



# Structural Functionalism in Rural Primary Education: An Inquiry into the Alleviation of Digital Dilemmas

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**Abstract:** This paper thoroughly examines the educational challenges faced by China's rural primary schools in the modern digital context and suggests solutions based on the structural functionalism theory. The allocation of educational resources in rural primary schools is blatantly unequal under the dual structures of urban and rural areas, and the use of digital teaching also creates the dual issues of system imbalance and incomplete function. This paper, which is based on the structural functionalism theory, explains the challenges that digital education in rural primary schools faces, including a lack of resources, a shortage of skilled teachers, and an imperfect top-level educational design. In light of these challenges, the paper proposes some solutions, including enhancing the creation of digital education resources, enhancing teachers' capacity for digital teaching, creating and refining the digital management system for rural primary education, and fostering shared values to support the social identity of rural primary education digitization. In order to improve rural primary education in China, close the educational resource gap between urban and rural areas, advance educational equity, and raise the standard of rural primary education, this paper offers a theoretical and practical perspective on the digital transformation of rural primary schools.

**Keywords:** digital conundrum; rural primary education; structural functionalism; alleviation tactics

## 1. Introduction

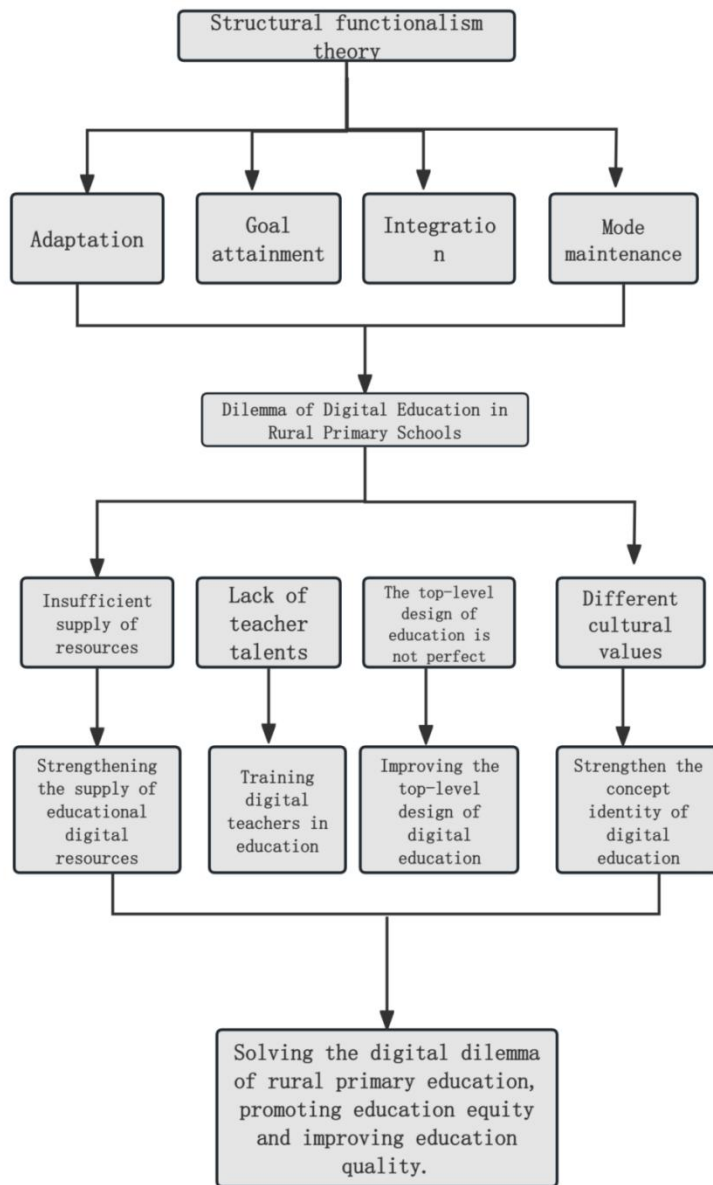
Currently, there is a strong push for the national education digitization plan, and campus information construction is heading into a new phase of smart campus development that incorporates application, integration, and innovation. All educational levels are actively investigating the development of smart campuses, opening up new avenues for instruction, enhancing the digital literacy of both instructors and students, and utilizing technology to support a well-rounded education. Digital education has emerged as a crucial tool for advancing educational fairness and raising standards of instruction in the current period of rapid information technology development. The cornerstone of rural development is rural primary education, which is essential for advancing social and economic development as well as children's personal development. Children may acquire information, acquire skills, create moral principles, and build a strong foundation for their future careers through education. Simultaneously, digital education in rural primary schools contributes to social fairness and narrows the divide between rural and urban communities.

