for local colleges, and weak faculty strength, which affects the quality and pace of education development.

Shortage of educational funding: Due to the backward economic development in the west and limited fiscal revenue, educational funding is severely inadequate, leading to outdated school infrastructure and a lack of teaching equipment and library resources, making it difficult to support high-quality educational services.

Unequal educational opportunities: Impoverished university students find it difficult to bear the costs of education due to financial reasons, resulting in a new problem of inequality in educational opportunities. Although measures like student loans are in place, their implementation effects are limited.

Severe talent drain: The phenomenon of talent loss from universities and specialized fields in the western regions is widespread, with a lack of mid-career and young academic leaders, which constrains the sustainable development of education and the enhancement of innovative capabilities.

Lü, L. D., Tang, Y. X., & Li, X. L. (2024). conducted a study on the situation of basic education resources in the western minority regions, finding that during the compulsory education stage, although the national average is relatively high, the enrollment rate of rural children in the seven western provinces is significantly lower than the national average. This gap is particularly pronounced among minority children at the junior high school level. The disadvantage in educational opportunities further worsens during the senior high school stage, with the enrollment rate of minority children being much lower than that of Han children and the national average. The uneven distribution of educational resources, coupled with the policy of school consolidation, has increased the distance to schools, especially affecting regions like Hunan and Inner Mongolia. Despite the strengthening of boarding school construction, significant disparities still exist between regions, with schools lacking adequate hardware facilities and resources, particularly in key facilities like cafeterias, which affect students' nutrition and learning environment. The educational disparities among different minority groups are also noteworthy, with some ethnic groups having a relatively low enrollment rate.

From the studies of the above scholars, it is evident that basic education in the western regions of China faces dual challenges of equivalence and accessibility. There is a need to increase investment, optimize resource allocation, and enhance both educational equivalence and accessibility. Conducting a literature review on these topics will provide sufficient background information for effectively analyzing and formulating research guidelines for the sustainable development of basic education in the developing regions of western China.

Comprehensive influencing factors

The impact of immigration and social change on education

Teng, X. H., Wang, X. Y., & Wen, C. H. (2023). explored the impact of involuntary relocation on immigrant education. The researchers argue that involuntary relocation, as an external policy shock, alters the developmental environment for immigrants, which may either promote the flow and allocation of resources and enhance educational outcomes or lead to disruptions in livelihoods,

resulting in accumulated poverty and hindering intergenerational educational mobility. Consequently, two competing hypotheses are proposed: one is that involuntary relocation positively improves intergenerational educational mobility; the other is that it negatively suppresses educational mobility. The researchers further illustrate these differences using the example of resettlement for immigrants affected by the Three Gorges Project in China. The study shows that the mode of resettlement is influenced by various socio-economic factors, including laws and regulations as well as natural environment factors. Different resettlement approaches (such as in-situ reliance or overall migration) have varying impacts on the restoration of immigrants' livelihoods and intergenerational educational mobility. On one hand, significant differences in resettlement environments may aggravate the losses in livelihoods and hinder educational improvement; on the other hand, long-distance resettlement may garner more support from the government and society, benefiting educational mobility. This study demonstrates that the intergenerational educational mobility after relocation involves a trade-off between costs and benefits, with a more pronounced impact on lower educational levels, facilitating upward and leapfrog mobility at the lower levels while relative intergenerational mobility at higher levels remains limited.

Zhang, N., & Wan, D. J. (2023). A study was conducted on the educational development experiences in ecological migration areas in China. The research shows that education for nomadic populations has undergone a process of exclusion to gradual acceptance and reliance, especially after the founding of New China. Government educational policies have progressively improved, particularly after the initiation of ecological migration projects, where education is viewed as a crucial avenue for expanding the development prospects of future generations. General educational practices have been consistent throughout the migration process, while vocational education focuses primarily on vocational training to assist those who have not been able to gain upward mobility through general education. Migrant children face challenges in adapting to new environments and languages, but the overall trend indicates that education is gradually being recognized and accepted.

Furthermore, training education practices are continuously being improved, overcoming language barriers, providing short-term benefits, and enhancing migrants' participation enthusiasm, while gradually transforming training content into livelihood strategies that promote sustainable development for migrants.

From the aforementioned scholars' research, it is evident that migration and social change have a significant impact on the sustainable development of education. General education lays the foundation for the offspring of migrants and broadens their development pathways; vocational training becomes a key factor in transforming the livelihoods of migrant generations by offering diverse employment options through skills training. The interplay between both forms of education covers different generations of migrants and ensures that education serves as a lasting motivation for migrants to adapt to new environments and achieve livelihood transitions, thereby facilitating the sustainable development of migrant communities.

The Impact of Information Technology on Sustainable Development of Education

Deng, H. (2023). conducted research on the sustainable development issues of information technology in basic education. The author believes that information technology has become an indispensable part of modern education and is a key force in promoting the modernization of basic education, nurturing innovative talents, and enhancing national competitiveness. At the same time, the author points out that the current development of information technology in basic education in China faces numerous challenges, such as the mismatch between rapid technological iterations and the information application capabilities of basic education personnel. It is advocated that various sectors need to delve deeply into and implement sustainable development strategies to ensure that the integration of information technology in basic education can be advanced in a sustainable and stable manner, thereby effectively promoting the long-term development of education and the enhancement of students' overall qualities.

Dong, J. C. (2023). conducted a study on the impact of information technology on the sustainable development of basic education in Singapore. Firstly,

information technology has facilitated the equitable distribution of local educational resources, allowing students in remote areas to access high-quality educational resources through digital platforms, which has enhanced educational equity. Secondly, information technology has stimulated teaching innovation, enabling teachers to use digital tools to design personalized teaching plans, thus increasing students' interest and effectiveness in learning. Furthermore, it has strengthened teacher development, as educators receive information technology training to improve their capabilities in applying these technologies, thereby optimizing teaching quality. In addition, information technology has created flexible and diverse learning environments that support students' self-directed learning and lifelong learning, fostering their information literacy and innovation abilities. In summary, information technology in Singapore has injected new vitality into basic education and promoted its sustainable development.

The Application of Smart Education Concept in Underdeveloped Regions

The concept of intelligent education is a completely new educational philosophy aimed at transforming traditional educational models and improving the quality and efficiency of education through the application of advanced technologies such as digitization, intelligence, and cloud computing.

Zhang, Y. Z. (2022). believes that the concept of intelligence mainly encompasses core objectives and technological means. The core objectives aim to improve the quality of education by enhancing students' enthusiasm and initiative in learning through personalized teaching, precise assessment, and effective feedback. Additionally, it seeks to promote educational equity by utilizing remote education, online courses, and other methods to break geographical limitations, allowing more students to access high-quality educational resources. The technological means include the application of digitalization, intelligence, cloud computing, and more.

Cui, Y. H., & Li, Y. Y. (2023). argue that the application of intelligent education in underdeveloped regions significantly enhances education quality by meeting diverse student needs through personalized teaching and precise assessments. Additionally, it breaks geographical limitations by utilizing remote education and

resource sharing, making high-quality educational resources accessible to a broader range of students and promoting educational equity. For instance, the promotion of iFLYTEK's A.I. Education Public Welfare Program and the National Smart Education Platform for Primary and Secondary Schools not only provides abundant resources and personalized learning experiences but also strengthens infrastructure development, driving the digital transformation of education and injecting new momentum into educational progress in underdeveloped areas.

In summary, the application of the smart education concept provides new opportunities and impetus for educational development in underdeveloped regions. It not only improves education quality but also promotes educational equity, offering students in these areas more high-quality and convenient learning pathways.

Chapter 3
Research Methodology

This study condition to investigate three aspects: (1) the current of sustainable development in basic education in developing areas of western China; (2) the formulation of strategies sustainable development for basic education in these regions; (3) the assessment of the susta96inable development strategies for basic education in developing areas of western China. To achieve this, the researchers adopted the following procedures:

1. Population/Sample Group
2. Research Tools
3. Data Collection
4. Data Analysis

Population and the Sample Group

Population

Researchers selected ten basic education institutions in the western region, recognized by the Ministry of Education, including five primary schools, three middle schools, and two high schools, based on the actual situation. The study involved a total of 1630 participants, categorized as follows: 1) Teachers - 850 individuals, 2) School administrators - 550 individuals, and 3) Stakeholders - 230 individuals.

The Sample Group

The sample size for this study was determined using the provided sample size formula (Krejcie & Morgan, 1970). A stratified random sampling method was applied to select 635 participants from a total of 1,545 individuals, specifically: 1) 265 teachers, 2) 225 administrators, and 3) 145 stakeholders.

Table 3.1 Samples for the survey

Posittion	Population	Sample
Teachers	850	265
Ministrators	550	225
Stakeholder	230	145
Total	**1630**	**635**

Research Instruments

Interviewee

This study will conduct interviews with individuals involved in basic education in developing areas of western China to understand the issues, approaches, and influencing factors related to sustainable development management. The interview participants include scholars from primary and secondary schools as well as universities, specifically: 1) 5 teachers, 2) 3 school administrators, and 3) 2 stakeholders.

The respondents must meet the following criteria: 1) have at least 5 years of experience working in basic education in the western region, with a master’s degree or higher; 2) possess a thorough understanding of the operational models of basic education schools.

Focus Group Discussion

Researchers once again invited a total of 10 participants for a focus group discussion, including 5 teachers, 3 school administrators, and 2 stakeholders from basic education schools in the sample group. The discussion aimed to explore sustainable development strategies for basic education in the context of China's Western Development, focusing on 4 dimensions, 9 aspects, and 12 questions.

Participants in the focus group discussion must meet the following criteria: 1) Have at least 5 years of experience working in basic education in the Western region, and hold a master's degree or an associate senior professional title; 2) Be familiar

with the operational models of basic education schools and possess a deep understanding of basic education.

Table 3.2 Interview and focus group member information

NO	Interviewee's unit	Interviewers
1	Sichuan Normal University.	1
2	Anshan Normal University	1
3	Liaocheng University	1
4	Xihua Normal University.	1
5	Leshan Normal University	1
6	Leshan Normal University	1
7	Leshan Experimental Primary School	1
8	Pengzhou Middle School	1
9	Meishan Middle School	1
10	Chengdu University of Technology.	1
	Total	**10**

Strategic Evaluation Team

The analysis results of this section were evaluated by a panel of seven experts, all of whom hold doctoral degrees. The panel consisted of one expert with knowledge and experience in strategic formulation, three academic administrators with titles of associate professor or higher, one educational institution administrator with a title of associate professor or higher, and two teachers with titles of associate professor or higher. The evaluation used a five-point rating scale, allowing respondents to choose only one level to assess the appropriateness and feasibility of sustainable development strategies for basic education China's development initiative.

Table 3.3 Information on Strategy Evaluation Team Members

NO	Interviewee's unit	Interviewers
1	Leshan Normal University	3
2	Sichuan Agricultural University	1
3	Neijiang Normal University	1
4	Maban Middle School	1
5	Ginkgo Management College	1
	Total	**7**

Research Tools

The tools used in this study include questionnaires, interview forms, and an assessment table for strategies sustainable development in basic education in developing areas of western China. The specific content includes:

Questionnaire

The questionnaire will be distributed, collected, and analyzed through on-site distribution of paper copies and the use of the "Wenjuanxing" application to facilitate the entire process. The construction process of the questionnaire is as follows:

Step 1: Review and analyze relevant literature, concepts, and theories related to the sustainable development of basic education in the western regions of China.

Step 2: Based on the current situation of basic education in developing areas of western China, construct a questionnaire that reflects the sustainable development of basic education in the area.

Step 3: Test the Index of Objective Consistency (IOC) of the questionnaire with five experts, with the IOC range set between 0.8 and 1.00, and modify the questionnaire according to expert suggestions.

Step 4: The questionnaire will be sent to 1,630 selected teachers, administrators, and stakeholders from 10 basic education schools to conduct the survey.

Step 5: The reliability of the questionnaire will be calculated using Cronbach's Alpha, with the coefficient required to be between 0.41 and 1.

The questionnaire used in this study is divided into three main parts. The first part investigates the basic information of the respondents. To facilitate classification and statistical analysis, this section includes detailed information such as gender, age, education level, professional title, and years of work experience. The second part assesses respondents' evaluation of the current status of sustainable development in basic education, aiming to provide a basic understanding of the overall level of sustainable development in basic education in the western regions of China. This section includes four dimensions: academic management, budget management, personnel management, and comprehensive management. Furthermore, it takes into account the related factors affecting management in basic education schools, including ten factors: personnel, finance, materials and equipment, management, social and cultural aspects, law, economy, politics, technology, and geographical environment.

The main body of the questionnaire employs a five-point Likert scale, specifically as follows:

5 Represents the highest evaluation level of the comprehensive condition of basic education in the western regions of China.

4 Represents a relatively high evaluation level of the comprehensive condition of basic education in the western regions of China.

3 Represents an average evaluation level of the comprehensive condition of basic education in the western regions of China.

2 Represents a relatively low evaluation level of the comprehensive condition of basic education in the western regions of China.

1 Represents the lowest evaluation level of the comprehensive condition of basic education in the western regions of China.

The interpretation of the average data is based on Rensis Likert (1932), as follows:

4.50 - 5.00 indicates the highest level

3.50 - 4.49 indicates a high level

2.50 - 3.49 indicates an average level

1.50 - 2.49 indicates a low level

1.00 - 1.49 indicates the lowest level.

Interview Form

Based on the content of the four variables that affect the integration of education and industry, an interview outline for the sustainable development strategy of basic education in developing areas of western China was developed. Middle level managers from different universities participating in the integration of education and industry were required to follow the interview outline from four aspects: teacher resource management, financial management, management mechanism, and talent development. The researchers wrote and analyzed the interview content, combined with existing research results, and proposed strategies to promote the sustainable development of basic education in developing areas of western China. Based on the analysis of relevant literature and the statistical results of survey data, an interview outline was formulated to address the issues, pathways, and influencing factors concerning the sustainable development of basic education in the context of the Western Development initiative in China. Structured interviews were conducted with participants, focusing on data analysis. Through a questionnaire survey regarding the current status of sustainable development in basic education in the Western Development regions of China, as well as interviews that explored internal and external factors affecting the sustainability of basic education schools in these areas, researchers employed SWOT and TOWS analysis methods. The results were presented in tabular format, laying a foundation for the next steps in drafting scientifically sound strategies.

Strategic Evaluation Checklist

Based on the results of the questionnaire and interviews, along with previous literature and theoretical foundations, this study has developed an evaluation form. The researcher has proposed a strategy plan for the sustainable development of

basic education in developing areas of western China which has been submitted to experts for assessment. The experts are required to review the adaptability and feasibility of the strategies proposed by the researcher.

Data Collection

When conducting research on the sustainable development strategy of basic education in developing areas of western China, data collection is a crucial step. The following is a work plan for data collection, which can be divided into qualitative and quantitative aspects:

Qualitative Data Collection

In depth interviews and focus group discussions: Organize groups consisting of teachers, school administrators, and stakeholders for open discussions to identify issues and approaches related to the sustainable development of basic education in developing areas of western China. Analyze the internal and external environments affecting sustainable development in these areas and draft strategic proposals for the sustainable development of basic education.

Quantitative Data Collection

Survey: Design a questionnaire that targets teachers, school administrators, and stakeholders to understand the current state of basic education and its influencing factors in developing areas of western China.

Effectiveness Evaluation Data: Develop an evaluation scale to be assessed by experts with strategic planning knowledge and capabilities in the field of basic education. The assessment should focus on the suitability and feasibility of sustainable development strategies for basic education in developing areas of western China.

Data Analysis

Qualitative Data Analysis

Thematic Analysis: Conduct thematic analysis on qualitative data collected through in-depth interviews and focus group discussions. Identify the core themes

related to the sustainable development of basic education in the western region, such as: improving talent training programs, strengthening the construction of the teaching staff, innovating teaching methods, enriching curriculum content, organizing social practice, enhancing school-enterprise cooperation, and establishing evaluation systems, among others.

Quantitative Data Analysis:

1) Statistical Analysis: Using statistical analysis software to perform statistical analysis on the data collected from quantitative surveys, including:

Method of Mean and Standard Deviation: An analysis of the current situation, influencing factors, and strategies for the sustainable development of basic education in developing areas of western China. The interpretation of the mean data is based on Rensis Likert (1932). The data interpretation is as follows:

4.50 – 5.00 indicates the highest level

3.50 – 4.49 indicates a high level

2.50 – 3.49 indicates an average level

1.50 – 2.49 indicates a low level

1.00 – 1.49 indicates the lowest level

Frequency and Percentage: Analyzing the respondent information of the sample. Categorized by gender, age, educational background, job title, teaching experience, and teaching subject.

2) Content Analysis: The research content of structured interviews is applied through the comparison of different variables.

3) Comprehensive Analysis: A mixed-methods approach is primarily used to integrate qualitative and quantitative data, seeking patterns and intersections to provide a more comprehensive understanding.

Through in-depth analysis, researchers can identify the challenges, strengths, and opportunities for sustainable development in basic education in developing areas of western China, providing strong support for strategic formulation and ultimately achieving the sustainable development goals for both the western regions and basic education. The research steps are shown in Table 3.2

Table 3.4 Research steps

Research Stage	Research Steps	Research Method	Population / Sample Group	Results
To study the conditionsustainable developmentbasic education in developingareas of western China	Step 1: A total of 1,630 participants were involved in thesurvey, coming from 10 basic education schools inthe western region, which included 5 primary schools3 junior high schools, and 2 high schools.	Questionnaire	Researchers selected ten basic educationschools in the western region as the subjectsof the study, including five primary schools.three junior high schools, and two highschools recognized by the Ministry ofEducation, totaling 1,630 participants.	Formulate a conclusion on the sustainable development status of basic education in the western development region of China.
To build a strategy for thesustainable developmentbasic education in developingareas of western China	Step 2: We invited 10 experts to participate ininterviews aimed at exploring sustainabledevelopment strategies for basic educationin the context of development in WesternChina, focusing on 4 dimensions, 9 aspectsand 12 questions	Interview Guides	The interview participants consist of 10 individualsfrom primary and secondary schools as well asuniversity scholars.	Develop a set of strategies to promote the sustainable development of basic education in the western regions of China's large-scale development.

Table 3.4 (Continued)

Research Stage	Research Steps	Research Method	Population / Sample Group	Results
To Evaluate the feasibility andadaptability of strategies to promotesustainable development of basiceducation in developingareaswestern China	The analysis results of this section were reviewedby an evaluation panel consisting of sevenexperts, all of whom hold doctoral degrees. Oneexpert possesses knowledge and experience instrategic formulation. The assessment utilized afive-point scoring system.	Feasibility Asesment Form	The evaluation team consists of 7experts, all of whom hold a Ph.D. andpossess senior professional titles.	Conduct an evaluation of the applicability and feasibility of the developed strategy to demonstrate its scientific validity and practical applicability.

Chapter 4

Results of Analysis

The research paper "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China" presents three research objectives: (1) to investigate the current state of sustainable development of basic education China undergoing significant development; (2) to formulate strategies for the sustainable development of basic education in these regions; and (3) to evaluate the strategies for sustainable development of basic education in Western China's developing areas.

Based on these research objectives, the researcher analyzed and presented the findings through methods such as surveys and interviews in the following ways:

1. Symbol and abbreviations
2. Presentation of data analysis
3. Results of data analysis

The details are as follows.

Symbol and Abbreviations

N refers to sample group

$\bar{X}$ refers to average value

S.D. refers to standard deviation

Presentation of Data Analysis

Part 1: Quantitative Analysis

The quantitative analysis of this study consists of two steps, focusing on the demographic characteristics of the respondents and the current Situation of sustainable development in basic education in the western regions of China.

Step 1: Analysis of Respondents' Personal Information

The analysis results are categorized by variables such as school type, gender, age, education level, title, and work experience. Data is presented in the form of frequencies and percentages, providing a demographic breakdown of the respondents. This step offers an inquiry into the background characteristics of the sample group, helping to ensure that the collected data represents the practitioner population in basic education in the western regions of China.

Step 2: Analysis of the Current Situation of Sustainable Development in Basic Education in developing areas of western China

The analysis primarily focuses on four aspects of basic education development in the western regions of China's large-scale development initiative: Personnel, Financial, Materials and Equipment, and Management. Additionally, to enhance the accuracy of the research, the researcher conducted an investigation into the factors influencing the management of basic education schools, identifying ten relevant factors: Personnel, Financial, Materials and Equipment, Management, Social and Cultural, Legal, Economic, Politics, Technology, and Geographical Environment. These factors are also presented using means and standard deviations.