Nonetheless, there have been several challenges with the elementary school digitization process in large rural areas. For example, learning and applying contemporary information technology for teaching in remote areas may be difficult due to a lack of hardware facilities, a teacher shortage, a lack of educational materials, and a lack of proper professional training. These challenges slow down the primary school modernization rate in rural regions and widen the educational divide between them. In order to advance educational fairness and raise the standard of rural education as a whole, it is crucial to investigate and analyze the solutions to the digital challenge of rural primary education. We cannot genuinely achieve balanced educational growth and allow every child to have access to top-notch materials until we make several attempts to address the challenges that remote primary schools confront in the realm of digital education.

The framework of structural functionalism offers us a fresh way to look at the digital challenge facing rural primary education. Structural functionalism holds that a system's growth and stability are contingent upon the logic of its internal organization and the excellence of its operations. The well-known "AGIL" model outlines the four fundamental requirements that the social system must achieve in order for it to function as intended. The elementary school system in rural areas is comparatively autonomous. Using the structural functionalism "AGIL" model, we may examine the internal organization and operation of rural primary education and determine the underlying causes of the education digitization conundrum. Using the structural functionalism theory as a base, this paper looks at the problems caused by digitization primary education in rural areas from four different points of view using the "AGIL" analysis model of the structural functionalism theory. It also suggests solutions based on the four issues raised. It is envisaged



that some theoretical and practical guidance for the digital transformation of rural primary education in China will be provided through a thorough analysis of the issues encountered in the process of digitization rural primary education and the policy recommendations made. This will help to promote the digital development of rural primary education, which will help to close the achievement gap between urban and rural education and improve the quality of rural education overall.



## 2. Literature review

### 2.1 Structural functionalism's theoretical foundation and evolution

According to structural functionalism, a social system has a certain structure, and its internal components are arranged and result in relationships with one another. The social system is a vast system made up of several levels of systems that serve various purposes. The ordered interrelationships among the components and the distinct roles played by the subsystems influence the overall function's realization<sup>[1]</sup>. By extensively integrating structuralism and functionalism, American academic Parsons created a very complete and broadly applicable sociological theoretical theory called structural functionalism in the 1940s. The renowned "AGIL" analytical model, which maintains that all social systems must satisfy four fundamental functional preconditions—adaptation (A), goal attainment (G), integration (I), and mode maintenance (L)—is the central component of this theoretical framework<sup>[2]</sup>. A (adaptation) is the function of "adaptation," which primarily refers to the social system obtaining sufficient resources or capabilities from its external environment and allocating these resources or capabilities within the system; G (goal attainment) is the function of "goal realization," which primarily refers to the role of a social system in aiding in the establishment of its goals and in stimulating and mobilizing the system's ability and energy to achieve these goals; I (integration)

is the function of "integration," which primarily refers to the maintenance of the coherence or integration of social systems, including the establishment of control mechanisms, the coordination of subsystems, and the avoidance of serious chaos within the system. The function of "latent protection" is represented by L (Latency), which primarily refers to the energy storage and allocation process within the system. It involves two interrelated aspects: mode maintenance, or the cultural supply of symbols, concepts, interests, and evaluations, and tension disposal, or the removal of actors' internal tensions, which preserves the common value mode of society and institutionalizes it within the social system<sup>[3]</sup>. Separated the social system into economic, political, social, and cultural systems in order to carry out the aforementioned four duties.