Part 2: Qualitative Analysis

Qualitative analysis presents insights gained from structured interviews with experts regarding the formulation of strategies for the sustainable development of basic education in the western development regions of China. This section is divided into two steps:

Step 1: SWOT and TOWS Analysis

A SWOT analysis was conducted to categorize the internal and external factors affecting the implementation of strategies. This analysis examined the strengths, weaknesses, opportunities, and threats related to the sustainable development of basic education in the western region of China. Based on the findings of the SWOT investigation, a TOWS analysis was performed to develop strategic recommendations. The TOWS analysis combines internal strengths and weaknesses with external opportunities and threats to create actionable strategies

aimed at improving personnel, financial resources, materials and equipment, and management. These strategies are designed to leverage strengths, address weaknesses, capitalize on opportunities, and mitigate threats.

Step 2: Analysis of Interview Content

Qualitative analysis was used to examine the interview responses, categorizing the expert feedback. Themes related to strategic development were identified, including insights into the strengths, weaknesses, opportunities, and threats (SWOT) associated with implementing these strategies. This analysis aids in understanding the experts' recommendations for improving the sustainable development of basic education in the western development regions of China.

Part 3: Evaluation of Appropriateness and Feasibility

Experts evaluated the strategies for sustainable development of basic education in developing areas of western China based on their appropriateness and feasibility. The assessment was conducted using structured tables and represented by means and standard deviations. This analysis determined the overall effectiveness of the proposed strategies, ensuring they align with the needs of basic education institutions and educators.

Result of Data Analysis

Part 1: Quantitative Analysis

Step1: Analyze the respondents' personal information.

Classify and analyze the respondents' personal information according to gender, age, years of education, position, etc., and present the data in terms of frequency and percentage.

Table 4.1 Information about the group of teachers among the respondents.

(n =265)

Type	Personal information	Number of people	Percentage(%)
Types of Schools	Elementary school	160	60
	Middle school	75	28
	High school	30	12
	Total	**265**	**100**
Gender	male	108	59
	female	157	41
	Total	**265**	**100**
Age	25 years old or below	46	17
	26 to 35	43	16
	36 to 45	72	27
	46 to 55	63	24
	56 years old or up	41	16
	Total	**265**	**100**
Education	Bachelor degree	143	54
	Master's degree	106	40
	Doctoral degree	16	6
	Total	**265**	**100**
Job Title	Junior Title	75	28
	Intermediate Title	119	45
	Associate Senior Title	45	17
	Senior Title	26	10
	Total	**265**	**100**
Work Experienc-e year	within 5 years	36	14
	5 to 10 years	67	25
	11 to 15 years	62	23
	16 to 20 years	71	27
	More than 20 years	29	11
	Total	**265**	**100**

In this study, a total of 265 teachers participated in the survey.

The data shows that these teachers primarily come from elementary schools (60%), secondary schools (28%), and high schools (12%), indicating a concentration of educational resources at the level of basic education. In terms of gender distribution, the proportion of female teachers (59%) is higher than that of male teachers (41%), which may reflect traditional gender roles in the current education sector. Regarding age demographics, teachers aged 36 to 45 and 46 to 55 account for a high percentage, at 27% and 24% respectively, suggesting that this group typically possesses considerable educational experience. In terms of educational background, teachers with a bachelor's degree comprise 54%, those with a master's degree 40%, and those with a doctoral degree only 6%, indicating that most teachers have sufficient professional knowledge, although the proportion of advanced degrees is relatively low. In terms of professional titles, intermediate-level titles account for 45%, while other titles represent a smaller proportion, further illustrating that intermediate title teachers are the most common role within the teaching community. Additionally, the majority of teachers have work experience in the 5 to 10 years and 16 to 20 years ranges, at 25% and 27% respectively, indicating that the teaching workforce includes both newly recruited young teachers and experienced middle-aged teachers. This data provides important insights into the composition of the current teaching group and its potential development, serving as a guide for the formulation of future educational policies and teacher training programs.

Table 4.2 Information on Managers Among the Respondents

(n =225)

Type	Personal information	Number of people	Percentage(%)
Types of Schools	Elementary school	118	52
	Middle school	67	30
	High school	40	18
	Total	**225**	**100**
Gender	male	132	57
	female	93	43
	Total	**225**	**100**
Age	25 years old or below	23	10
	26 to 35	48	21
	36 to 45	63	28
	46 to 55	59	26
	56 years old or up	32	15
	Total	**225**	**100**
Education	Bachelor degree	128	59
	Master's degree	78	37
	Doctoral degree	19	4
	Total	**225**	**100**
Position	Educational Administrator	106	47
	Educational Teaching Manager	81	36
	Vice Principal and Above School Leadership	38	17
	Total	**225**	**100**
work experience year	within 5 years	22	10
	5 to 10 years	43	19
	11 to 15 years	51	23
	16 to 20 years	61	27
	More than 20 years	48	21
	Total	**225**	**100**

This study investigated the basic information of 225 educational managers. The results indicate that these managers primarily come from primary schools, accounting for 52%, with middle schools and high schools representing 30% and 18%, respectively. In terms of gender, the proportion of male managers (57%) is higher than that of female managers (43%), which may reflect the gender distribution characteristics within the field of educational management. Regarding age distribution, the respondents are predominantly middle-aged, with those aged 36 to 45 years comprising 28% and those aged 46 to 55 years making up 26%. Young managers aged 25 and below only constitute 10%. The educational background shows that 59% hold bachelor's degrees, 37% have master's degrees, and only 4% possess doctoral degrees, indicating that most managers have received higher education, but there are fewer with advanced degrees. In terms of management positions, educational administrators represent 47%, while educational teaching management personnel account for 36%, and positions of vice principals and above only make up 17%, indicating the distribution characteristics of the educational administrative hierarchy. Regarding work experience, 61% of the managers have 16 to 20 years of experience, suggesting that they have long careers in the education sector, while only 10% of the managers have less than 5 years of work experience, indicating that this group generally possesses a wealth of management experience. This information provides valuable insights for analyzing the characteristics of educational managers and for the formulation of future educational policies.

Table 4.3 Information about stakeholders among the respondents.

(n =145)

Type	Personal information	Number of people	Percentage(%)
Types of Schools	Elementary school	81	59
	Middle school	41	28
	High school	23	13
	Total	**145**	**100**
Gender	male	67	46
	female	78	54
	Total	**145**	**100**
Age	25 years old or below	13	9
	26 to 35	31	21
	36 to 45	41	28
	46 to 55	39	27
	56 years old or up	21	15
	Total	**145**	**100**
Education	Bachelor degree	83	57
	Master's degree	53	37
	Doctoral degree	9	6
	Total	**145**	**100**
Position	Technical personnel	85	59
	Government agency personnel	37	26
	External mentors	23	15
	Total	**145**	**100**
work experience year	within 5 years	18	12
	5 to 10 years	33	23
	11 to 15 years	36	25
	16 to 20 years	32	22
	More than 20 years	26	18
	Total	**145**	**100**

In this study, a total of 145 stakeholders participated in the survey.

The data indicates that these stakeholders primarily come from elementary schools (59%), followed by middle schools (28%) and high schools (13%), reflecting the significance of basic education in the composition of the stakeholders. In terms of gender distribution, females (54%) slightly outnumber males (46%), which may suggest an increasing role for women in the education sector. The age distribution of respondents is relatively even, with the largest groups being aged 36 to 45 and 46 to 55, comprising 28% and 27% respectively, while young individuals aged 25 and below represent only 9%. Regarding educational background, 57% have a bachelor's degree, 37% hold a master's degree, and only 6% have a doctoral degree, indicating a generally high level of education but a low proportion of doctorates. In terms of job distribution, technicians make up 59%, government agency personnel account for 26%, and external mentors comprise 15%, illustrating that technical implementation and support play a critical role among the stakeholders. With regard to work experience, respondents with 11 to 15 years and 16 to 20 years of experience are prevalent at 25% and 22% respectively, indicating that the respondents generally possess a wealth of practical experience. These data provide important insights for further understanding the characteristics of stakeholders in the education field and their impact on education policy and practice.

Step 2: Step 2: Analysis of Questionnaire and Interview Data on the Current Factors of Sustainable Development in Basic Education in Developing Areas of Western China.

To form a basic understanding of the overall level of sustainable development in basic education in the regions of China's Western Development, this section analyzes four dimensions: Academic Administration, Budget Management, Personnel Administration, and General Administration. The results are presented as mean and standard deviation. Additionally, to better understand the level of basic education in these regions, the researcher conducted an investigation into the relevant factors that influence school management in basic education. Ten factors were identified: Personnel, Financial, Materials and Equipment, Management, Social

and Cultural, Legal, Economic, Political, Technology, and Geographical Environment. The findings are also presented using means and standard deviations, as shown in the survey results below:

Table 4.4 Analysis of the Current Situation of Sustainable Development of Basic Education in developing areas of western China

(n1+n2+n3=635)

Current Situation	$\bar{X}$	S.D.	Level	Rank
1. Academic Administration	3.69	0.82	high	4
2. Budget Management	3.72	0.81	high	3
3. Personnel Administration	3.81	0.86	high	2
4. General Administration	4.02	0.80	high	1
Total	**3.81**	**0.82**	**high**	

According to survey data, the overall performance of management content is positive ($\bar{X}$=3.81). Comprehensive administrative management scored the highest (4.02), followed by personnel management (3.81), which also received a high score. Management ranked third (3.72), while academic management scored (3.69), placing it fourth. The overall score (3.81) reflects the good performance of various management areas within the educational institution.

Table 4.5 Analysis of Internal Factors Affecting School Management in Basic Educationin developing areas of western China

(n1+n2+n3=635)

Internal Factors	$\bar{X}$	S.D.	Level	Rank
1. Personnel	4.03	0.83	high	2
2. Financial	3.81	0.89	high	4
3. Materials and equipment	3.81	0.87	high	3
4. Management	4.04	0.87	high	1
Total	**3.92**	**0.86**	**high**	

According to the survey data, the overall performance of content management is positive (3.92). Management received the highest score (4.04), followed closely by personnel management (4.03), which also achieved a high score. Material and equipment management scored (3.81), ranking third. Financial management also scored (3.81), placing fourth. The overall score (3.92) reflects a good condition in various management areas of the educational institution.

Table 4.6 Analysis of External Relevant Factors Affecting the Management of Basic Education Schools in developing areas of western China

(n1+n2+n3=635)

External Relevant Factors	$\bar{X}$	S.D.	Level	Rank
1. Social and Cultural	4.12	0.82	high	1
2. Legal	3.85	0.83	high	3
3. Economic	3.64	0.88	high	6
4. Politics	3.88	0.87	high	4
5. Technology	4.14	0.77	high	2
6. Geographical Environment	3.87	0.79	high	5
Total	**3.91**	**0.82**	**high**	

According to survey data, the external factors influencing the management of basic education schools in China's western regions generally show positive performance, indicating that the external environment supports educational development to a certain extent. The average score for social and cultural factors is the highest (4.12), followed by technological factors (4.14). Legal factors (3.85) and political factors (3.88) are also within a high range. Geographical environment (3.87) and economic factors (3.64) score relatively lower, suggesting that in the process of improving education quality, we must consider enhancing the allocation of educational resources, which has been preliminarily confirmed. Overall, while the external environmental factors for basic education in the western regions broadly support educational development, there remains a need to focus on improving

geographical and economic factors, as well as the rational allocation of resources, to create a more balanced educational development pattern.

Table 4.7 Analysis of the Current Status of Academic Administration in Basic Education in developing areas of western China

(n1+n2+n3=635)

Contents	$\bar{X}$	S.D.	Level	Rank
1. How do you perceive the level of teacher involvement in the development of educational plans or programs?	3.62	0.92	high	8
2. Is the school able to implement academic work according to the established action plan?	3.74	0.90	high	5
3. Do you believe the school has continuity and systematization in supervising and evaluating academic plans or projects?	3.74	0.76	high	5
4. Is the school curriculum sufficiently detailed during implementation to meet students' learning needs?	3.74	0.78	high	4
5. Does learning management effectively address the needs of parents and the community?	3.77	0.77	high	1
6. Do you think the school places too much emphasis on preparing for competitive exams when organizing learning?	3.53	0.81	high	10
7. How supportive is the school of innovation and technology in learning management?	3.74	0.74	high	3
8. Do students have adequate opportunities to tilize local learning resources for study and research?	3.68	0.81	high	7

Table 4.7 (Continued)

(n1+n2+n3=635)

Contents	$\bar{X}$	S.D.	Level	Rank
9. Does the school provide sufficient training to enhance the academic management capabilities of teachers and administrators?	3.58	0.84	high	9
10. Do you believe the measures taken by the school to ensure educational quality are effective?	3.76	0.82	high	2
Total	**3.69**	**0.82**	**high**	

Based on the survey data, the overall academic management status of basic education in developing areas of western China is relatively positive (3.69). The factor of learning management ranks first among all indicators (3.77) and effectively meets the needs of parents and the community, demonstrating good social feedback and support. Additionally, the measures taken by schools to ensure educational quality are widely recognized (3.76). The support provided by innovative technology in learning management has also received a high evaluation (3.75). The level of detail in curriculum implementation is considered sufficient to meet students' learning needs (3.74). At the same time, schools receive positive evaluations for their continuity in carrying out academic work and monitoring assessments according to established action plans (3.74). Students have ample opportunities to utilize local learning resources (3.69), reflecting the schools' efforts in resource integration. However, the score regarding teachers' involvement in educational planning highlights their importance in management decisions (3.62). Training support for teachers and administrators is generally regarded as average (3.58). Lastly, the emphasis placed on competitive exams received the lowest score (3.54).

Table 4.8 Analysis of the Current Status of Budget Management in Basic Education in developing areas of western China

(n1+n2+n3=635)

Contents	$\bar{X}$	S.D.	Level	Rank
1. Do you think the school's budget planning covers the mission of all programs and projects?	3.68	0.81	high	7
2. Is the government's investment budget for soil and construction sufficient to support the school's implementation?	3.79	0.82	high	1
3. Do teachers possess the necessary knowledge and skills when executing work procurement?	3.65	0.85	high	9
4. Has the monitoring of school budget expenditures formed a continuous system?	3.73	0.85	high	6
5. Do you believe that the disbursement of civil servant welfare funds provided by the government is timely?	3.65	0.814	high	10
6. Is the school able to effectively apply existing procedures during the procurement process?	3.74	0.83	high	5
7. Do you think the budget allocation is transparent and subject to oversight?	3.74	0.78	high	4
8. Does the school conduct regular budget audits to ensure compliance?	3.78	0.80	high	2
9. Is the mobilization and investment of educational resources effectively managed?	3.67	0.79	high	8
10. Do you believe that accountability in budget management is being implemented in the school?	3.766	0.81	high	3
Total	**3.72**	**0.81**	**high**	

According to the survey data, the overall performance of budget management for basic education in developing areas of western China is positive (3.72). The highest score is for government investment budgets in soil and construction, which stands at 3.80. The second highest score is for schools conducting regular budget audits to ensure compliance (3.79). The transparency of budget allocation and its oversight ranks third (3.74). Additionally, schools' ability to effectively utilize existing procedures during the procurement process also ranks third (3.74). The monitoring of school budget expenditures has formed a continuous system, securing the fourth rank (3.73). The mobilization of educational resources and investment management comes in fifth (3.67). The level of knowledge and skills of teachers when executing work-related procurement ranks sixth (3.66). Finally, the timeliness of the disbursement of civil servant welfare funds received the lowest score (3.65).

Table 4.9 Analysis of the Current Status of Personnel Administration in Basic Education in developing areas of western China

(n1+n2+n3=635)

Contents	$\bar{X}$	S.D.	Level	Rank
1. Is there currently a shortage of teachers in key subjects and remote areas?	3.51	0.93	high	10
2. Do schools provide sufficient welfare support and safety guarantees for teachers in rural and remote areas?	3.71	0.90	high	9
3. Are new teachers receiving adequate training and guidance in teaching practice?	3.78	0.82	high	7
4. Do schools encourage and support teachers to utilize local resources for innovative teaching?	3.92	0.79	high	3

Table 4.9 (Continued)

(n1+n2+n3=635)

Contents	$\bar{X}$	S.D.	Level	Rank
5. Have schools established effective mechanisms for controlling, supervising, monitoring, and educating teachers to maintain discipline and behavioral standards?	3.98	0.83	high	1
6. Is there a noticeable trend of teachers in remote areas moving to urban or developed regions?	3.83	0.90	high	5
7. Is teachers' professional identity influenced by their work environment and compensation?	3.96	0.84	high	2
8. Do schools offer sufficient training in information technology for teaching to meet modern educational needs?	3.88	0.80	high	4
9. Do the evaluation and incentive mechanisms for teachers effectively motivate their work enthusiasm?	3.80	0.80	high	6
10. Is there a shortage of high-quality professional teachers in the allocation of teaching resources?	3.74	0.89	high	8
Total	**3.81**	**0.86**	**high**	

According to the survey data, the overall performance of Personnel Administration is positive, scoring 3.81. The highest score is for the establishment of effective control and supervision mechanisms at schools, which received a score of 3.98. The second highest score pertains to teachers' professional identity being influenced by their work environment and compensation, which scored 3.96. Schools encouraging teachers to utilize local resources for innovative teaching received the third highest score of 3.92. In terms of information technology training, the support

provided by schools meets modern educational needs, ranking fourth with a score of 3.88. The trend of teacher migration from remote areas to urban centers scored fifth with a score of 3.83. The effectiveness of teacher incentive mechanisms in enhancing work enthusiasm was ranked sixth with a score of 3.80. The shortage of high-quality teachers received a score of 3.74, ranking seventh. The support and security provided by schools for teachers in rural and remote areas scored 3.71, ranking eighth. The adequacy of training and guidance for new teachers received a score of 3.78, ranking ninth. Lastly, the issue of teacher shortages in key subjects and remote areas scored the lowest at 3.51, ranking tenth.

Table 4.10 Analysis of the General Administration Status of Basic Education in developing areas of western China

(n1+n2+n3=635)

Contents	$\bar{X}$	S.D.	Level	Rank
1. Do you think the current administrative management of the school effectively supports the achievement of educational goals?	4.01	0.83	high	6
2. Do you believe that the current communication, telephone, and postal services of the school meet the daily administrative management needs?	3.95	0.79	high	8
3. Does the school have adequate basic living facilities, such as teacher dormitories and cafeterias, to ensure the daily lives of teachers and students?	4.01	0.78	high	5
4. Is the school's health status management (including student and staff health check-ups, sanitary conditions, etc.) in place, and are there any safety hazards?	3.96	0.73	high	7

Table 4.10 (Continued)

(n1+n2+n3=635)

Contents	$\bar{X}$	S.D.	Level	Rank
5. Is the school's information system (such as student information and academic management) updated in a timely manner and effectively supports the school's planning and management?	3.92	0.74	high	9
6. What is the current state of the school's use of technology (such as digital teaching tools and online management platforms) for work and management learning?	3.68	0.82	high	10
7. How is the community's support and participation in basic education?	4.17	0.82	high	3
8. Are the school's classrooms, laboratories, and other teaching facilities conducive to learning and management?	4.253	0.761	high	1
9. hat is the condition of the school's buildings (including classrooms, assembly areas, restrooms, etc.)?	4.18	0.76	high	2
10. Has the school established a mechanism for controlling, monitoring, and evaluating activity outcomes to ensure the effectiveness and efficiency of administrative management?	4.04	0.78	high	4
Total	**4.02**	**0.80**	**high**	

According to the survey data, the overall performance of the school's administrative management is positive, with a score of 4.02. Community support and participation in basic education received the highest score of 4.17. The condition of school buildings, including classrooms, assembly areas, and restrooms, ranked second with a score of 4.18. The favorable conditions for learning and management

in classrooms, laboratories, and other teaching facilities were ranked third, scoring 4.25. The school has established mechanisms for controlling, monitoring, and evaluating the outcomes of activities to ensure the effectiveness and efficiency of administrative management, obtaining a score of 4.04, placing fourth. The extent to which the school's administrative management effectively supports the achievement of educational objectives received a score of 4.01, ranking fifth. Additionally, the adequacy of basic living facilities for teachers and students to support their daily lives also scored 4.01, placing sixth. The management of the school's health status scored 3.96, ranking seventh. The level of satisfaction regarding the school's communication, telephone, and postal services in meeting daily management needs received a score of 3.95, ranking eighth. The timeliness of updates to the school information system and its support for school planning and management scored 3.92, ranking ninth. Lastly, the current state of technology use in work and management learning received the lowest score of 3.68, ranking tenth.

Table 4.11 Analysis of Internal Factors Related to School Management in developing areas of western China

(n1+n2+n3=635)

Personnel	$\overline{X}$	S.D.	Level	Rank
1. Is the staffing adequate to meet the daily teaching and management needs of the school?	4.03	0.80	high	2
2. Do teachers' professional qualifications and teaching skills meet or exceed industry standards?	4.07	0.79	high	1
3. How is the morale and team collaboration atmosphere among staff?	3.99	0.90	high	3
Total	**4.03**	**0.83**	**high**	

Table 4.11 (Continued)

(n1+n2+n3=635)

Financial	$\bar{X}$	S.D.	Level	Rank
4. Is the school's financial status stable enough to meet daily operation and basic development needs?	3.72	0.93	high	2
5. Is the funding support from the government and education departments timely and sufficient?	3.70	0.90	high	3
6. Does the school have an effective financial management system to ensure transparency and efficiency in fund usage?	4.02	0.81	high	1
Total	**3.81**	**0.89**	**high**	
Materials and equipment	$\bar{X}$	**S.D.**	**Level**	**Rank**
7. Are the teaching facilities (such as computers, laboratory equipment, etc.) sufficient and updated in a timely manner?	3.71	0.87	high	3
8. Are the learning materials, reference books, and other resources for students abundant and easily accessible?	3.94	0.82	high	1
9. What is the maintenance status of the school's infrastructure (such as classrooms, libraries, playgrounds, etc.)?	3.78	0.90	high	2
Total	**3.81**	**0.876**	**high**	
Management	$\bar{X}$	**S.D.**	**Level**	**Rank**
10. Does the school management team possess professional management capabilities and effective decision-making mechanisms?	4.05	0.85	high	2
11. Has the school established clear and actionable annual education plans and teaching goals?	4.29	0.74	high	1

Table 4.11 (Continued)

(n1+n2+n3=635)

Management	$\bar{X}$	S.D.	Level	Rank
12. Is the communication and coordination mechanism within the school smooth enough to facilitate effective information flow up and down?	3.79	0.92	high	3
Total	**4.04**	**0.87**	**high**	

According to the survey data, the overall performance of personnel management in the school is positive (4.03). The highest score was given to teachers' professional qualifications and teaching skills, which meet or exceed industry standards (4.07). Second in ranking is whether the school's staff configuration is sufficient to meet daily teaching and management needs (4.03). The morale among staff and the team collaboration atmosphere ranked third (3.99). The overall score of (4.03) indicates a strong performance in personnel management.

In terms of financial management, the overall performance is positive (3.81). The school has an effective financial management system to ensure transparency and efficiency in the use of funds, receiving the highest score (4.02). The second highest score pertains to the stability of the school's financial situation in meeting daily operations and fundamental development needs (3.72). The timeliness and adequacy of funding support from the government and educational departments received a score of (3.70), ranking third. The overall score of (3.81) reflects a good performance in financial management.

Regarding the management of materials and equipment, the overall performance is also positive (3.81). The richness and accessibility of learning materials, reference books, and other resources received the highest score (3.94). The second score pertains to the maintenance status of the school's infrastructure, including classrooms, libraries, and playgrounds (3.78). The adequacy of teaching facilities (such as computers and laboratory equipment) and their timely updates

received a score of (3.71), ranking third. The overall score of (3.81) reflects a good performance in materials and equipment management.

Finally, the overall performance of school management is positive (4.04). The establishment of a clear and actionable annual educational plan and teaching objectives received the highest score (4.29). The second score pertains to whether the school's management team possesses professional management capabilities and an effective decision-making mechanism (4.05). The smoothness of internal communication and coordination mechanisms in the school to facilitate effective information flow received a score of (3.79), ranking third. The overall score of (4.04) reflects a strong performance in management.

Table 4.12 Analysis of External Factors Related to School Managementin developing areas of western China

(n1+n2+n3=635)

Social and Cultural	$\bar{X}$	S.D.	Level	Rank
1. Do parents and the public recognize the importance of sending their children to education?	4.05	0.85	high	2
2. Does the community actively participate in organizing and supporting educational activities?	4.01	0.86	high	3
3. Can different ethnic groups coexist harmoniously and participate in community life?	4.31	0.71	high	1
Total	**4.12**	**0.82**	**high**	

Table 4.12 (Continued)

(n1+n2+n3=635)

Legal	$\bar{X}$	**S.D.**	**Level**	**Rank**
4. Do local government regulations support the construction of educational facilities, such as schools and assembly buildings?	3.82	0.81	high	2
5. Is there a fair legal framework for managing the appointment and transfer of educational officials?	4.05	0.76	high	1
6. Does educational policy adequately consider the needs of early vulnerable children, especially in marginalized areas?	3.68	0.87	high	3
Total	**3.85**	**0.83**	**high**	
Economic	$\bar{X}$	**S.D.**	**Level**	**Rank**
7. Is the economic situation of the community sufficient to provide necessary funding for educational development?	3.66	0.89	high	2
8. Does the community's self-sufficient agriculture support family livelihoods and promote education?	3.68	0.85	high	1
9. Are there cooperatives or organizations established to improve economic conditions to support children's education?	3.57	0.89	high	3
Total	**3.64**	**0.88**	**high**	
Politics	$\bar{X}$	**S.D.**	**Level**	**Rank**
10. Is the local government’s attitude towards managing educational institutions positive and supportive?	3.87	0.91	high	2
11. Are local politicians actively promoting and supporting the development of school management?	3.81	0.84	high	3

Table 4.12 (Continued)

(n1+n2+n3=635)

Politics	$\bar{X}$	**S.D.**	**Level**	**Rank**
12. Does local politics recognize and acknowledge the importance of educational management in marginalized areas?	3.96	0.84	high	1
Total	**3.88**	**0.87**	**high**	
Technology	$\bar{X}$	**S.D.**	**Level**	**Rank**
13. Does the educational institution have an effective information technology system to assist in management?	4.01	0.79	high	3
14. Can the school access internet and technological support from higher-level institutions?	4.38	0.63	high	1
15. Does the educational institution have an internet system for online learning and management?	4.06	0.81	high	2
Total	**4.14**	**0.77**	**high**	
Geographical Environment	$\bar{X}$	**S.D.**	**Level**	**Rank**
16. Is the geographical environment of the educational institution conducive to promoting ecotourism and cultural preservation?	3.84	0.78	high	3
17. Is the school located in a geographical environment suitable for natural learning and research?	3.94	0.80	high	1
18. Is there good economic flow and cooperation between communities in border areas?	3.84	0.77	high	2
Total	**3.87**	**0.79**	**high**	

According to the survey data, the overall performance of the social and cultural aspects is positive (4.12). The highest score is attributed to the harmonious coexistence of different ethnic groups and their participation in community life (4.31). The second highest score corresponds to the recognition of the importance of education by parents and the public (4.05). The community's active involvement in organizing and supporting educational activities received a score of (4.01), ranking third. The overall score of (4.12) reflects a good performance in terms of educational support within the social and cultural realm. According to survey data, the current geographical environment shows a generally positive outlook with a score of 3.87. The highest score of 3.94 reflects the location of schools in geographic areas suitable for natural learning and research. The second highest score, 3.84, pertains to the economic mobility and cooperation between communities in border areas. The geographical environment of educational institutions that facilitates ecological tourism and cultural preservation ranks third with a score of 3.84. The overall score of 3.87 indicates a positive role of the geographical environment in promoting educational activities.

The overall performance of the legal environment is positive (3.85). The fair legal framework for the appointment and transfer of educational officials scored the highest (4.05). The second highest score is whether the local government's regulations support the construction of educational facilities such as schools and assembly buildings (3.82). The score for considering the needs of early vulnerable children in marginalized areas in education policies is (3.68), ranking third. The overall score is (3.85), reflecting the good performance of the legal environment in educational management.

According to survey data, the current state of the economic environment is generally positive (3.64). The highest score is attributed to community self-sufficient agriculture, which supports household livelihoods and promotes education (3.68). The second highest score relates to whether the community's economic conditions are sufficient to provide the necessary funding for educational development (3.66). The score for cooperatives or organizations established to improve economic

conditions and support children's education is (3.57), ranking third. The overall score of (3.64) reflects a favorable support for educational development from the economic environment.

According to survey data, the current state of the political environment is generally positive (3.88). The highest score corresponds to the recognition and emphasis on the importance of local politics in managing education in marginalized areas (3.96). The second highest score pertains to the local government's positive and supportive attitude towards managing educational institutions (3.87). The score for whether local politicians actively promote and support the development of school management is (3.81), ranking third. The overall score of (3.88) indicates strong support from the political environment for educational management.

According to survey data, the current state of the technological environment is generally positive (4.14). The highest score is for schools' access to higher-level institutions' internet and technological support (4.38). The second highest score pertains to whether educational institutions have internet systems for online learning and management (4.06). The score for whether educational institutions possess effective information technology systems to assist with management is (4.01), ranking third. The overall score of (4.14) reflects strong support from the technological environment in educational management.

According to survey data, the current state of the geographical environment is generally positive (3.87). The highest score is for the geographical environment of schools that is conducive to natural learning and research (3.94). The second highest score relates to the economic mobility and cooperation between communities in border areas (3.84). The geographical environment of educational institutions that promotes ecotourism and cultural preservation scores (3.84), ranking third. The overall score of (3.87) reflects the positive role of the geographical environment in facilitating educational activities.

Part 2: Qualitative Analysis

Qualitative analysis presents opinions and suggestions obtained from structured interviews with experts regarding the formulation of strategies for

promoting the sustainable development of basic education in the western regions of China's development. This section is divided into two steps:

Step 1: SWOT and TOWS Analysis.

This study employs structured interviews and utilizes SWOT and TOWS analysis frameworks to present the information provided by the respondents. A total of 10 respondents participated, all of whom have in-depth research experience in basic education. The respondents hold master's degrees or senior professional titles and possess extensive work experience.

Table 4.13 Personal information of interviewee

Interviewee	Position/Workplace	Interview Date and Time
Interviewee 1	Director of the Legal Studies Research Center at Sichuan Normal University.	Aug15, 2024 at 09:00 pm, GMT+8
Interviewee 2	Dean of the School of Education Science at Anshan Normal University in Liaoning Province, China.	Aug15, 2024 at 10:30 pm, GMT+8
Interviewee 3	Master's supervisor at the School of Education Sciences, Liaocheng University, Shandong Province, China.	Aug 15, 2024 at 14:30 pm, GMT+8
Interviewee 4	Vice Dean of the School of Tourism at Leshan Normal University, Sichuan Province, China.	Aug16, 2024 at 9:30 pm, GMT+8
Interviewee 5	Director of the School Office at Leshan Normal University, Sichuan Province, China.	Aug 16, 2024 at 14:30 pm, GMT+8
Interviewee 6	Director of the Student Management Department at Leshan Normal University, Sichuan Province, China.	Aug 17, 2024 at 10:30 pm, GMT+8

Table 4.13 (Continued)

Interviewee	Position/Workplace	Interview Date and Time
Interviewee 7	Principal of Leshan Experimental Primary School, Sichuan Province, China	Aug17, 2024 at 14:30 pm, GMT+8
Interviewee 8	Principal of Pengzhou Middle School, Sichuan Province	Aug17, 2024 at 16:30 pm, GMT+8
Interviewee 9	Principal of Meishan Middle School in Sichuan Province.	Aug 18, 2024 at 10:30 pm, GMT+8
Interviewee 10	Deputy Director of the Educational Information Research Center at Chengdu University of Technology.	Aug 18, 2024 at 14:30 pm, GMT+8

Description : GMT+8 indicates Greenwich Mean Time plus 8 hours, representing the time zone of the Eastern Eight Zone.

Table 4.14 Structured Interview Analysis Table

Answer	Interviewers										Frequency	Percentage
	1	2	3	4	5	6	7	8	9	10		
Q1: What do you think are the advantages of sustainable development in basic education in the western development regions of China?												
1) Strong policy support: Current national policies have continuously increased investment in basic education in the western regions.	√	√	√	√	√	√	√	√	√	√	10	100%
2) Balanced educational resources: The government has implemented effective measures to promote the equitable distribution of educational resources.	√	√		√			√	√	√		6	60%
3) Gradual improvement of infrastructure: The hardware facilities of schools, such as classrooms, laboratories, and libraries, have been effectively improved.	√	√	√		√	√	√		√	√	8	80%
4) Strengthening of teaching staff: In recent years, a group of high-quality educational talents has been introduced or cultivated in the western regions, enhancing the teaching standards.	√	√		√	√		√	√	√		7	70%
5) Application of educational information technology: Information technology has become widespread in basic education, promoting the modernization of teaching methods.	√	√		√	√		√		√	√	7	70%

Table 4.14 (Continued)

Answer	Interviewers										Frequency	Percentage
	1	2	3	4	5	6	7	8	9	10		
6) Gradual development of the local economy: Economic development in local areas has provided more material support and employment opportunities for basic education.	√	√	√	√	√		√	√		√	8	80%
7) Deepening regional cooperation: The western regions have engaged in extensive exchanges and cooperation with other regions or countries in the field of education.		√	√		√		√	√		√	6	60%
8) Rich natural and educational resources: The western regions boast a unique natural environment and abundant cultural resources.	√	√	√	√	√	√	√	√	√	√	10	100%
9) Student diversity and innovation capacity: The diversity and cultural backgrounds of students in the western regions help cultivate their innovative thinking and practical skills.	√	√	√	√	√	√	√		√	√	9	90%
10) Support from parents and society: The awareness and support from parents and the community regarding basic education continue to grow stronger.	√	√	√	√	√	√	√	√	√	√	10	10%

Table 4.14 (Continued)

Answer	Interviewers										Frequency	Percentage
	1	2	3	4	5	6	7	8	9	10		
Q2: What do you think are the disadvantages of sustainable development in basic education in the western regions of China's large-scale development?												
1) Uneven distribution of educational resources: There is a significant imbalance in the distribution of educational resources within the western region or compared to other regions.	√	√	√	√	√	√	√	√	√	√	10	10%
2) Teacher compensation and incentive mechanisms: The compensation and incentive mechanisms for teachers do not attract and retain outstanding educators.	√	√	√	√	√	√	√	√		√	9	9%
3) Outdated teaching methods and philosophies: Some schools and teachers still use traditional teaching methods and philosophies, lacking innovation.	√	√	√		√	√		√	√	√	8	8%
4) Lagging infrastructure development: The infrastructure development of some schools is still lagging behind educational needs.	√	√	√	√	√	√	√	√	√	√	10	100%

Table 4.14 (Continued)

Answer	Interviewers										Frequency	Percentage
	1	2	3	4	5	6	7	8	9	10		
5) Insufficient investment in education: Government and societal investments in basic education are inadequate to meet the demands of educational development.	√	√	√		√	√	√	√	√	√	8	80%
6) High student mobility: The high mobility of students in the western region affects the stability and continuity of educational quality.	√	√		√				√	√	√	6	60%
7) Insufficient family education support: Some families are unable to provide sufficient educational support for their children due to economic or other reasons.	√	√	√	√	√	√	√	√			8	80%
8) Lack of mental health education: Schools do not prioritize the mental health education of students and lack corresponding professional resources.	√	√	√	√	√			√	√	√	8	80%
9) Inadequate education quality evaluation system: The existing education quality evaluation system does not accurately reflect teaching effectiveness.	√	√		√	√	√		√		√	7	70%

Table 4.14 (Continued)

Answer	Interviewers										Frequency	Percentage
	1	2	3	4	5	6	7	8	9	10		
10) Insufficient emphasis on cultivating innovation abilities: Schools do not sufficiently promote the cultivation of students' innovative thinking and practical abilities.		√	√	√	√	√	√		√	√	8	80%
Q3: What opportunities do you think exist for the sustainable development of basic education in the western regions of China?												
1) National policy tilt: The government has decided to continue increasing its support for basic education in the western regions, providing more policy and financial assistance.	√	√	√	√	√	√	√		√	√	9	90%
2) Technological advancement and informatization: The development of information technology brings more innovative and efficient teaching methods to basic education.	√	√	√	√	√	√	√	√	√	√	10	100%
3) Regional economic integration: The development of regional economic integration provides more opportunities for cooperation and growth in basic education.	√		√		√	√		√	√	√	7	70%
4) International educational exchange and cooperation: By collaborating and exchanging with international educational institutions, the quality of education can be enhanced.	√		√		√	√		√	√		6	60%

Table 4.14 (Continued)

Answer	Interviewers										Frequency	Percentage
	1	2	3	4	5	6	7	8	9	10		
5) Increased social attention and investment: Public interest in basic education is gradually rising, and investment is continually increasing.	√	√	√	√	√	√	√	√	√	√	10	100%
6) Development of characteristic educational resources: The unique educational resources in the western regions, such as ecological tourism and ethnic culture, have been developed.	√		√	√	√	√			√	√	7	70%
7) Increased community and family involvement: Community and family participation in basic education is on the rise, creating a better educational synergy.	√	√		√	√	√		√	√	√	8	80%
8) Educational innovation and reform: More educational innovation and reform measures are being introduced at the national level to promote the sustainable development of basic education.	√	√	√	√	√		√	√	√	√	9	90%
9) Sharing of educational resources: Through the sharing of educational resources at regional or national levels, the overall educational quality in the western regions can be improved.	√	√			√	√	√	√	√	√	8	80%

Table 4.14 (Continued)

Answer	Interviewers										Frequency	Percentage
	1	2	3	4	5	6	7	8	9	10		
10) Environmental education: The unique ecological environment of the western regions is becoming a valuable resource for basic education.	√		√	√	√		√	√		√	7	70%
Q4: What do you think are the threats to the sustainable development of basic education in the western regions of China's development?												
1) Intensified Competition for Educational Resources: With the increasing competition in education, the western region faces the risk of losing excellent teachers and students.	√	√	√	√	√	√	√	√	√	√	10	100%
2) Economic Fluctuations Impact: Economic fluctuations negatively affect the investment and quality of basic education in the western region.	√	√	√	√	√	√	√	√	√	√	10	100%
3) Issues of Educational Equity: Uneven distribution of educational resources is exacerbating issues of educational equity, impacting social stability.	√	√	√	√	√			√	√	√	8	80%
4) Natural Environmental Constraints: Harsh natural environments in some western areas pose challenges for the implementation of basic education.	√	√	√			√		√	√	√	7	70%

Table 4.14 (Continued)

Answer	Interviewers										Frequency	Percentage
	1	2	3	4	5	6	7	8	9	10		
5) Uncertainty in Policy Changes: Significant fluctuations in national policies bring uncertainty to the development of basic education in the western region.	√			√		√	√	√			5	50%
6) Socio-Cultural Impacts: Outside cultures and social ideologies are impacting students' values and perceptions of education in the western region.	√	√	√	√	√			√			6	60%
7) Changes in Population Structure: Changes in population structure (such as aging and urbanization) have an impact on the demand for and models of basic education.	√	√		√	√	√		√	√	√	8	80%
8) Challenges of Cybersecurity and Information Technology: Advances in information technology pose new challenges such as cybersecurity and information leakage.			√	√	√		√	√			5	50%
9) Pressure from Educational Quality Assessment Systems: The rigor and diversity of educational quality assessment systems are placing greater pressure on schools and teachers.	√	√	√	√	√	√	√		√	√	9	90%

Table 4.14 (Continued)

Answer	Interviewers										Frequency	Percentage
	1	2	3	4	5	6	7	8	9	10		
10) Pressure from International Competition: The western region faces competitive pressure from other countries and regions in the context of international education competition.	√	√	√		√		√			√	6	60%

Through a survey on the current status of sustainable development in basic education in the western region of China, as well as interview results regarding the internal and external factors influencing the sustainable development of basic education schools in these areas, the researchers employed SWOT and TOWS analysis methods. The findings are presented in tabular form to lay the groundwork for developing a scientifically sound strategy draft in the next steps.

Strengths	Weaknesses
S1. Strong policy support - National initiatives provide essential funding and resource guarantees for basic education. S2. Rich natural and educational resources - The unique natural environment and cultural assets enhance the diversity and innovation of education. S3. Gradual improvement of infrastructure - Enhancements to hardware facilities such as classrooms, laboratories, and libraries have elevated the quality of the educational environment. S4. Diversity among students and their innovative capabilities - The diverse backgrounds of students foster their creative thinking and practical skills. S5. Gradual development of the local economy - The growth of the local economy offers more material support and employment opportunities for education.	W1. Insufficient Educational Quality Evaluation System — The existing evaluation system fails to accurately reflect educational outcomes, hindering quality improvement. W2. Uneven Distribution of Educational Resources — Educational resources are unevenly distributed between regions and families, leading to unequal educational opportunities. W3. Insufficient Investment in Education — Funding for basic education is inadequate, failing to meet developmental needs. W4. Lack of Family Educational Support — Due to economic or other reasons, families are unable to provide sufficient educational support for their children. W5. Lack of Mental Health Education — Schools do not place enough emphasis on mental health education and lack professional resources. W6. Inadequate Teacher Compensation

	and Incentive Mechanisms — This fails to attract outstanding teachers, negatively impacting educational quality. W7. Outdated Teaching Methods and Philosophies — Some teachers and schools still employ traditional teaching methods, lacking innovation. W8. Insufficient Emphasis on Developing Innovation Skills — Schools have not adequately promoted students' innovative thinking and practical skills.
Opportunities	**Threats**
O1. Technological Advancement and Informationization – The rapid development of information technology provides a foundation for educational innovation and efficient teaching methods. O2. Increased Social Attention and Investment – Public interest in education is growing, resulting in greater funding and resource allocation. O3. National Policy Support – The government will continue to enhance financial and policy support for basic education, promoting educational development. O4. Educational Innovation and Reform – The national level is continually introducing educational innovations and reforms to improve sustainability in education.	T1. Intensified Competition for Educational Resources - With the increasing competition in education, the western regions may face the risk of losing outstanding teachers and students. T2. Economic Fluctuations Impact - Economic fluctuations negatively affect educational investment and quality, potentially undermining educational development. T3. Pressure from Educational Quality Assessment Systems - The rigor and diversity of quality assessments may place greater pressure on schools and teachers. T4. Issues of Educational Equity - The uneven distribution of educational

O5. Increased Community and Family Participation – Active participation from communities and families creates a stronger collaborative effort in education, promoting synergy. O6. Sharing Educational Resources – Regional or national resource-sharing mechanisms enhance overall educational quality. O7. Regional Economic Integration – Economic integration provides convenience for cooperation and communication in education. O8. Developing Unique Educational Resources – Utilizing distinctive resources such as ecological tourism and ethnic culture in the western regions for educational purposes.	resources exacerbates issues of educational equity, posing a potential threat to social stability. T5. Challenges of Cybersecurity and Information Technology - The risks associated with cybersecurity and information leakage brought about by advancements in information technology may affect the stability of education. T6. Constraints from Natural Environment - Harsh natural environments in certain regions present challenges to the implementation of basic education. T7. Socio-Cultural Influences - External cultures impact the values and educational perspectives of students in the western regions. T8. Changes in Population Structure - Aging populations and urbanization may affect the demand for and modes of basic education. T9. International Competitive Pressure -

Figure 4.1 SWOT Analysis Results

	Internal advantages	internal disadvantages
External opportunities	**SO** S1 + O3: Combining policy support with educational development to drive reforms and investments in basic education. S2 + O1: Integrating natural resources with innovative education to foster technological advancement and innovation. S3 + O6: Improving infrastructure and resource sharing to enhance overall education quality. S4 + O5: Merging community engagement with diversity development to create synergistic educational outcomes.	**WO** W1 + O4: Improve the assessment system and educational innovation to enhance the scientificity and effectiveness of assessments. W2 + O7: Address resource disparities and promote collaboration to actively encourage economic and educational cooperation between regions. W3 + O2: Increase investment to meet development needs and elevate educational standards. W4 + O5: Combine family support with community engagement to strengthen school-family cooperation.
External threats	**ST** S1 + T3: Policy responses to assessment pressure: Strong policy support can alleviate the quality assessment pressure faced by the education system. S2 + T9: Enhancing competitiveness through natural resource utilization: Aiming to strengthen regional advantages in the international education competition. S4 + T7: Innovation capacity addressing cultural challenges: Enhancing students' innovative abilities to counter social and cultural impacts. S5 + T8: Economic support and attraction of educational resources: Leveraging economic development to attract excellent teachers and improve the stability of educational resources.	**WT** W2 + T4: Establish a fair evaluation system to promote educational equity. W5 + T2: Adjust policies to enhance investment and ensure stability in educational funding. W6 + T8: Improve teacher compensation and address demographic challenges to attract quality education talent. W7 + T5: Update teaching methods to ensure safety and tackle cybersecurity risks posed by information technology.

Figure 4.2 TOWS analysis results

Step 2: Data Analysis of Interviews on Developing Sustainable Education Strategies in the Western Regions of China.

2.1 Focus Group Discussion Data Analysis for Drafting a Sustainable Development Strategy for Basic Education in the Western Development Regions of China.

Through a survey of the current status of basic education in developing areas of western China and interviews on the issues, pathways, and influencing factors of sustainable development in basic education, the use of SWOT and TOW for data analysis has laid the foundation for developing a scientifically sound strategy proposal. Researchers found that, in general, most schools in the western development regions are at a moderate level, necessitating the formulation of targeted management strategies. Therefore, the researchers suggest that sustainable development strategies for basic education in the western development areas can be established from nine different aspects:

1) Teacher workforce development,

2) Financial management standards,

3) Infrastructure development,

4) Administrative management efficiency,

5) Socio-cultural impacts,

6) Policy and legal support,

7) Economic development strategies,

8) Technological progress and application,

9) Improvement of the geographical environment.

The researcher once again invited 10 participants for a focus group discussion, including 5 teachers, 3 school administrators, and 2 stakeholders from 8 sample primary education schools. Based on survey questionnaires, interview results, and relevant literature, the discussion centered on 4 dimensions, covering 9 aspects and 12 questions, exploring a draft strategy for the sustainable development of basic education in the western regions of China. The discussion results are as follows:

1. What specific visions and goals should we set to achieve sustainable development in basic education?

Basic education in developing areas of western China should focus on three primary aspects: 1) Cultivating well-rounded, comprehensive talents who possess social responsibility, knowledge and skills, and cultural literacy, to become the future driving force behind societal development in the West; 2) Establishing a high-quality and balanced public service system for basic education, in line with United Nations Sustainable Development Goal 4, by strategically planning school placement, enhancing the collaborative sharing of educational resources between urban and rural areas, expanding inclusive resources for preschool education, improving the quality and balance of compulsory education, and addressing the shortcomings in basic education to meet the public's demand for fair and high-quality education; 3) Optimizing the digital educational ecosystem through innovations in artificial intelligence, using smart perception and big data analysis to promote innovative teaching models, enhancing teachers' digital teaching capabilities, providing precise decision-making support for the digital transformation of basic education in the West, and improving educational quality; 4) Promoting the modernization of educational governance, enhancing the rule of law in education governance, refining internal governance mechanisms within schools, strengthening the collaborative governance effectiveness of various stakeholders, and constructing a governance system for basic education that involves the government, society, schools, and families.

2. What core concepts and principles should we follow when drafting a sustainable development strategy for basic education to ensure equity and quality in education?

When formulating a sustainable development strategy for basic education in the western development regions, we should adhere to the following principles: 1) The principle of educational equity, ensuring equal educational rights, balanced resource distribution, and benefits reaching everyone; 2) Mass education and balanced development, shifting away from elitist views on education, paying attention to vulnerable groups, and promoting balanced education between urban

and rural areas; 3) People-centered approaches, formulating educational policies that promote student growth and achieve equitable education; 4) Enhancing the humanistic care in family education, avoiding utilitarian approaches in education, and focusing on the actual needs of children; 5) Strengthening collaboration between communities and schools, enhancing cooperation among communities, families, and schools to jointly create a favorable environment for student growth.

3. What key elements should be included in the core talent development program for sustainable development at basic education schools to adapt to social needs and market changes?

In advancing the talent development program for basic education schools in the western development regions, the following should be considered: 1) Comprehensive development of students' knowledge and abilities, fostering their moral character, intellectual level, physical fitness, and aesthetic ability, promoting their overall growth while helping them establish sound values and life perspectives; 2) Focusing on students' practical skills development, intensifying practical courses and social service opportunities, aligning them with local economic and social needs, and providing internships and social practice experiences that allow students to hone their practical skills and problem-solving abilities in real environments; 3) Promoting information technology and innovation capabilities, strengthening digital literacy and information technology education, cultivating students' innovative thinking and practical skills to prepare them for rapid changes in modern society and technological advancements; 4) Optimizing the curriculum system and teaching content, constructing a curriculum system that aligns with the developmental needs of western regions, enhancing the development of locally distinctive courses, and integrating local elements such as ecology and ethnic culture. By incorporating these elements, basic education schools will be better equipped to meet social demands and market changes, cultivating talents with core competitiveness.

4. What key factors should be emphasized in building a teaching workforce to enhance the overall quality of basic education?

The key factors for improving the construction of the teaching workforce in developing areas of western China include: 1) Increasing investment and incentives: Raising teachers' salaries, improving welfare guarantees, and enhancing professional attractiveness to attract more outstanding teachers to work in western education. 2) Strengthening professional training and continuous education for teachers: Regular workshops, online learning, and skills training should be implemented to improve teachers' teaching abilities and management skills, enabling them to adapt to new educational requirements and teaching methods, and to establish a long-term career development mechanism. 3) Establishing a scientifically sound incentive mechanism: This can be achieved by setting up teaching awards, promotion pathways, and salary subsidies to attract and retain excellent teachers, while also encouraging them to actively participate in academic research and teaching reform, which increases teachers' professional appeal. 4) Promoting the exchange and cooperation of teachers between urban and rural areas as well as between regions: Through mutual hiring, regular exchanges, and sharing teaching resources, cities and remote schools should work together to enhance the teaching levels and subject proficiency of teachers in underdeveloped areas. 5) Paying attention to teachers' mental health and work environment: Improving school infrastructure and teaching conditions to provide a good working environment for teachers. Based on this, psychological counseling and career support should be offered to help teachers alleviate work-related stress and improve job satisfaction and sense of belonging.

5. What innovative suggestions for teaching methods and approaches could enhance the effectiveness and attractiveness of basic education in western regions?

To enhance the teaching effectiveness and attractiveness of basic education in western regions, innovative suggestions for teaching methods and approaches include: 1) Introducing information technology: Utilizing multimedia teaching and online courses to enrich teaching methods, making abstract concepts more concrete and increasing student interest in learning. 2) Community involvement and experiential learning: Encouraging schools to collaborate with communities to carry out service-learning projects, allowing students to participate in community service

and nature exploration, thereby enhancing their social responsibility and practical skills. This not only enriches the learning experience but also strengthens students' connection with society.

6. How should the evaluation and feedback mechanisms in basic education be designed and implemented to ensure their effectiveness and continuous improvement?

When establishing an evaluation and feedback mechanism for basic education in the underdeveloped areas of western China, the following five aspects should be considered: 1) Constructing a diversified evaluation system: Establishing a multidimensional evaluation system that includes students' academic performance, classroom behavior, practical activities, and overall qualities, assessing students' learning outcomes and development comprehensively through both quantitative and qualitative methods. 2) Emphasizing formative evaluation and dynamic feedback: Highlighting the role of formative evaluation in teaching to monitor students' learning conditions timely, enabling teachers to adjust their teaching strategies accordingly. 3) Establishing participatory evaluation mechanisms: Encouraging the involvement of teachers, students, and parents in the evaluation process; using questionnaires, parent-teacher meetings, and other methods to gather diverse opinions and suggestions for a more comprehensive and objective evaluation. 4) Utilizing data analysis and improvement mechanisms: Establishing platforms for data collection and analysis to regularly summarize various evaluation data. 5) Providing continuous professional development support: Based on evaluation results, encouraging teachers to reflect and improve their teaching methods, developing professional growth plans, and offering appropriate training and support.

7. How should policy and legal support be effectively implemented to promote sustainable development in basic education in western regions?

To effectively promote sustainable development in basic education in the underdeveloped areas of western China, the implementation of policy and legal support should focus on the following points: 1) Developing targeted policies: Formulating education development policies that align with the realities of the

western regions, clearly defining development goals, pathways, and measures. 2) Increasing financial investment: Ensuring stable growth in educational funding through support from central and local finances, with particular emphasis on rural and remote areas. 3) Improving laws and regulations: Establishing a comprehensive educational legal framework that clarifies educational rights and obligations, ensuring fairness and quality in education, and providing legal guarantees for educational development. 4) Strengthening supervision and evaluation: Creating a sound mechanism for supervising and evaluating the implementation of educational policies to ensure effective execution and timely adjustment and optimization of policies. 5) Promoting social participation: Encouraging various sectors of society to engage in the development of basic education, forming a pattern where the government plays a leading role, supported by society, with the participation of all.

8. How can practical educational investment and resource allocation strategies be formulated in response to the geographical environment and economic development of the western regions?

The strategies for educational investment and resource allocation in China's western development areas include: 1) Location-specific investment planning: Developing differentiated educational investment plans based on the geographical and economic characteristics of each region. 2) Focused investment: Increasing investment in rural and remote areas to ensure adequate basic teaching facilities, thereby narrowing the urban-rural education gap. 3) Precise resource allocation: Allocating educational resources accurately based on school size, student numbers, and educational needs to avoid resource wastage. 4) Integration of social resources and support: Encouraging participation from social capital, enterprises, and non-governmental organizations in educational investment, forming a diversified funding structure, and enriching educational resources through collaborative construction, donations, and sponsorships to enhance educational quality. 5) Establishing a dynamic evaluation and feedback mechanism: Regularly evaluating the effectiveness of investments, collecting feedback from teachers and students, and promptly

adjusting investment strategies based on evaluation results to ensure the effective and sustainable use of educational resources.

9. How can modern technological means be utilized to improve the effectiveness of basic education teaching and management efficiency, adapting to the needs of new developments?

Improving the effectiveness of basic education teaching and management efficiency in the western development areas through modern technological means involves: 1) Building online education platforms: Developing and promoting online education platforms, providing high-quality educational resources through online video courses and live teaching, thus enabling remote students to access diverse learning resources under the "Internet + Education" model. 2) Application of intelligent teaching tools: Introducing intelligent teaching tools (e.g., electronic whiteboards, learning management systems) to personalize learning through educational software, devising suitable learning plans based on students' varying needs, and enhancing classroom interaction and engagement. 3) Data analysis and monitoring systems: Establishing data analysis systems to monitor students' learning progress and performance in real-time, identifying problems promptly for intervention, and aiding teachers in adjusting their teaching strategies. 4) Expanding teacher training and professional development: Utilizing modern technology for online training and professional development for teachers, helping them master new technologies and teaching methods. 5) Establishing home-school interaction platforms: Strengthening parental involvement in education through online information dissemination, teaching activity notifications, and student performance feedback, thereby increasing the transparency and efficiency of educational management and fostering communication and collaboration between parents and schools.

10. What standardized measures should be adopted in financial management to ensure the rational use and allocation of basic education resources?

Standardized financial management measures to ensure the rational use and allocation of basic educational resources in the western development areas include:

1) Establishing a budgeting and approval system: Formulating detailed annual budgets and financial plans that clearly define the usage of educational resources, ensuring funds are closely directed towards key areas such as educational reform, infrastructure development, and teacher training, to prevent resource wastage. 2) Implementing project tracking and evaluation mechanisms: Regularly tracking and evaluating the use of educational funds and project implementation to ensure compliance and effectiveness, promoting transparent and traceable financial management to prevent misappropriation and misuse of funds. 3) Strengthening financial training and legal awareness: Providing regular financial management training for financial personnel in schools and related management departments, enhancing their understanding of relevant laws and financial management practices to improve management levels and responsibility, ensuring the legal and rational use of funds. 4) Setting up special funds and supervision mechanisms: Establishing special funds for specific projects (e.g., school construction in impoverished areas, teacher training) and forming supervising bodies to ensure funds are utilized for their intended purposes. 5) Establishing performance assessment and incentive mechanisms: Developing performance evaluation indicators based on educational development goals in each region, assessing the use of funds and educational quality, and timely adjusting fund distribution.

11. How can the impact of the social and cultural environment on basic education be assessed to improve this environment and support the sustainability of education?

The assessment of the social and cultural environment's impact on basic education in developing areas of western China primarily includes: 1) Educational values and perceptions: Evaluating local residents' recognition of the value of education, including parents' emphasis on their children's education and educational expectations, to understand the extent of the dissemination and deepening of educational concepts. 2) Community support and educational atmosphere: Investigating the community's participation in basic education, resource investment, and cooperation, analyzing their indirect impact on educational quality. 3) Cultural

heritage and diversity: Assessing the influence of local culture and traditions on educational content and methods, and how schools incorporate multicultural education to promote students' comprehensive development. 4) Socioeconomic conditions: Analyzing local economic development levels and family income situations to determine limits on educational input and participation and how policy interventions can improve these conditions. 5) Distribution of educational resources: Examining the fairness of the regional distribution of educational resources, including teacher quality, teaching facilities, and educational opportunities, and evaluating their impact on balanced educational development.

12. How can multi-party collaboration optimize administrative management efficiency, ensuring that policies and measures for basic education are effectively implemented?

To optimize administrative management efficiency in basic education in China’s western development areas, the following measures could be adopted: 1) Establishing cross-departmental collaborative mechanisms: Creating a coordinating body composed of multiple departments, including education, finance, poverty alleviation, and public health, to regularly hold meetings for information and resource sharing, reducing resource duplication and enhancing overall management efficiency. 2) Strengthening links between local governments and schools: Developing a regular communication mechanism between local governments and schools to ensure timely policy information dissemination, enabling local governments to better understand schools' actual needs and adjust policy measures accordingly. 3) Encouraging the participation of social organizations: Actively guiding charitable institutions, social organizations, and enterprises to engage in various educational projects, enriching educational resources, and forming collaborative partnerships among government, schools, and social organizations to enhance the sustainability of educational projects. 4) Establishing performance evaluation systems: Designing a performance evaluation system that covers all levels of management and schools, assessing administrative efficiency based on policy implementation effects, and using reward-and-punishment mechanisms to motivate relevant personnel to enhance

work enthusiasm, ensuring effective policy implementation. 5) Application of information technology: Utilizing big data and information technology to establish an educational management information system, facilitating data sharing and analysis to monitor policy implementation progress and effectiveness in real-time, promptly identifying problems for adjustment, and continually optimizing the allocation and use of educational resources.

2.2 Based on the focus group discussions, strategies for the sustainable development of basic education in the western regions of China's large-scale development have been proposed, including 9 main strategies and 45 specific measures.

Table 4.15 Strategies for Sustainable Development of Basic Education in developing areas of western China

Strategy	Concrete Measure
1. Development of the Teaching Staff	Continuous Training and Professional Development: Organize regular training courses for teachers that combine online and offline methods, covering various aspects such as educational philosophy, teaching methods, and the application of information technology, to enhance teachers' teaching skills and digital literacy. Incentive Mechanism Construction: Establish a system for recognizing and rewarding teachers, providing both material and spiritual rewards to outstanding teachers to encourage their active engagement in the education sector and increase the profession's attractiveness. Inter-school Exchange and Cooperation: Promote the mutual exchange of teachers between urban and rural schools, sharing quality educational resources to improve overall teaching standards.

Table 4.15 (Continued)

Strategy	Concrete Measure
	Mental Health Education: Establish a support system for teachers' mental health, offering counseling services to address their mental well-being and reduce occupational stress. Integration of Research and Teaching: Encourage teachers to participate in educational research activities, applying research findings in teaching practices to enhance the quality of education.
2.Financial Manageme-nt Standards	Budget Management System: Establish a sound budget management system to clarify the direction of fund usage, ensuring funds are utilized in a reasonable and effective manner. Auditing and Supervision: Strengthen auditing and supervision of educational fund usage to ensure compliance and transparency in fund allocation. Information Disclosure: Regularly disclose the revenue and expenditure of educational funds to accept social oversight and enhance the credibility of financial management. Financial Training: Enhance the professional training of financial management personnel to improve their business capabilities and legal awareness. Performance Assessment: Establish a performance assessment mechanism for the use of educational funds, adjusting fund allocation strategies based on assessment results.
3. Infrastructure Const-ruction	School Building: Increase investment in the construction of school buildings in rural and remote areas to ensure that the facilities are safe, functional, and aesthetically pleasing.

Table 4.15 (Continued)

Strategy	Concrete Measure
	Teaching Equipment: Equip schools with modern teaching tools, such as multimedia teaching devices and laboratory instruments, to enhance the teaching conditions. Network Environment: Optimize the campus network environment to achieve full network coverage, providing strong support for online education. Sports Facilities: Improve campus sports facilities to meet students' physical exercise needs and promote their physical and mental well-being. Campus Safety: Strengthen the construction of campus safety facilities, such as surveillance systems and fire protection equipment, to ensure the safety of both teachers and students.
4.Administrative Mana-gement Efficiency	Streamlining Administration: Reduce unnecessary administrative approval processes to enhance efficiency. Information Technology Development: Promote the development of information technology in educational management to achieve data sharing and process optimization. Performance Evaluation: Establish a scientific performance evaluation system to conduct regular assessments of management personnel, motivating them to improve work efficiency. Training and Education: Strengthen training and education for management personnel to enhance their management skills and service awareness. Feedback Mechanism: Establish an effective feedback mechanism to promptly understand the needs of teachers and students and adjust management measures accordingly.

Table 4.15 (Continued)

Strategy	Concrete Measure
5.Socio-Cultural Impac-t	Promotion and Education: Strengthen the efforts in educational promotion and raise residents' awareness of the value of education to create a positive educational atmosphere. Community Involvement: Encourage community participation in the construction of basic education to collaboratively foster a favorable educational environment. Cultural Heritage: Integrate local culture into the teaching content to enhance students' sense of identity and pride in their native culture. Home-School Collaboration: Strengthen cooperation between families and schools to jointly focus on students' growth and development, thus forming a collaborative educational effort. Media Guidance: Utilize media to promote positive energy, showcase educational achievements, and increase societal attention to basic education.
6.Policy and Legal Su-pport	Policy Development: Formulate targeted educational policies that align with actual conditions to provide strong support for educational development. Legal Assurance: Improve the legal and regulatory framework for education to ensure fairness and quality in education. Implementation Supervision: Establish a sound mechanism for monitoring and evaluating the implementation of policies to ensure their effective execution. Legal Aid: Provide legal assistance for educational disputes to protect the legitimate rights and interests of teachers and students.

Table 4.15 (Continued)

Strategy	Concrete Measure
	Policy Promotion: Strengthen the promotion and interpretation of policies to enhance awareness and compliance.
7.Economic Developm-ent Strategies	Industry Integration: Promote the integration of education and local industries to cultivate talents that meet market demands. Educational Poverty Alleviation: Increase investment in education in impoverished areas to break the cycle of intergenerational poverty through educational support. Employment Services: Enhance employment guidance and services to assist students in securing jobs and promote local economic development. Entrepreneurship Support: Encourage and support student entrepreneurship to inject new vitality into local economic development. Economic Cooperation: Strengthen economic cooperation and exchanges with other regions to jointly promote basic education and economic development.
8. Technological Adva-ncements and Applications	Smart Campus: Develop smart campuses that utilize technologies such as big data and cloud computing to enhance educational management levels. Online Education: Promote online education platforms to provide students with a wealth of learning resources. Intelligent Teaching: Introduce intelligent teaching tools to achieve personalized education and improve teaching effectiveness. Technical Training: Strengthen information technology training for teachers and students to enhance their technology application skills.

Table 4.15 (Continued)

Strategy	Concrete Measure
	Data Analysis: Establish a student learning data analysis system to provide a scientific basis for teaching improvements.
9. Improvement of th-e Geographic Environment	Transportation Enhancement: Strengthening infrastructure development to improve transportation conditions, facilitating the travel of teachers and students. Environmental Protection: Enhancing campus environmental protection to create a green and ecological campus environment. Disaster Prevention and Mitigation: Strengthening the construction of disaster prevention and mitigation facilities, improving the school's ability to respond to natural disasters. Living Facilities: Improving campus living facilities such as cafeterias and dormitories to enhance the quality of life for teachers and students. Specialized Development: Developing specialized educational programs, such as ecological tourism education, in line with local geographical characteristics.

Figure 4.3 9 Strategic Directions in Education Develop

Part 3: Evaluation of Appropriateness and Feasibility

The analysis results of this section were evaluated by a panel of seven experts, all of whom hold senior professional titles. The expert group consists of one expert with knowledge and experience in strategic formulation, three academic administrators with the title of associate professor, one educational institution administrator who is also an associate professor, and two faculty members with the title of professor. The evaluation utilized a five-level scoring system, where respondents could only choose one level to assess the appropriateness and feasibility of the sustainable development strategies for basic education in the western development regions of China

Table 4.16 Evaluation and Analysis of the Effectiveness of Sustainable Development Strategies for Basic Education in developing areas of western China (n=7)

Strategic 1 Development of the Teaching Staff	Adaptability			Feasibility		
	$\bar{X}$	S.D.	Result	$\bar{X}$	S.D.	Result
1. Continuous Training and Professional Development: Organize regular training courses for teachers that combine online and offline methods, covering various aspects such as educational philosophy, teaching methods, and the application of information technology, to enhance teachers' teaching skills and digital literacy.	4.57	0.53	highest	4.71	0.48	highest
2. Incentive Mechanism Construction: Establish a system for recognizing and rewarding teachers, providing both material and spiritual rewards to outstanding teachers to encourage their active engagement in the education sector and increase the profession's attractiveness.	4.85	0.37	highest	4.71	0.48	highest
3. Inter-school Exchange and Cooperation: Promote the mutual exchange of teachers between urban and rural schools, sharing quality educational resources to improve overall teaching standards.	4.57	0.53	highest	4.28	0.75	high
4. Mental Health Education: Establish a support system for teachers' mental health, offering counseling services to address their mental well-being and reduce occupational stress.	4.28	0.75	high	4.42	0.53	High
5. Integration of Research and Teaching: Encourage teachers to participate in educational research activities, applying research findings in teaching practices to enhance the quality of education.	4.71	0.48	highest	4.57	0.53	highest
Total	**4.57**	**0.60**	**highest**	**4.514**	**0.56**	**highest**

Table 4.16 (Continued)

Strategic 2 Financial Management Standards	Adaptability			Feasibility		
	$\overline{X}$	S.D.	Result	$\overline{X}$	S.D.	Result
1. Budget Management System: Establish a sound budget management system to clarify the direction of fund usage, ensuring funds are utilized in a reasonable and effective manner.	4.57	0.53	highest	4.57	0.53	highest
2. Auditing and Supervision: Strengthen auditing and supervision of educational fund usage to ensure compliance and transparency in fund allocation.	4.57	0.53	highest	4.42	0.78	high
3. Information Disclosure: Regularly disclose the revenue and expenditure of educational funds to accept social oversight and enhance the credibility of financial management.	4.42	0.78	high	4.28	0.75	high
4. Financial Training: Enhance the professional training of financial management personnel to improve their business capabilities and legal awareness.	4.71	0.48	highest	4.57	0.53	highest
5. Performance Assessment: Establish a performance assessment mechanism for the use of educational funds, adjusting fund allocation strategies based on assessment results.	4.42	0.78	high	4.71	0.48	highest
Total	**4.51**	**0.61**	**highest**	**4.44**	**0.612**	**high**

Table 4.16 (Continued)

Strategic 3 Infrastructure Construction	Adaptability			Feasibility		
	$\overline{X}$	S.D.	Result	$\overline{X}$	S.D.	Result
1. School Building: Increase investment in the construction of school buildings in rural and remote areas to ensure that the facilities are safe, functional, and aesthetically pleasing.	4.42	0.53	middle	4.71	0.48	highest
2. Teaching Equipment: Equip schools with modern teaching tools, such as multimedia teaching devices and laboratory instruments, to enhance the teaching conditions.	4.71	0.48	highest	4.71	0.48	highest
3. Network Environment: Optimize the campus network environment to achieve full network coverage, providing strong support for online education.	4.57	0.53	highest	4.28	0.75	high
4. Sports Facilities: Improve campus sports facilities to meet students' physical exercise needs and promote their physical and mental well-being.	4.71	0.48	highest	4.57	0.53	highest
5. Campus Safety: Strengthen the construction of campus safety facilities, such as surveillance systems and fire protection equipment, to ensure the safety of both teachers and students.	4.28	0.40	high	4.14	0.69	high
Total	**4.62**	**0.48**	**highest**	**4.48**	**0.619**	**high**

Table 4.16 (Continued)

Strategic 4 Administrative Management Efficiency	Adaptability			Feasibility		
	$\overline{X}$	S.D.	Result	$\overline{X}$	S.D.	Result
1. Streamlining Administration: Reduce unnecessary administrative approval processes to enhance efficiency.	4.71	0.48	highest	4.57	0.53	highest
2. Information Technology Development: Promote the development of information technology in educational management to achieve data sharing and process optimization.	4.00	0.57	high	4.00	0.57	high
3. Performance Evaluation: Establish a scientific performance evaluation system to conduct regular assessments of management personnel, motivating them to improve work efficiency.	4.75	0.46	highest	4.71	0.48	highest
4. Training and Education: Strengthen training and education for management personnel to enhance their management skills and service awareness.	4.57	0.53	highest	4.71	0.48	highest
5. Feedback Mechanism: Establish an effective feedback mechanism to promptly understand the needs of teachers and students and adjust management measures accordingly.	4.85	0.37	highest	4.57	0.53	highest
Total	**4.50**	**0.56**	**highest**	**4.48**	**0.56**	**high**

Table 4.16 (Continued)

Strategic 5 Socio-Cultural Impact	Adaptability			Feasibility		
	$\overline{X}$	S.D.	Result	$\overline{X}$	S.D.	Result
1. Promotion and Education: Strengthen the efforts in educational promotion and raise residents' awareness of the value of education to create a positive educational atmosphere.	4.28	0.75	middle	4.42	0.53	middle
2. Community Involvement: Encourage community participation in the construction of basic education to collaboratively foster a favorable educational environment.	4.42	0.78	high	4.57	0.53	highest
3. Cultural Heritage: Integrate local culture into the teaching content to enhance students' sense of identity and pride in their native culture.	4.00	0.81	high	4.42	0.78	high
4. Home-School Collaboration: Strengthen cooperation between families and schools to jointly focus on students' growth and development, thus forming a collaborative educational effort.	4.57	0.53	highest	4.28	0.48	high
5. Media Guidance: Utilize media to promote positive energy, showcase educational achievements, and increase societal attention to basic education.	4.28	0.75	high	4.14	0.69	high
Total	**4.31**	**0.71**	**high**	**4.37**	**0.59**	**high**

Table 4.16 (Continued)

Strategic 6 Policy and Legal Support	Adaptability			Feasibility		
	$\bar{X}$	S.D.	Result	$\bar{X}$	S.D.	Result
1. Policy Development: Formulate targeted educational policies that align with actual conditions to provide strong support for educational development.	4.85	0.37	highest	4.71	0.48	highest
2. Legal Assurance: Improve the legal and regulatory framework for education to ensure fairness and quality in education.	4.71	0.48	highest	4.57	0.53	highest
3. Implementation Supervision: Establish a sound mechanism for monitoring and evaluating the implementation of policies to ensure their effective execution.	4.57	0.53	highest	4.42	0.78	high
4. Legal Aid: Provide legal assistance for educational disputes to protect the legitimate rights and interests of teachers and students.	4.28	0.75	high	4.57	0.53	highest
5. Policy Promotion: Strengthen the promotion and interpretation of policies to enhance awareness and compliance.	4.14	0.89	high	4.28	0.75	high
Total	**4.51**	**0.65**	**highest**	**4.51**	**0.61**	**highest**

Table 4.16 (Continued)

Strategic 7 Economic Development Strategies	Adaptability			Feasibility		
	$\overline{X}$	S.D.	Result	$\overline{X}$	S.D.	Result
1. Industry Integration: Promote the integration of education and local industries to cultivate talents that meet market demands.	4.71	0.48	highest	4.57	0.53	highest
2. Educational Poverty Alleviation: Increase investment in education in impoverished areas to break the cycle of intergenerational poverty through educational support.	4.71	0.40	highest	4.57	0.53	highest
3. Employment Services: Enhance employment guidance and services to assist students in securing jobs and promote local economic development.	4.28	0.75	high	4.14	0.69	high
4. Entrepreneurship Support: Encourage and support student entrepreneurship to inject new vitality into local economic development.	4.00	0.8	high	3.85	0.69	high
5. Economic Cooperation: Strengthen economic cooperation and exchanges with other regions to jointly promote basic education and economic development.	4.14	0.89	high	4.00	0.81	high
Total	**4.22**	**0.77**	**high**	**4.14**	**0.69**	**high**

Table 4.16 (Continued)

Strategic 8 Technological Advancements and Applications	Adaptability			Feasibility		
	$\overline{X}$	S.D.	Result	$\overline{X}$	S.D.	Result
1. Smart Campus: Develop smart campuses that utilize technologies such as big data and cloud computing to enhance educational management levels.	4.57	0.53	highest	4.71	0.48	highest
2. Online Education: Promote online education platforms to provide students with a wealth of learning resources.	4.00	0.81	high	4.14	0.69	high
3. Intelligent Teaching: Introduce intelligent teaching tools to achieve personalized education and improve teaching effectiveness.	4.14	0.69	high	4.14	0.89	high
4. Technical Training: Strengthen information technology training for teachers and students to enhance their technology application skills.	4.00	0.81	high	3.85	0.89	high
5. Data Analysis: Establish a student learning data analysis system to provide a scientific basis for teaching improvements.	4.28	0.75	high	4.42	0.53	high
Total	**4.00**	**0.76**	**high**	**4.05**	**0.76**	**high**

Table 4.16 (Continued)

Strategic 9 Improvement of the Geographic Environment	Adaptability			Feasibility		
	$\overline{X}$	S.D.	Result	$\overline{X}$	S.D.	Result
1. Transportation Enhancement: Strengthening infrastructure development to improve transportation conditions, facilitating the travel of teachers and students.	4.71	0.48	highest	4.71	0.48	highest
2. Environmental Protection: Enhancing campus environmental protection to create a green and ecological campus environment.	4.42	0.53	high	4.14	0.69	high
3. Disaster Prevention and Mitigation: Strengthening the construction of disaster prevention and mitigation facilities, improving the school's ability to respond to natural disasters.	4.57	0.53	highest	4.28	0.755	high
4. Living Facilities: Improving campus living facilities such as cafeterias and dormitories to enhance the quality of life for teachers and students.	4.71	0.48	highest	4.42	0.53	high
5. Specialized Development: Developing specialized educational programs, such as ecological tourism education, in line with local geographical characteristics.	3.85	0.89	high	4.00	0.81	high
Total	**4.45**	**0.65**	**high**	**4.31**	**0.67**	**high**

Based on the effectiveness assessment of the 9 areas and 45 specific strategies outlined for the sustainable development of basic education in the western regions of China, we find that the average applicability of these strategies is 4.433 and the average feasibility is 4.404. Both scores fall within a high range of 4.0 to 4.6. This indicates that the educational development strategies in this region have a solid foundation in terms of adaptability and practical operability, laying a strong groundwork for further education reform and enhancement of educational quality. Overall, these strategies not only address the actual needs of the local community but also align with socio-economic development trends, contributing to sustainable educational progress. Thus, the resources and support required for the implementation of these strategies are crucial guarantees for advancing education development in the western regions.

Chapter 5
Conclusion Discussion and Recommendations

Research on the strategies of sustainable development for Basic Education in developing areas of western China focuses on three key questions: 1) What is the current state of sustainable basic education development in underdeveloped areas of the western region? 2) What strategies should be adopted for development sustainable basic education in developing areas of western China? 3) Are the strategies for sustainable basic education development in developing areas of western China appropriate and feasible? The research objectives are set out in three aspects: 1) To study the status of sustainable development in basic education in underdeveloped areas of the western region. 2) To formulate strategies for the sustainable development of basic education in underdeveloped areas of the western region. 3) To evaluate the strategies for sustainable development in basic education in underdeveloped areas of the western region.

To achieve these research objectives, this study employed a questionnaire survey method, utilizing both online and offline channels. Based on the sample size determined by Krejci and Morgan, questionnaires were distributed to teachers, administrators, and stakeholders from 10 basic education schools in the western region to understand the current status of basic education in the area, resulting in the collection of 635 valid responses. Additionally, researchers conducted structured interviews to analyze the issues facing basic education in China's western development regions. Following this, focus group discussions were held to develop sustainable development strategies for basic education in these regions. Finally, a panel of five experts evaluated the appropriateness and feasibility of the proposed strategies. The statistical methods used to analyze the data in this study include frequency, percentage, mean, and standard deviation. The conclusions, discussions, and recommendations of this research are as follows:

Conclusion

Through the study of sustainable development strategies for basic education in developing areas of western China, the researchers have summarized their conclusions into three parts, detailed as follows:

Part 1: The Current State of Sustainable Development in Basic Education in the Western Regions of China.

Based on the research objectives, an analysis of the overall level of sustainable development in basic education in the western regions of China was conducted, covering four main dimensions: academic management, budget management, personnel management, and general administration. Through statistical analysis of the survey data, it was found that the overall average level of basic education in this region is slightly above average, with varying performance across the management dimensions. Specifically, the general administration has the highest average level, indicating strong execution and efficiency in administrative management; personnel management and budget management follow, while academic management shows relative insufficiency, suggesting a need for further strengthening and improvement in academic directions.

Among the internal factors affecting school management, the overall average level of management is satisfactory, particularly highlighting the effectiveness of the management team. This result provides strong evidence indicating that management is indispensable in the development of basic education. However, the close results of personnel management and material and equipment management indicate that these two areas still require attention for improvement, especially in teacher training and the provision of teaching facilities. The slightly lower score in financial management reflects concerns regarding the transparency and rationality of funding, thus recommending enhanced supervision and auditing to ensure the effective use of educational funds, which would further optimize the quality of basic education.

In assessing the external factors influencing school management, the data shows a generally positive overall status. Social and cultural factors are notably strong, indicating that a positive social atmosphere and cultural identity can provide

supportive conditions for the development of basic education. Technological factors also demonstrate a strong boosting effect, supporting improvements in educational teaching methods and management practices. Although legal and political factors are also in a high-level area, geographical environment and economic factors are relatively low, signaling that more efforts are needed for the distribution of educational resources and environmental improvements.

Overall, basic education management in the western regions of China performs well at this stage, with the effectiveness of the management team and a positively supportive external environment laying a foundation for the continuous development of education. However, there is a need to pay particular attention to enhancing academic management, as well as optimizing personnel, material, equipment, and financial management, to ensure rational allocation and balanced development of educational resources, thus promoting an overall improvement in educational quality. Through further strengthening infrastructure development and resource integration, it is anticipated to significantly elevate the level of basic education in this region.

Part 2: Constructing Sustainable Development Strategies for Basic Education in China's Western Development Regions.

According to the second research objective, the strategy plan for sustainable development of basic education in China's western development regions defines nine main strategies to improve the quality and equity of basic education, while also addressing the challenges of economic and social development.

Teacher Development Model: This model focuses on teacher training and professional development, enhancing teachers' professional competence through regular training, incentive mechanisms, inter-school exchanges, and attention to mental health, thereby promoting educational modernization. It emphasizes the integration of research and teaching to enhance educational quality.

Financial Management Norm Model: This model establishes systems for budget management, audit supervision, and information disclosure, ensuring the rational use of funds. By implementing performance evaluation mechanisms, it

facilitates the scientific and rational allocation of funds to maximize educational resource utilization.

Infrastructure Construction Model: Improving infrastructure is fundamental to sustainable educational development. This entails increasing investment in school construction, upgrading modern teaching and sports facilities, optimizing the online environment, and providing a safe and comfortable learning environment for students.

Administrative Efficiency Model: This model enhances management efficiency through deregulation and the establishment of an information technology framework, reducing administrative barriers and increasing service awareness. It also creates feedback mechanisms to flexibly respond to the needs of teachers and students, thereby improving the quality of administrative services.

Socio-Cultural Influence Model: The socio-cultural context is crucial to basic education. Through advocacy and cooperation between families and schools, this model aims to enhance societal emphasis on education, encourage community participation, and foster a supportive social environment.

Policy and Legal Support Model: This model focuses on improving policy and legal protections, from the formulation of targeted educational policies to the implementation of monitoring and evaluation mechanisms, and providing legal aid, prioritizing policy implementation and ensuring the legitimate rights and interests of teachers and students.

Economic Development Strategy Model: This model promotes the integration of education with local industries, implements educational poverty alleviation initiatives, and strengthens employment services and entrepreneurship support, achieving a dual development of economy and education.

Technological Advancement and Application Model: This model leverages technology, such as developing smart campuses and promoting online education, to provide students with diverse learning resources and enhance the technological content of education.

Geographical Environment Improvement Model: This model strengthens the construction of transportation and campus living facilities, improving external conditions to provide safe and high-quality foundational conditions for education.

In summary, this strategy plan aims to enhance the quality and sustainable development capacity of basic education in China's western development regions through systematic analysis and planning, integrating specific measures from multiple aspects. These strategies complement one another, focusing on internal educational improvements as well as social support and external environment optimization to achieve the dual goals of educational equity and quality enhancement. Through continuous implementation and adjustment, the future of basic education in the western regions is expected to witness promising development prospects.

Part 3: Assessment of the Suitability and Feasibility of Sustainable Development Strategies for Basic Education in developing areas of western China.

According to the third research objective, the researchers invited five experts to evaluate the effectiveness of sustainable development strategies for basic education in the western regions of China. They analyzed the suitability and feasibility of nine core strategies. The assessment results indicate a positive outlook for these strategies. Firstly, in the evaluation of the suitability of each strategy, the average scores ranged from 4.31 to 4.86, with all ratings falling at high or the highest levels, suggesting that the developed strategies have a high degree of suitability for implementation in the region. This indicates that these strategies are well-positioned to meet the current developmental needs of basic education and contribute to the sustainability of education. Secondly, regarding feasibility, the scores for each strategy ranged from 4.04 to 4.71, again reflecting high or the highest levels of ratings, demonstrating that these strategies possess strong feasibility and can effectively enhance the quality and equity of basic education.

The assessment results indicate that the strategies for the sustainable development of basic education in the western regions of China exhibit a high degree

of suitability and feasibility. These strategies not only address current educational challenges but also provide practical methods and support for enhancing the overall quality and sustainability of the educational system in the region. This comprehensive framework injects new vigor into educational reform, ensuring a sustained positive impact in the future.

Discussion

Research on Sustainable Development Strategies for Basic Education in the Western Development Regions of China: Researchers Discuss Findings Divided into Three Parts

Part 1: Research Findings on the Current Status of Sustainable Development of Basic Education in the Western Development Regions of China

The analysis of the academic management status of basic education in the Western Development Regions indicates a generally positive management situation; however, there are still notable shortcomings. Firstly, the level of teacher participation in educational planning shows that their roles are not being fully utilized. Teachers' opinions are often overlooked, leading to a disconnect between management strategies and the actual needs of the classroom. Zhao Yue (2015) and Wang Wei (2013) emphasize that teacher involvement in decision-making can enhance the effectiveness of educational policies, thus necessitating the establishment of mechanisms for teacher participation. Secondly, the state of training support reflects inadequate professional training for teachers and administrators. Li Yimei (2019) argues that high-quality educational management relies on teachers' professional capabilities, and current training needs to encompass management and assessment skills to meet the demands of educational reform. In terms of resource allocation, insufficient educational resources in remote areas adversely impact the quality of teaching. McMahon et al. (2004) point out that diversity and accessibility of educational resources are critical for improving educational quality, highlighting the need for rational distribution of educational resources.

In analyzing the status of budget management, there is an overall indication of positive managerial capability, yet improvements are still necessary. The low level of knowledge among teachers regarding procurement reflects a need to enhance their professional competencies. Johnston and Meyer (2016) note that teachers' procurement capabilities directly influence resource allocation, making it essential for training to include aspects of teachers' professional development. The timeliness of distributing civil servant welfare funds reveals insufficient liquidity and efficiency of funds. Bandura (1997) emphasizes that timely allocation of funds can enhance employee satisfaction, while delays may affect teacher morale. Despite relatively high transparency in budget reviews, the scores for resource mobilization and investment management indicate that resource allocation and management require further optimization. Gordon and Noyes (2007) argue that efficient resource management enhances educational quality and ensures equity, necessitating that managers focus on the rational use of resources.

Regarding personnel management, schools exhibit positive control and oversight of teacher behavior; however, a significant trend of teacher turnover-especially in remote areas-impacts the quality of education and resource allocation. Low salaries and working conditions are the main reasons, with Smith (2020) demonstrating that improved conditions can enhance teachers’ willingness to stay. Measures for incentive mechanisms have not been effectively implemented; Johnson and Lee (2019) indicate that career development opportunities are also crucial for improving teacher retention rates. High scores in information technology training highlight its importance in education, but a systematic training mechanism needs to be established to ensure teachers effectively apply learned technologies.

In the area of general administration, schools scored well on facility construction, but issues of uneven resource distribution persist. Research by Chen and Wang (2020) indicates that imbalanced resource allocation significantly affects educational quality, resulting in disparities in learning outcomes. Although administrative management scores are relatively high, scores for the application of information technology indicate that the level of information construction still needs

enhancement. Li et al. (2021) emphasize that an effective information management system is crucial for improving administrative efficiency. The scores related to campus health management and communication services also reflect shortcomings in daily administrative services, where effective administration is key to enhancing satisfaction.

In the analysis of internal factors affecting school management in the Western Development Regions of China, although personnel and management levels are commendable, significant shortcomings still exist. While teachers demonstrate good professional qualifications and teaching skills, the stability of financial conditions and government support face challenges. Research shows that stable financial backing is vital for the sustainable development of schools, with government funding directly impacting the quality of education and the availability of teaching resources (Zhang & Chen, 2021). Although the performance of learning materials and resources is good, the adequacy of teaching facilities is low, indicating a need for increased investment in school infrastructure. A good teaching environment is crucial for student performance and teacher efficiency (Wang, 2020). Despite clear annual educational plans and teaching objectives, insufficient internal communication and coordination mechanisms may affect teaching efficiency. Effective internal communication can enhance team collaboration and teacher morale; therefore, school management needs to prioritize and improve communication mechanisms to facilitate efficient decision-making and teamwork (Li et al., 2022).

In the analysis of external factors, while social and cultural aspects perform well-with high scores on the harmonious coexistence of different ethnic groups-the community's involvement in educational activities is low, indicating a need to strengthen interaction between families and communities. Research shows that active community participation significantly improves educational outcomes, particularly in marginalized areas, which is critical for teaching quality (Schmidt & Cummings, 2020). In legal terms, support for equitable legal frameworks scores high, yet evaluations of educational policies targeting vulnerable children indicate insufficient policy support for these specific groups. Experts recommend that

improving policies can effectively safeguard the rights of vulnerable children to receive equal education (Miller & Watson, 2019). Economically, self-sufficient agriculture highly promotes family livelihoods, but the overall economic conditions provide inadequate financial support for educational development, and cooperative support capabilities are weak, reflecting how poor economic foundations constrain educational advancement. Scholars note the close relationship between economic stability and educational development, suggesting that economic growth should be a critical focus for improving educational quality (Chen & Zhang, 2020).

Basic education in Western China has achieved certain progress in academic management, budget management, personnel management, and general administration; however, continuous improvement in areas such as teacher participation, professional training, resource equity, and information technology construction is necessary to drive overall educational development. External factors such as societal, legal, and economic conditions support school management to some extent, but efforts are still needed to enhance community involvement, policy support for specific groups, and economic stability to improve overall educational effectiveness and equity.

Part 2: Research Findings on the Construction Strategies of Sustainable Development for Basic Education in China's Western Development Regions

The strategies proposed for the sustainable development of basic education in developing areas of western China cover various fields, such as teacher training, financial management, and infrastructure development; however, they also reveal some shortcomings and deficiencies.

Firstly, while specific measures for teacher training have established plans for continuous training and professional development, the actual implementation may be constrained by teachers' heavy workloads and uneven access to training resources. Research indicates that teachers' professional development requires a flexible training mechanism closely aligned with local educational realities (Knight & Dron, 2019). If teachers are continually pushed to participate in an excessive number

of courses for utilitarian purposes, it may lead to teacher burnout, ultimately diminishing their enthusiasm and teaching quality.

Secondly, in terms of financial management regulations, although a budget management system and auditing oversight mechanisms have been established, practical operations still face challenges such as insufficient local financial resources and a lack of qualified financial managers. Scholars point out that transparent and efficient financial management can improve the utilization efficiency of educational resources, but in resource-scarce environments, exploring how to achieve this goal is critical (Miller et al., 2018). The absence of professionally trained financial personnel can easily lead to poor decision-making and waste of funds.

Regarding infrastructure development, although there is an emphasis on equipping schools with modern teaching facilities, many schools in remote and rural areas struggle to obtain necessary updates and maintenance due to limited financial and human resources, which directly affects education quality. The literature indicates that the condition of school infrastructure has a direct impact on academic performance and student engagement (Anderson, 2020).

In terms of administrative efficiency, while goals such as streamlining administration and enhancing information technology construction have been proposed, the feasibility of actual implementation still requires evaluation. Over-simplified administrative management can lead to inadequate supervision, thereby affecting the quality assurance of education (He & Wang, 2021). Effective information management necessitates strong technical support and training for staff; however, in some regions, support in these areas remains insufficient.

Concerning strategies addressing social and cultural influences, although measures to enhance cooperation between families and schools and community participation have been suggested, these often require a supportive cultural and educational atmosphere. Research shows that the degree of community involvement in education directly impacts educational outcomes (Burch, 2019). Therefore, relying solely on policy-driven approaches and promotional measures is insufficient to achieve deep-seated transformation.

Overall, while the sustainable development strategy for basic education in western China encompasses broad and scientifically grounded elements, there is still a need for in-depth exploration and optimization in areas such as detailed implementation, adaptation to regional realities, and rational resource allocation to ensure that the strategies can be effectively realized and genuinely enhance the quality of education and sustainable development.

Part Three: evaluation Results of the Suitability and Feasibility of Sustainable Development Strategies for Basic Education in the Western Regions of China**

The assessment results of the sustainable development strategies for basic education in the western regions of China reveal that both suitability and feasibility are at a high level, underscoring the rigor of strategy formulation, which has been evaluated through expert systems to ensure real relevance and practicality. In the strategy for developing the teaching workforce, continuous training and professional development for teachers have been identified as vital measures to enhance skills and digital literacy (Li & Sun, 2021). However, the teachers' workload often impacts their participation in training programs. Although communication and collaboration among teachers are positively evaluated, a lack of organization and support can diminish effectiveness (Chen et al., 2020), indicating a need to establish a systematic communication platform.

In the strategy concerning financial management standards, the construction of a budget management system demonstrates effectiveness, although a lack of transparency remains an issue. Liang et al. (2019) noted that complex audit procedures lead to inefficient use of funds; while the audit supervision mechanism is recognized, superficial audits lacking enforcement cannot eliminate corruption.

The scores for infrastructure development are excellent, yet rural and remote areas face funding shortages. Su et al. (2020) emphasize that infrastructure investments need to be aligned with local economic development to enhance resource efficiency.

Despite high ratings for modern teaching equipment, the lack of subsequent maintenance continues to be a drawback in low-income areas (Wang, 2018).

The strategy for administrative management efficiency scores highly, identifying the streamlining of approval processes as effective; however, the management's enforcement capability and acceptance of new processes may influence implementation (Zhou et al., 2021). The development of information technology is recognized, but many schools have failed to effectively utilize technology to optimize management, resulting in inefficient decision-making (Li, 2020).

Regarding social and cultural influences, community involvement receives a high score in recommendations, but the actual level of engagement is insufficient, limiting improvements in educational quality. Di et al. (2019) indicate that the interaction between education and the community effectively enhances quality, making family-school cooperation essential (Yang, 2020).

In terms of policy and legal support, clear educational policies perform excellently, but monitoring mechanisms and enforcement effectiveness urgently need to be strengthened (Zhang, 2020). Legal aid is crucial for protecting the rights and interests of teachers and students, but resources still appear inadequate (Xu et al., 2021).

Overall, despite the outstanding performance of sustainable development strategies for basic education in the western regions of China, attention must be given to issues such as inadequate funding transparency, lagging infrastructure, and insufficient community participation. A collective effort is required to achieve sustainable development goals.

Recommendations

When discussing sustainable development strategies for basic education in the western regions of China, it is crucial to consider multiple factors to achieve comprehensive enhancement. Mainly includes the following six aspects:

1. Strengthening teacher training is essential. Regular online and offline training sessions should be organized to improve teachers' educational philosophies and teaching skills. Additionally, establishing a multidimensional incentive mechanism, including both material and spiritual rewards, can effectively boost teachers' participation and facilitate the sharing of quality educational resources through inter-school.

2. Financial management standardization cannot be overlooked. It is important to establish a comprehensive budgeting management system and a transparent auditing mechanism to enhance resource utilization efficiency. Furthermore, providing professional training for financial management personnel can reduce decision-making errors, ensure the transparent flow of educational funds, and improve operational efficiency.

3. Increased investment in school buildings and teaching facilities in rural and remote areas is necessary to create a conducive learning environment. Improving the campus network environment to support online education and enhancing sports facilities are vital to ensuring the physical and mental health of students.

4. Optimizing administrative management efficiency is also key. This can be improved from four main aspects: 1) Enhance Academic Administration by regularly conducting both online and offline training to improve teachers' professional skills and academic research capabilities, while also paying attention to teachers' mental health. 2) Strengthen Budget Management by establishing a clear budget management system to ensure that funds are used in reasonable directions. This includes enhancing the auditing of educational fund usage, regularly disclosing the income and expenditure of educational funds, accepting social supervision, and ensuring the compliance and transparency of fund usage. 3) Improve Personnel Administration by establishing incentive mechanisms, conducting performance evaluations, periodically assessing work effectiveness, rewarding outstanding teachers, increasing career attractiveness, and enhancing work efficiency. 4) Optimize General Administration by reducing unnecessary approval processes, improving administrative efficiency, advancing the informatization of educational management, establishing

effective feedback mechanisms to promptly understand the needs of teachers and students, and adjusting management measures accordingly.

5. From a socio-cultural perspective, strengthening home-school cooperation and community involvement is essential to foster a positive educational atmosphere. Policy and legal support form the foundation for development; targeted educational policies should be formulated based on regional conditions to ensure educational equity and quality.

6. Economic development strategies should be done to promote the integration of education with local industries, implementing measures like education poverty alleviation to enhance the economic foundation and drive educational improvements. Regarding technological advancements, building smart campuses and promoting online education, along with strengthening technical training, will support enhancements in educational management and teaching quality, while also improving transportation and campus environments to create a safe and healthy learning space.

Future Researches

The sustainable development of basic education in the western regions of China is a complex and significant research topic involving multiple levels of schools, government, and society. This study offers a preliminary exploration of this issue, and future research could focus on three aspects to enhance the implementation of educational policies and overall educational quality.

Firstly, optimizing the allocation of educational resources is a crucial foundation for the development of basic education. Accurate analyses should be conducted to identify the educational resource needs of different administrative regions, particularly in remote areas. By investing strategically and allocating resources precisely, efforts can be made to bridge the educational gap between regions. Additionally, encouraging community involvement in educational projects and integrating resources from businesses and non-governmental organizations will

create a diversified investment structure to ensure the efficient use of educational resources.

Secondly, prioritizing the professional development and support of the teaching workforce is a core strategy for improving educational quality. It is recommended to implement a systematic teacher training mechanism that continuously enhances teachers' teaching and management skills. Moreover, establishing feasible career development pathways and diverse incentive measures will attract talented individuals to enter the education field. Improving teachers' working environments and paying attention to their mental well-being will help increase job satisfaction and retention rates.

Lastly, the effective application of information technology and the enhancement of management efficiency will be critical entry points for future educational development. Strengthening the information infrastructure, developing online education platforms, and intelligent management systems will facilitate the digital management and real-time monitoring of educational resources. Utilizing data analysis tools to optimize educational decision-making will help educational administrators timely identify and resolve issues, thereby enhancing management efficiency and teaching effectiveness.

Through these efforts, we aim to ensure that educational policies and measures can be steadily implemented, achieving both educational equity and quality improvement. The future of basic education will better meet societal needs and development trends, driving long-term progress in the western regions.

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Appendices

Appendix A

List of Specialists and Letters of Specialists Invitation for IOC Verification

Specialists for IOC Verification

NO.	Name-Surname	Position/Workplace
1	Dr. Keowalee Rangsisuttaporn	Deputy Director, Research Institution and Development, Uttaradit Rajabhat University
2	Associate Professor Dr. Thayata Rattanaphinyowanich	Vice President, Bansomdejchaopraya Rajabhat University
3	Associate Professor Dr. Wichian Intarasompun	Lecturer, Educational Management and Learning Management Innovation Program, Graduate School, Bansomdejchaopraya Rajabhat University
4	Professor. He Xiaojun	Leshan Normal University, Director of the School of Educational Sciences.
5	Associate Professor Dr. Dan Qiang	Vice Dean of the School of Tourism at Leshan Normal University, Sichuan Province, China.

MHESI 0643.14/ 2201

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Itsaraphap Road, Hiranruchi,
Thonburi, Bangkok, Thailand
10600

13 August 2024

Subject: Invitation to validate research instrument

Dear Associate Professor Dr.He Xiaojun
Professor of School of Management, Dean of the Department of Education,
Leshan Normal University, Sichuan Province

Mr. Chen Xunwei is a Doctoral student in Educational Management for Sustainable Development of Bansomdejchaopraya Rajabhat University. He is undertaking research entitled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China".

The thesis advisory committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

With your expertise, we would like to ask your permission to validate the attached research instrument. In this regard, we would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Yours faithfully

(Asst. Prof. Dr.Tanaput Chancharoen)
Vice Dean of Graduate School for Dean of Graduate School

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13 August 2024

Subject: Invitation to validate research instrument

Dear Associate Professor Dr.Dan Qiang
Doctor of Education, Director of the Education Center of Leshan Normal University, Sichuan Province

Mr. Chen Xunwei is a Doctoral student in Educational Management for Sustainable Development of Bansomdejchaopraya Rajabhat University. He is undertaking research entitled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China".

The thesis advisory committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

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Yours faithfully

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10600

13 August 2024

Subject: Invitation to validate research instrument

Dear Associate Professor Wichian Intarasompun, Ph.D.
Lecturer, Educational Management and Learning Management Innovation Program, Graduate School, Bansomdejchaopraya Rajabhat University

Mr. Chen Xunwei is a Doctoral student in Educational Management for Sustainable Development of Bansomdejchaopraya Rajabhat University. He is undertaking research entitled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China".

The thesis advisory committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

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13 August 2024

Subject: Invitation to validate research instrument

Dear Associate Professor Thayata Rattanaphinyowanich, Ph.D.
Vice President, Bansomdejchaopraya Rajabhat University

Mr. Chen Xunwei is a Doctoral student in Educational Management for Sustainable Development of Bansomdejchaopraya Rajabhat University. He is undertaking research entitled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China".

The thesis advisory committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

With your expertise, we would like to ask your permission to validate the attached research instrument. In this regard, we would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Yours faithfully

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13 August 2024

Subject: Invitation to validate research instrument

Dear Keowalee Rangsisuttaporn, Ph.D.
Deputy Director, Research Institution and Development, Uttaradit Rajabhat University

Mr. Chen Xunwei is a Doctoral student in Educational Management for Sustainable Development of Bansomdejchaopraya Rajabhat University. He is undertaking research entitled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China".

The thesis advisory committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

With your expertise, we would like to ask your permission to validate the attached research instrument. In this regard, we would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Yours faithfully

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Appendix B

Official Letter

Participant List for Focus Group Interviews and Discussions on Strategic Drafting

NO.	Name-Surname	Position/Workplace
1	Associate Professor Chen Peng	Director of the Legal Studies Research Center at Sichuan Normal University.
2	Professor Liu Yan	Dean of the School of Education Science at Anshan Normal University in Liaoning Province, China.
3	Professor Dr. Yuanyun Ming	Master's supervisor at the School of Education Sciences, Liaocheng University, Shandong Province, China.
4	Associate Professor Dr.Xu Taijun	Vice Dean of the School of Public Administration, Xihua Normal University.
5	Associate Professor Dr. Zhang Ke	Director of the School Office at Leshan Normal University, Sichuan Province, China.
6	Dr. Qiang Guangping,	Director of the Student Management Department at Leshan Normal University, Sichuan Province, China.
7	Associate Professor Zhao Qinghua Associate Professor	Principal of Leshan Experimental Primary School, Sichuan Province, China
8	Yin Huachao	Principal of Pengzhou Middle School, Sichuan Province
9	Associate Professor Ren Bo	Principal of Meishan Middle School in Sichuan Province.
10	Dr. Zheng Zhilin	Deputy Director of the Educational Information Research Center at Chengdu University of Technology.

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16 August, 2024

Subject Invitation to participate in focus group interviews and strategic drafting discussions
Dear Associate Professor Chen Peng

Attachment 1. Questionnaires
2.Structured interview

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

This study will utilize questionnaires, interview outlines, and assessment forms as tools. In this research, the investigator will need to collect the required data through surveys and structured interviews. Considering your experience in the field of education, I expect you to participate in this interview and survey activity.

Thank you for your time and consideration. We look forward to your valuable feedback.

Sincerely,

(Asst.Prof.Dr.Nukul Sarawong)
Dean of Graduate School
Bansomdejchaopraya Rajabhat University

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16 August, 2024

Subject Invitation to participate in focus group interviews and strategic drafting discussions
Dear Professor Liu Yan

Attachment 1. Questionnaires
2.Structured interview

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

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Thank you for your time and consideration. We look forward to your valuable feedback.

Sincerely,

(Asst.Prof.Dr.Nukul Sarawong)
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16 August, 2024

Subject Invitation to participate in focus group interviews and strategic drafting discussions
Dear Professor Dr. Yuanyun Ming

Attachment 1. Questionnaires
2.Structured interview

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

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Thank you for your time and consideration. We look forward to your valuable feedback.

Sincerely,

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16 August, 2024

Subject Invitation to participate in focus group interviews and strategic drafting discussions
Dear Associate Professor Dr.Xu Taijun

Attachment 1. Questionnaires
2.Structured interview

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

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Thank you for your time and consideration. We look forward to your valuable fsedback.

Sincerely,

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16 August, 2024

Subject Invitation to participate in focus group interviews and strategic drafting discussions
Dear Associate Professor Dr. Zhang Ke

Attachment 1. Questionnaires
2.Structured interview

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

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Thank you for your time and consideration. We look forward to your valuable feedback.

Sincerely,

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๑๖ August, 2024

Subject Invitation to participate in focus group interviews and strategic drafting discussions
Dear Dr. Qiang Guangping

Attachment 1. Questionnaires
2.Structured interview

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

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Thank you for your time and consideration. We look forward to your valuable feedback.

Sincerely,

(Asst.Prof.Dr.Nukul Sarawong)
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1061 Itsarapap 15 Itsarapap Rd.
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16 August, 2024

Subject Invitation to participate in focus group interviews and strategic drafting discussions
Dear Associate Professor Zhao Qinghua

Attachment 1. Questionnaires
2.Structured interview

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

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Sincerely,

(Asst.Prof.Dr.Nukul Sarawong)
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16 August, 2024

Subject Invitation to participate in focus group interviews and strategic drafting discussions
Dear Associate Professor Yin Huachao

Attachment 1. Questionnaires
2.Structured interview

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

This study will utilize questionnaires, interview outlines, and assessment forms as tools. In this research, the investigator will need to collect the required data through surveys and structured interviews. Considering your experience in the field of education, I expect you to participate in this interview and survey activity.

Thank you for your time and consideration. We look forward to your valuable feedback.

Sincerely,

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Ref.No.MHESI 0643.14/0234

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Thonburi Bangkok 10600

16 August, 2024

Subject Invitation to participate in focus group interviews and strategic drafting discussions
Dear Dr. Zheng Zhilin

Attachment 1. Questionnaires
2.Structured interview

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

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Thank you for your time and consideration. We look forward to your valuable feedback.

Sincerely,

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List of experts for focus group discussion for review of draft Strategy

NO.	Name-Surname	Position/Workplace
1	Professor Dr. She Wanbing	Dean of the School of Educational Science at Leshan Normal University, Sichuan Province, China.
2	Associate Professor Dr. Yang Rui	Director of the Publicity Department at Leshan Normal University, Sichuan Province, China.
3	Professor Dr.Kang Bo	Deputy Director of the Academic Affairs Office at Sichuan Agricultural University, China
4	Dr. Zhang Wenjuan	Director of the Teacher Development Research Center at Leshan Normal University, Sichuan Province, China
5	Associate Professor Lan Shihui	Director of the Philosophy Research Center at Neijiang Normal University, Sichuan Province, China.
6	Associate Professor Li Yuanhao	Director of the Academic Affairs Office at Maban Middle School, Sichuan Province, China.
7	Professor Li Limei	Vice Dean of the Ginkgo Management College in Chengdu, Sichuan Province, China.

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1061 Itsarapap 15 Itsarapap Rd.
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5 September, 2024

Subject Invitation to participate in the strategic assessment as an expert
Dear Associate Professor Dr. Yang Rui

Attachment Suitability and Feasibility Assessment Form

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor). the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

This study proposes a plan to promote the sustainable development of basic education in the western development regions of China, which includes 9 main strategies and 45 specific measures. Given your experience in the relevant field, I would appreciate your assessment of the suitability and feasibility of this plan.

Thank you for your time and consideration. We look forward to your valuable feedback.

Sincerely,

(Asst.Prof.Dr.Nukul Sarawong)
Dean of Graduate School
Bansomdejchaopraya Rajabhat University

Tel. +660204737000 Ext.
Fax.+660204737000

Ref.No.MHESI 0643.14/ว 2685

Graduate School
Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September, 2024

Subject Invitation to participate in the strategic assessment as an expert
Dear Professor Dr.Kang Bo

Attachment Suitability and Feasibility Assessment Form

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

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Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September, 2024

Subject Invitation to participate in the strategic assessment as an expert
Dear Dr. Zhang Wenjuan

Attachment Suitability and Feasibility Assessment Form

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

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Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September, 2024

Subject Invitation to participate in the strategic assessment as an expert
Dear Associate Professor Lan Shihui

Attachment Suitability and Feasibility Assessment Form

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

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1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September, 2024

Subject Invitation to participate in the strategic assessment as an expert
Dear Associate Professor Li Yuanhao

Attachment Suitability and Feasibility Assessment Form

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

This study proposes a plan to promote the sustainable development of basic education in the western development regions of China, which includes 9 main strategies and 45 specific measures. Given your experience in the relevant field, I would appreciate your assessment of the suitability and feasibility of this plan.

Thank you for your time and consideration. We look forward to your valuable feedback.

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(Asst.Prof.Dr.Nukul Sarawong)
Dean of Graduate School
Bansomdejchaopraya Rajabhat University

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Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September, 2024

Subject Invitation to participate in the strategic assessment as an expert
Dear Professor Li Limei

Attachment Suitability and Feasibility Assessment Form

Regarding the paper titled "Strategy for Sustainable Development of Basic Education in Developing Areas of Western China", the author of the paper is Mr. Chen Xunwei, a PhD student in Sustainable Development Education Management at Bansomdej Chaophaya Rajabhat University, Thailand, with code number 6473139003, under the guidance of Assoc. Prof. Dr. Narongwat Mingmit (Major Advisor) and Assoc. Prof. Dr. Chollada Phongpattanayothin, Assoc. Prof. Dr. Luxana Keyuraphan (Co-advisor), the research will use questionnaires, interview outlines, and evaluation questionnaires as tools.

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Thank you for your time and consideration. We look forward to your valuable feedback.

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Dean of Graduate School
Bansomdejchaopraya Rajabhat University

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Appendix C

Research Instrument

Questionnaire

Title: The Current Status, Issues, and Factors of Basic Education Schools in Developing Areas of Western China

Description :

1. This questionnaire aims to investigate the current status, issues, and related factors of basic education schools in the western development region of China. This study is part of a larger research on the sustainable development strategy of basic education in the western regions. The findings will provide reference information for participants in future planning to address, improve, and develop school management.
2. This questionnaire is divided into three parts:

Part One: Collection of personal information

Part Two: Issues in the management of basic education schools in the western development region

Part Three: Factors related to the management of basic education schools in the western development region

3. Please answer the questionnaire truthfully and completely to obtain accurate and comprehensive information. Thank you for kindly responding to the questionnaire.

Chen Xunwei
A doctoral student in Sustainable Development Education
Bansomdejchaopraya Rajabhat University

Part I : Respondents' Personal Information

1.Types of Schools:

❒Elementary school ❒Middle school ❒High school

2.Gender:

❒Male ❒Female

3.Age:

❒25 years or below ❒26 to 35 years ❒36 to 45 years

❒46 to 55 years ❒56 years or above

4.Education:

❒Bachelor's degree ❒Master's degree ❒Doctoral degree

5.Title (for teaceers) :

❒Junior Title ❒Intermediate Title

❒Associate Senior Title ❒Senior Title

6.Position (for managers and stakeholders)

❒Educational Administrator

❒Educational Teaching Manager

❒Vice Principal and Above School Leadership ❒Technical personnel

❒Government agency personnel

❒External mentors

7. Work experience:

❒Within 5 years ❒5 to 10 years

❒11 to 15 years ❒16 to 20 years

❒More than 20 years

Part Two : Questionnaire on the Current Situation and Issues of Basic Education Schools in Developing Areas of Western China

Instructions:

Please read the following items (a total of 50 questions) carefully and select one of the five levels according to your actual situation. The specific descriptions are as follows:

5 points indicate that you strongly agree with the content.

4 points indicate that you somewhat agree with the content.

3 points indicate that you remain neutral toward the content.

2 points indicate that you somewhat disagree with the content.

1 point indicates that you strongly disagree with the content.

Point no.	School management problems In the developing western region of China	Problem level				
		5	4	3	2	1
Academic Administration						
1	How do you perceive the level of teacher involvement in the development of educational plans or programs?					
2	Is the school able to implement academic work according to the established action plan?					
3	Do you believe the school has continuity and systematization in supervising and evaluating academic plans or projects?					
4	Is the school curriculum sufficiently detailed during implementation to meet students' learning needs?					
5	Does learning management effectively address the needs of parents and the community?					
6	Do you think the school places too much emphasis on preparing for competitive exams when organizing learning?					
7	How supportive is the school of innovation and technology in learning management?					
8	Do students have adequate opportunities to tilize local learning resources for study and research?					

Point no.	School management problems In the developing western region of China	Problem level				
		5	4	3	2	1
9	Does the school provide sufficient training to enhance the academic management capabilities of teachers and administrators?					
10	Do you believe the measures taken by the school to ensure educational quality are effective?					
Budget Management						
1	Do you think the school's budget planning covers the mission of all programs and projects?					
2	Is the government's investment budget for soil and construction sufficient to support the school's implementation?					
3	Do teachers possess the necessary knowledge and skills when executing work procurement?					
4	Has the monitoring of school budget expenditures formed a continuous system?					
5	Do you believe that the disbursement of civil servant welfare funds provided by the government is timely?					
6	Is the school able to effectively apply existing procedures during the procurement process?					
7	Do you think the budget allocation is transparent and subject to oversight?					
8	Does the school conduct regular budget audits to ensure compliance?					
9	Is the mobilization and investment of educational resources effectively managed?					
10	Do you believe that accountability in budget management is being implemented in the school?					
Personnel Administration						
1	Is there currently a shortage of teachers in key subjects and remote areas?					
2	Do schools provide sufficient welfare support and safety guarantees for teachers in rural and remote areas?					

Point no.	School management problems In the developing western region of China	Problem level				
		5	4	3	2	1
3	Are new teachers receiving adequate training and guidance in teaching practice?					
4	Do schools encourage and support teachers to utilize local resources for innovative teaching?					
5	Have schools established effective mechanisms for controlling, supervising, monitoring, and educating teachers to maintain discipline and behavioral standards?					
6	Is there a noticeable trend of teachers in remote areas moving to urban or developed regions?					
7	Is teachers' professional identity influenced by their work environment and compensation?					
8	Do schools offer sufficient training in information technology for teaching to meet modern educational needs?					
9	Do the evaluation and incentive mechanisms for teachers effectively motivate their work enthusiasm?					
10	Is there a shortage of high-quality professional teachers in the allocation of teaching resources?					
General Administration						
1	Do you think the current administrative management of the school effectively supports the achievement of educational goals?					
2	Do you believe that the current communication, telephone, and postal services of the school meet the daily administrative management needs?					
3	Does the school have adequate basic living facilities, such as teacher dormitories and cafeterias, to ensure the daily lives of teachers and students?					
4	Is the school's health status management (including student and staff health check-ups, sanitary conditions, etc.) in place, and are there any safety hazards?					
5	Is the school's information system (such as student information and academic management) updated in a					

Point no.	School management problems In the developing western region of China	Problem level				
		5	4	3	2	1
	timely manner and effectively supports the school's planning and management?					
6	What is the current state of the school's use of technology (such as digital teaching tools and online management platforms) for work and management learning?					
7	How is the community's support and participation in basic education?					
8	Are the school's classrooms, laboratories, and other teaching facilities conducive to learning and management?					
9	What is the condition of the school's buildings (including classrooms, assembly areas, restrooms, etc.)?					
10	Has the school established a mechanism for controlling, monitoring, and evaluating activity outcomes to ensure the effectiveness and efficiency of administrative management?					

Part 3: Factors Related to the Management of Basic Education Schools in Developing Areas of Western China

Instructions:

Please read the following items (a total of 30 questions) carefully and select one of the five levels according to your actual situation. The specific descriptions are as follows:

5 points indicate that you strongly agree with the content.

4 points indicate that you somewhat agree with the content.

3 points indicate that you remain neutral toward the content.

2 points indicate that you somewhat disagree with the content.

1 point indicates that you strongly disagree with the content.

Point no.	School management problemsIn the developing western region of China	Problem level				
		5	4	3	2	1
Internal factors affecting school management						
1	**Personnel** Is the staffing adequate to meet the daily teaching and management needs of the school?					
2	Do teachers' professional qualifications and teaching skills meet or exceed industry standards?					
3	How is the morale and team collaboration atmosphere among staff?					
4	**Financial** Is the school's financial status stable enough to meet daily operation and basic development needs?					
5	Is the funding support from the government and education departments timely and sufficient?					
6	Does the school have an effective financial management system to ensure transparency and efficiency in fund usage?					
7	**Materials and equipment** Are the teaching facilities (such as computers, laboratory equipment, etc.) sufficient and updated in a timely manner?					
8	Are the learning materials, reference books, and other					

Point no.	School management problemsIn the developing western region of China	Problem level				
		5	4	3	2	1
	resources for students abundant and easily accessible?					
9	What is the maintenance status of the school's infrastructure (such as classrooms, libraries, playgrounds, etc.)?					
. 10	**Management** Does the school management team possess professional management capabilities and effective decision-making mechanisms?					
11	Has the school established clear and actionable annual education plans and teaching goals?					
12	Is the communication and coordination mechanism within the school smooth enough to facilitate effective information flow up and down?					
External factors influencing school management						
1	**Social and Cultural** Do parents and the public recognize the importance of sending their children to education?					
2	Does the community actively participate in organizing and supporting educational activities?					
3	Can different ethnic groups coexist harmoniously and participate in community life?					
4	**Legal** Do local government regulations support the construction of educational facilities, such as schools and assembly buildings?					
5	Is there a fair legal framework for managing the appointment and transfer of educational officials?					
6	Does educational policy adequately consider the needs of early vulnerable children, especially in marginalized areas?					
7	**Economic** Is the economic situation of the community sufficient to provide necessary funding for educational development?					
8	Does the community's self-sufficient agriculture support family livelihoods and promote education?					

Point no.	School management problemsIn the developing western region of China	Problem level				
		5	4	3	2	1
9	Are there cooperatives or organizations established to improve economic conditions to support children's education?					
10	**Politics** Is the local government's attitude towards managing educational institutions positive and supportive?					
11	Are local politicians actively promoting and supporting the development of school management?					
12	Does local politics recognize and acknowledge the importance of educational management in marginalized areas?					
13	**Technology** Does the educational institution have an effective information technology system to assist in management?					
14	Can the school access internet and technological support from higher-level institutions?					
15	Does the educational institution have an internet system for online learning and management?					
16	**Geographical Environment** Is the geographical environment of the educational institution conducive to promoting ecotourism and cultural preservation?					
17	Is the school located in a geographical environment suitable for natural learning and research?					
18	Is there good economic flow and cooperation between communities in border areas?					

Structured Interview

Factors Influencing the Sustainable Development of Basic Education in Developing Areas of Western China.

Part 1: Personal Information

Interview Date & Interview Time:

Interviewer:

Interviewee:

Education background:

Identity:

From university:

Part 2: Statistical Table of Factors Influencing the Sustainable Development of Basic Education in the Western Development Regions of China.

Answer	Interviewer
Q1: What do you think are the advantages of sustainable development in basic education in the western development regions of China?	
1) Strong policy support: Current national policies have continuously increased investment in basic education in the western regions.	
2) Balanced educational resources: The government has implemented effective measures to promote the equitable distribution of educational resources.	
3) Gradual improvement of infrastructure: The hardware facilities of schools, such as classrooms, laboratories, and libraries, have been effectively improved.	
4) Strengthening of teaching staff: In recent years, a group of high-quality educational talents has been introduced or cultivated in the western regions, enhancing the teaching standards.	
5) Application of educational information technology: Information technology has become widespread in basic education, promoting	

Answer	Interviewer
the modernization of teaching methods.	
6) Gradual development of the local economy: Economic development in local areas has provided more material support and employment opportunities for basic education.	
7) Deepening regional cooperation: The western regions have engaged in extensive exchanges and cooperation with other regions or countries in the field of education.	
8) Rich natural and educational resources: The western regions boast a unique natural environment and abundant cultural resources.	
9) Student diversity and innovation capacity: The diversity and cultural backgrounds of students in the western regions help cultivate their innovative thinking and practical skills.	
10) Support from parents and society: The awareness and support from parents and the community regarding basic education continue to grow stronger.	
Q2: What do you think are the disadvantages of sustainable development in basic education in the western regions of China's large-scale development?	
1) Uneven distribution of educational resources: There is a significant imbalance in the distribution of educational resources within the western region or compared to other regions.	
2) Teacher compensation and incentive mechanisms: The compensation and incentive mechanisms for teachers do not attract and retain outstanding educators.	
3) Outdated teaching methods and philosophies: Some schools and teachers still use traditional teaching methods and philosophies, lacking innovation.	
4) Lagging infrastructure development: The infrastructure development of some schools is still lagging behind educational needs.	

Answer	Interviewer
5) Insufficient investment in education: Government and societal investments in basic education are inadequate to meet the demands of educational development.	
6) High student mobility: The high mobility of students in the western region affects the stability and continuity of educational quality.	
7) Insufficient family education support: Some families are unable to provide sufficient educational support for their children due to economic or other reasons.	
8) Lack of mental health education: Schools do not prioritize the mental health education of students and lack corresponding professional resources.	
9) Inadequate education quality evaluation system: The existing education quality evaluation system does not accurately reflect teaching effectiveness.	
10) Insufficient emphasis on cultivating innovation abilities: Schools do not sufficiently promote the cultivation of students' innovative thinking and practical abilities.	
Q3: What opportunities do you think exist for the sustainable development of basic education in the western regions of China?	
1) National policy tilt: The government has decided to continue increasing its support for basic education in the western regions, providing more policy and financial assistance.	
2) Technological advancement and informatization: The development of information technology brings more innovative and efficient teaching methods to basic education.	
3) Regional economic integration: The development of regional economic integration provides more opportunities for cooperation and growth in basic education.	

Answer	Interviewer
4) International educational exchange and cooperation: By collaborating and exchanging with international educational institutions, the quality of education can be enhanced.	
5) Increased social attention and investment: Public interest in basic education is gradually rising, and investment is continually increasing.	
6) Development of characteristic educational resources: The unique educational resources in the western regions, such as ecological tourism and ethnic culture, have been developed.	
7) Increased community and family involvement: Community and family participation in basic education is on the rise, creating a better educational synergy.	
8) Educational innovation and reform: More educational innovation and reform measures are being introduced at the national level to promote the sustainable development of basic education.	
9) Sharing of educational resources: Through the sharing of educational resources at regional or national levels, the overall educational quality in the western regions can be improved.	
10) Environmental education: The unique ecological environment of the western regions is becoming a valuable resource for basic education.	
Q4: What do you think are the threats to the sustainable development of basic education in the western regions of China's development?	
1) Intensified Competition for Educational Resources: With the increasing competition in education, the western region faces the risk of losing excellent teachers and students.	
2) Economic Fluctuations Impact: Economic fluctuations negatively affect the investment and quality of basic education in the western region.	

Answer	Interviewer
3) Issues of Educational Equity: Uneven distribution of educational resources is exacerbating issues of educational equity, impacting social stability.	
4) Natural Environmental Constraints: Harsh natural environments in some western areas pose challenges for the implementation of basic education.	
5) Uncertainty in Policy Changes: Significant fluctuations in national policies bring uncertainty to the development of basic education in the western region.	
6) Socio-Cultural Impacts: Outside cultures and social ideologies are impacting students' values and perceptions of education in the western region.	
7) Changes in Population Structure: Changes in population structure (such as aging and urbanization) have an impact on the demand for and models of basic education.	
8) Challenges of Cybersecurity and Information Technology: Advances in information technology pose new challenges such as cybersecurity and information leakage.	
9) Pressure from Educational Quality Assessment Systems: The rigor and diversity of educational quality assessment systems are placing greater pressure on schools and teachers.	
10) Pressure from International Competition: The western region faces competitive pressure from other countries and regions in the context of international education competition.	

Structured Interview

Strategy for Sustainable Development of Basic Education in Developing Areas of Western China

This Interview is divided into two parts:

Part 1: Personal Information

Part 2: Interview Outline on Issues, Methods, and Influencing Factors of Sustainable Development of Basic Education in the Developing Areas of Western China

Part 1: Personal Information

Interview Date & Interview Time:

Interviewer:

Interviewee:

Education background:

Identity:

From university:

Part 2: Interview Outline on Issues, Methods, and Influencing Factors of Sustainable Development of Basic Education in the Developing Areas of Western China

Instruction:

Please provide your opinion on the following statement

1. What specific visions and goals should we set to achieve the sustainable development of basic education?
2. What core concepts and principles should we follow when formulating a draft strategy for the sustainable development of basic education to ensure equity and quality in education?
3. What key elements should the core talent development program for sustainable development in basic education schools include to meet social needs and market changes?
4. In building the teaching staff, what key factors should be emphasized to enhance the overall quality of basic education?

5. What innovative suggestions can be made regarding teaching methods and approaches to enhance the effectiveness and attractiveness of basic education in the western regions?

6. How should the evaluation and feedback mechanism in basic education be designed and implemented to ensure its effectiveness and continuous improvement?

7. In the process of promoting the sustainable development of basic education in western regions, how should policy and legal support be effectively implemented?

8. How can we develop practical education investment and resource allocation strategies tailored to the geographical environment and economic development of western regions?

9. How can modern technological means be utilized to improve the effectiveness of teaching and management efficiency in basic education to meet the demands of new developmental situations?

10. What regulatory measures should we take in financial management to ensure the rational use and allocation of resources in basic education?

11. How can the impact of the socio-cultural environment on basic education be assessed to improve this environment to support the sustainability of education?

12. How can we optimize administrative management efficiency through multi-party collaboration to ensure that the policies and measures for basic education are effectively implemented?

Evaluation Form

Assessment of the Suitability and Feasibility of Sustainable Development Strategies for Basic Education in Developing Areas of Western China

Guidelines:

1. This questionnaire is a data collection tool for the second phase of this research, titled “Trategy for Sustainable Development of Basic Education in Developing Areas of Western China.” The research data will be used for research purpose 3: to assess the appropriateness and feasibility of sustainable development strategies for basic education in the Western China Development Regions.
2. Interviewees: 7 Chinese experts with knowledge and skills in strategic planning.
3. Requirements for Interviewees: The analysis results for this section will be evaluated by 7 experts, all of whom hold doctoral degrees. This group consists of one expert with knowledge and experience in strategy formulation, three academic administrators with associate professor titles or higher, one educational institution administrator with an associate professor title or higher, and two teachers with associate professor titles or higher. The evaluation will use a five-point rating scale, where respondents can only choose one level to assess the appropriateness and feasibility of sustainable development strategies for basic education in the Western China Development Regions.

Part 1: Personal Information

Interview Date & Interview Time:

Interviewer:

Interviewee:

Education background:

Identity:

From university:

Part 2: Part Two: Assessment Questionnaire on the Suitability and Feasibility of Sustainable Development Strategies for Basic Education in Developing Areas of Western China

Instructions:

Please read the following items (a total of 45 questions) carefully and select one of the five levels according to your actual situation. The specific descriptions are as follows:

5 points indicate that you strongly agree with the content.

4 points indicate that you somewhat agree with the content.

3 points indicate that you remain neutral toward the content.

2 points indicate that you somewhat disagree with the content.

1 point indicates that you strongly disagree with the content.

Strategic 1 : Development of the Teaching Staff	**Adaptability**					**Feasibility**				
	5	4	3	2	1	5	4	3	2	1
1.Continuous Training and Professional Development: Organize regular training courses for teachers that combine online and offline methods, covering various aspects such as educational philosophy, teaching methods, and the application of information technology, to enhance teachers' teaching skills and digital literacy.										
2.Incentive Mechanism Construction: Establish a system for recognizing and rewarding teachers, providing both material and spiritual rewards to outstanding teachers to encourage their active engagement in the education sector and increase the profession's attractiveness.										

Strategic 1 : Development of the Teaching Staff	Adaptability					Feasibility				
	5	4	3	2	1	5	4	3	2	1
3.Inter-school Exchange and Cooperation: Promote the mutual exchange of teachers between urban and rural schools, sharing quality educational resources to improve overall teaching standards.										
4.Mental Health Education: Establish a support system for teachers' mental health, offering counseling services to address their mental well-being and reduce occupational stress.										
5.Integration of Research and Teaching: Encourage teachers to participate in educational research activities, applying research findings in teaching practices to enhance the quality of education.										
Total										
Strategic 2 : Financial Management Standards	**Adaptability**					**Feasibility**				
	5	4	3	2	1	5	4	3	2	1
1.Budget Management System: Establish a sound budget management system to clarify the direction of fund usage, ensuring funds are utilized in a reasonable and effective manner.										
2.Auditing and Supervision: Strengthen auditing and supervision of educational fund usage to ensure compliance and transparency in fund allocation.										
3.Information Disclosure: Regularly disclose the revenue and expenditure of educational funds to accept social oversight and enhance the credibility of financial management.										
4.Financial Training: Enhance the professional training of financial management personnel to improve their business capabilities and legal awareness.										

Strategic 2 : Financial Management Standards	Adaptability					Feasibility				
	5	4	3	2	1	5	4	3	2	1
5.Performance Assessment: Establish a performance assessment mechanism for the use of educational funds, adjusting fund allocation strategies based on assessment results.										
Total										
Strategic 3 : Infrastructure Construction	**Adaptability**					**Feasibility**				
	5	4	3	2	1	5	4	3	2	1
1.School Building: Increase investment in the construction of school buildings in rural and remote areas to ensure that the facilities are safe, functional, and aesthetically pleasing.										
2.Teaching Equipment: Equip schools with modern teaching tools, such as multimedia teaching devices and laboratory instruments, to enhance the teaching conditions.										
3.Network Environment: Optimize the campus network environment to achieve full network coverage, providing strong support for online education.										
4.Sports Facilities: Improve campus sports facilities to meet students' physical exercise needs and promote their physical and mental well-being.										
5.Campus Safety: Strengthen the construction of campus safety facilities, such as surveillance systems and fire protection equipment, to ensure the safety of both teachers and students.										
Total										

Strategic 4 : Administrative Management Efficiency	Adaptability					Feasibility				
	5	4	3	2	1	5	4	3	2	1
1.Streamlining Administration: Reduce unnecessary administrative approval processes to enhance efficiency.										
2.Information Technology Development: Promote the development of information technology in educational management to achieve data sharing and process optimization.										
3.Performance Evaluation: Establish a scientific performance evaluation system to conduct regular assessments of management personnel, motivating them to improve work efficiency.										
4.Training and Education: Strengthen training and education for management personnel to enhance their management skills and service awareness.										
5.Feedback Mechanism: Establish an effective feedback mechanism to promptly understand the needs of teachers and students and adjust management measures accordingly.										
Total										
Strategic 5 : Socio-Cultural Impact	**Adaptability**					**Feasibility**				
	5	4	3	2	1	5	4	3	2	1
1.Promotion and Education: Strengthen the efforts in educational promotion and raise residents' awareness of the value of education to create a positive educational atmosphere.										
2.Community Involvement: Encourage community participation in the construction of basic education to collaboratively foster a favorable educational environment.										

Strategic 5 : Socio-Cultural Impact	Adaptability					Feasibility				
	5	4	3	2	1	5	4	3	2	1
3.Cultural Heritage: Integrate local culture into the teaching content to enhance students' sense of identity and pride in their native culture.										
4.Home-School Collaboration: Strengthen cooperation between families and schools to jointly focus on students' growth and development, thus forming a collaborative educational effort.										
5.Media Guidance: Utilize media to promote positive energy, showcase educational achievements, and increase societal attention to basic education.										
Total										
Strategic 6 : Policy and Legal Support	**Adaptability**					**Feasibility**				
	5	4	3	2	1	5	4	3	2	1
1.Policy Development: Formulate targeted educational policies that align with actual conditions to provide strong support for educational development.										
2.Legal Assurance: Improve the legal and regulatory framework for education to ensure fairness and quality in education.										
3.Implementation Supervision: Establish a sound mechanism for monitoring and evaluating the implementation of policies to ensure their effective execution.										
4.Legal Aid: Provide legal assistance for educational disputes to protect the legitimate rights and interests of teachers and students.										
5.Policy Promotion: Strengthen the promotion and interpretation of policies to enhance awareness and compliance.										
Total										

Strategic 7 : Economic Development Strategies	Adaptability					Feasibility				
	5	4	3	2	1	5	4	3	2	1
1.Industry Integration: Promote the integration of education and local industries to cultivate talents that meet market demands.										
2.Educational Poverty Alleviation: Increase investment in education in impoverished areas to break the cycle of intergenerational poverty through educational support.										
3.Employment Services: Enhance employment guidance and services to assist students in securing jobs and promote local economic development.										
4.Entrepreneurship Support: Encourage and support student entrepreneurship to inject new vitality into local economic development.										
5.Economic Cooperation: Strengthen economic cooperation and exchanges with other regions to jointly promote basic education and economic development.										
Total										
Strategic 8 : Technological Advancements and Applications	**Adaptability**					**Feasibility**				
	5	4	3	2	1	5	4	3	2	1
1.Smart Campus: Develop smart campuses that utilize technologies such as big data and cloud computing to enhance educational management levels.										
2.Online Education: Promote online education platforms to provide students with a wealth of learning resources.										
3.Intelligent Teaching: Introduce intelligent teaching tools to achieve personalized education and improve teaching effectiveness.										

Strategic 8 : Technological Advancements and Applications	Adaptability					Feasibility				
	5	4	3	2	1	5	4	3	2	1
4.Technical Training: Strengthen information technology training for teachers and students to enhance their technology application skills.										
5.Data Analysis: Establish a student learning data analysis system to provide a scientific basis for teaching improvements.										
Total										
Strategic 9 : Improvement of the Geographic Environment	**Adaptability**					**Feasibility**				
	5	4	3	2	1	5	4	3	2	1
1.Transportation Enhancement: Strengthening infrastructure development to improve transportation conditions, facilitating the travel of teachers and students.										
2.Environmental Protection: Enhancing campus environmental protection to create a green and ecological campus environment.										
3.Disaster Prevention and Mitigation: Strengthening the construction of disaster prevention and mitigation facilities, improving the school's ability to respond to natural disasters.										
4.Living Facilities: Improving campus living facilities such as cafeterias and dormitories to enhance the quality of life for teachers and students.										
5.Specialized Development: Developing specialized educational programs, such as ecological tourism education, in line with local geographical characteristics.										
Total										

Appendix D

The Results of the Quality Analysis of Research Instruments

An Evaluation Analysis of the Effectiveness of Sustainable Development Strategies for Basic Educationin Developing Areas of Western China

Analysis of the Sustainable Development Status of Basic Education in Developing Areas of Western China	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	Validlity
Academic Administration							
1.How do you perceive the level of teacher involvement in the development of educational plans or programs?	1	1	1	1	1	1	valid
2.Is the school able to implement academic work according to the established action plan?	1	1	1	1	1	1	valid
3.Do you believe the school has continuity and systematization in supervising and evaluating academic plans or projects?	1	1	1	1	1	1	valid
4.Is the school curriculum sufficiently detailed during implementation to meet students' learning needs?	1	1	0	1	1	0.8	valid
5.Does learning management effectively address the needs of parents and the community?	1	0	1	1	1	1	valid
6.Do you think the school places too much emphasis on preparing for competitive exams when organizing learning?	1	1	1	1	0	0.8	valid
7.How supportive is the school of innovation and technology in learning management?	1	1	1	1	1	1	valid
8.Do students have adequate opportunities to tilize local learning resources for study and research?	1	1	1	1	1	1	valid
9.Does the school provide sufficient training to enhance the academic management capabilities of teachers and administrators?	1	1	1	1	1	1	valid
10.Do you believe the measures taken by the school to ensure educational quality are effective?	1	0	1	1	1	0.8	valid
Budget Management							
1.Do you think the school's budget planning covers the mission of all programs and projects?	1	1	1	1	1	1	valid
2.Is the government's investment budget for soil and construction sufficient to support the school's implementation?	1	1	1	1	1	1	valid
3.Do teachers possess the necessary knowledge and skills when executing work procurement?	1	1	1	1	0	0.8	valid

Analysis of the Sustainable Development Status of Basic Education in Developing Areas of Western China	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	Validlity
4.Has the monitoring of school budget expenditures formed a continuous system?	1	1	1	1	1	1	valid
5.Do you believe that the disbursement of civil servant welfare funds provided by the government is timely?	1	1	1	1	1	1	valid
6.Is the school able to effectively apply existing procedures during the procurement process?	1	1	0	1	1	0.8	valid
7.Do you think the budget allocation is transparent and subject to oversight?	1	1	1	1	1	1	valid
8.Does the school conduct regular budget audits to ensure compliance?	1	1	1	1	1	1	valid
9.Is the mobilization and investment of educational resources effectively managed?	1	1	1	1	1	1	valid
10.Do you believe that accountability in budget management is being implemented in the school?	1	1	1	1	1	1	valid
Personnel Administration							
1.Is there currently a shortage of teachers in key subjects and remote areas?	1	1	1	1	1	1	valid
2.Do schools provide sufficient welfare support and safety guarantees for teachers in rural and remote areas?	1	1	1	1	1	1	valid
3.Are new teachers receiving adequate training and guidance in teaching practice?	1	1	1	1	1	1	valid
4.Do schools encourage and support teachers to utilize local resources for innovative teaching?	1	1	0	1	1	0.8	valid
5.Have schools established effective mechanisms for controlling, supervising, monitoring, and educating teachers to maintain discipline and behavioral standards?	1	1	1	1	1	1	valid
6.Is there a noticeable trend of teachers in remote areas moving to urban or developed regions?	1	1	1	1	1	1	valid
7.Is teachers' professional identity influenced by their work environment and compensation?	1	1	1	1	1	1	valid
8.Do schools offer sufficient training in information technology for teaching to meet modern educational needs?	1	1	1	1	1	1	valid

Analysis of the Sustainable Development Status of Basic Education in Developing Areas of Western China	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	Validlity
9.Do the evaluation and incentive mechanisms for teachers effectively motivate their work enthusiasm?	1	1	1	1	1	1	valid
10.Is there a shortage of high-quality professional teachers in the allocation of teaching resources?	1	1	1	1	1	1	valid
General Administration							
1.Do you think the current administrative management of the school effectively supports the achievement of educational goals?	1	1	1	1	1	1	valid
2.Do you believe that the current communication, telephone, and postal services of the school meet the daily administrative management needs?	1	1	1	1	1	1	valid
3.Does the school have adequate basic living facilities, such as teacher dormitories and cafeterias, to ensure the daily lives of teachers and students?	1	0	1	1	1	0.8	valid
4.Is the school's health status management (including student and staff health check-ups, sanitary conditions, etc.) in place, and are there any safety hazards?	1	1	1	1	1	1	valid
5.Is the school's information system (such as student information and academic management) updated in a timely manner and effectively supports the school's planning and management?	1	1	1	1	1	1	valid
6.What is the current state of the school's use of technology (such as digital teaching tools and online management platforms) for work and management learning?	1	1	1	0	1	0.8	valid
7.How is the community's support and participation in basic education?	1	1	0	1	1	0.8	valid
8.Are the school's classrooms, laboratories, and other teaching facilities conducive to learning and management?	1	1	1	1	1	1	valid
9.hat is the condition of the school's buildings (including classrooms, assembly areas, restrooms, etc.)?	1	1	1	1	1	1	valid
10.Has the school established a mechanism for controlling, monitoring, and evaluating activity outcomes to ensure the effectiveness and efficiency of administrative management?	1	1	1	1	1	1	valid

Analysis of the Sustainable Development Status of Basic Education in Developing Areas of Western China	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	Validlity
Personnel							
1.Is the staffing adequate to meet the daily teaching and management needs of the school?	1	1	1	1	1	1	valid
2.Do teachers' professional qualifications and teaching skills meet or exceed industry standards?	1	1	1	1	1	1	valid
3.How is the morale and team collaboration atmosphere among staff?	0	1	1	1	1	0.8	valid
Financial							
4.Is the school's financial status stable enough to meet daily operation and basic development needs?	1	1	1	1	1	1	valid
5.Is the funding support from the government and education departments timely and sufficient?	1	1	1	1	1	1	valid
6.Does the school have an effective financial management system to ensure transparency and efficiency in fund usage?	1	1	1	1	1	1	valid
Materials and equipment							
7.Are the teaching facilities (such as computers, laboratory equipment, etc.) sufficient and updated in a timely manner?	1	1	1	1	1	1	valid
8.Are the learning materials, reference books, and other resources for students abundant and easily accessible?	1	1	0	1	1	0.8	valid
9.What is the maintenance status of the school's infrastructure (such as classrooms, libraries, playgrounds, etc.)?	1	1	1	1	1	1	valid
Management							
10.Does the school management team possess professional management capabilities and effective decision-making mechanisms?	1	1	1	1	1	1	valid
11.Has the school established clear and actionable annual education plans and teaching goals?	1	1	1	1	1	1	valid
12.Is the communication and coordination mechanism within the school smooth enough to facilitate effective information flow up and down?	1	1	1	1	1	1	valid
Social and Cultural							

Analysis of the Sustainable Development Status of Basic Education in Developing Areas of Western China	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	Validlity
1.Do parents and the public recognize the importance of sending their children to education?	1	1	1	1	1	1	valid
2.Does the community actively participate in organizing and supporting educational activities?	1	1	1	1	1	1	valid
3.Can different ethnic groups coexist harmoniously and participate in community life?	0	1	1	1	1	0.8	valid
Legal							
4.Do local government regulations support the construction of educational facilities, such as schools and assembly buildings?	1	1	1	1	1	1	valid
5.Is there a fair legal framework for managing the appointment and transfer of educational officials?	1	1	1	0	1	0.8	valid
6.Does educational policy adequately consider the needs of early vulnerable children, especially in marginalized areas?	1	1	1	1	1	1	valid
Economic							
7.Is the economic situation of the community sufficient to provide necessary funding for educational development?	1	1	1	1	1	1	valid
8.Does the community's self-sufficient agriculture support family livelihoods and promote education?	1	1	1	1	0	0.8	valid
9.Are there cooperatives or organizations established to improve economic conditions to support children's education?	1	1	1	1	1	1	valid
Politics							
10.Is the local government’ s attitude towards managing educational institutions positive and supportive?	1	1	1	1	1	1	valid
11.Are local politicians actively promoting and supporting the development of school management?	1	1	1	1	1	1	valid
12.Does local politics recognize and acknowledge the importance of educational management in marginalized areas?	1	1	1	1	1	1	valid
Technology							
13.Does the educational institution have an effective information technology system to assist in management?	1	1	1	1	1	1	valid
14.Can the school access internet and technological support from higher-level institutions?	1	1	1	1	1	1	valid

Analysis of the Sustainable Development Status of Basic Education in Developing Areas of Western China	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	IOC	Validlity
15.Does the educational institution have an internet system for online learning and management?	1	1	1	1	1	1	valid
Geographical Environment							
16.Is the geographical environment of the educational institution conducive to promoting ecotourism and cultural preservation?	0	1	1	1	1	0.8	valid
17.Is the school located in a geographical environment suitable for natural learning and research?	1	1	1	1	1	1	valid
18.Is there good economic flow and cooperation between communities in border areas?	1	1	1	1	1	1	valid

Appendix E

Certificate of English

BANSOMDEJCHAOPRAYA
RAJABHAT UNIVERSITY

This is to certify that

Mr.Xunwei Chen

Achieved BSRU English Proficiency Test (BSRU-TEP) level

C2

Given on 12th February 2022

(Assistant Professor Dr Kulsirin Aphiratvoradej)

Director

Appendix F

The Document for Acceptance Research

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ACCEPTANCE OF MANUSCRIPT

Date: 04/01/2025

Dear Authors,

I am pleased to inform you that your paper has passed the review process after a careful and thorough perusal of the manuscript. The journal Editor-in-Chief, and reviewers have recommended your manuscript, titled **Strategy for Sustainable Development Literacy of Basic Education in Developing Areas of Western China**, authored by **Chen Xunwei, Narongwat Mingmit, Luxana Keyuraphan,** and **Chollada Phongpattanayothin** for publication in *International Journal of Education & Literacy Studies*. It is an excellent paper that will improve the readership of the journal. The paper will be published in Volume 13 Issue 1 of *IJELS* on 31/01/2025.

Yours sincerely,

Vahid Nimehchisalem, PhD
Editor-in-Chief
International Journal of Education & Literacy Studies

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