Structural functionalism, a sociological theoretical framework, serves as the theoretical foundation for investigating the digital issue in rural primary education. This theory emphasizes the educational system's role in promoting social stability and development and seeks to illuminate the relationship between social structure and social function. Structural functionalism has been a popular tool in the field of education in recent years for analyzing the structure, operations, and modifications of educational systems.

### 2.2 Studies on Digitizing Primary Education in Remote Areas

Traditional education is being transformed and innovated in rural regions through digital education. By combining "internet plus" with rural resources, we can draw in digital talent and enhance the rural productivity development education system through the use of cutting-edge production technology<sup>[4]</sup>. The use of digital technology creates a new

platform for the professional development of rural instructors and offers students in remote locations access to excellent educational materials<sup>[5]</sup>. In light of the broader context of the digital transformation of education, it is not only imperative to accelerate this transition within the context of the national digital education plan, but it is also an unavoidable decision to bring about the modernization of rural education<sup>[6]</sup>. The value orientation of digital empowerment in rural education revitalization is primarily seen in the following ways: expanding educational scenes and supporting the enhancement of rural teaching quality; removing educational barriers and supporting the balanced development of urban and rural education; and planting human capital and stimulating the endogenous motivation of rural revitalization<sup>[7]</sup>. The quality of digital instructional materials varies due to regional variances in the allocation level of educational infrastructure, which presents several obstacles for rural schools<sup>[8]</sup>. The lack of digital literacy and expertise among educators, the need to maximize digital learning resources in rural schools, and the lengthy process of digital reform in rural education governance are just a few of the issues that rural education is now dealing with<sup>[9]</sup>. Zhonglou Town Central Primary School in Lanshan District, Rizhao City, views informatization as a breakthrough and uses hardware construction to create a "1+N" platform application mode, create a new ecosystem of education at home and at school, and cultivate new people to adapt to the future society in order to prepare for the arrival of the digital age<sup>[10]</sup>. Zhoushan City, located in Zhejiang Province, manages digital education resources, modifies the optimization scheme, enhances the relationship between digital education and the revitalization of rural education, reduces the educational divide between urban and rural areas, and encourages Zhoushan Island's rural revitalization<sup>[11]</sup>. We can support the digitization of rural education and the equitable growth of education by constructing digital classrooms, enhancing the training of teachers in digital skills, creating locally relevant teaching materials, and popularizing top-notch digital education apps<sup>[12]</sup>.

### **3. A structural and functional analysis of the digitization of elementary education in rural areas**

The utilization of structural functionalism in the field of education offers us a distinctive viewpoint for scrutinizing and evaluating the functioning of the educational system. According to this theory, which places a strong emphasis on the interdependence and integrity of the system, the education system's internal structure must be optimized and coordinated in order for its intended function to be realized<sup>[13]</sup>. In rural areas, the use of structural functionalism is especially critical in the digital primary education process.

#### **3.1 Analysis of adaptive functions**

The term "adaptive function" refers to a system's ability to successfully employ resources from the external environment in order to adapt to both the external environment and its own system<sup>[14]</sup>. Rural primary education's digital adaptation is critical for the system's smooth and reliable functioning. In order to provide high-quality digital instruction, the educational system must adapt to developments in the outside world. The two main approaches used to adapt rural primary education digitization to the external environment are as follows: first, actively seek out external resource support within the education system, fostering consensus among education departments, local or foreign enterprises, social capital, parents, and other subjects; second, increase investment in educational resources; and third, promote the balanced distribution of resources. This approach effectively accepts the resource support given by the external environment and, on this basis, transforms the resource support provided by the outside world.

#### **3.2 A functional study of achieving objectives**

Any system's adaptation process will set a suitable objective based on the real requirements of the external environment. In order to guarantee that both the mobile system and its surroundings may arrive at the predetermined optimal condition simultaneously, the system also possesses the capacity to activate the internal energy of the entire system. Teachers are an essential component for realizing the purpose of education. To transform traditional teaching strategies and bring about the digitization of education in rural primary schools, educators must work together.

Improving teachers' digital literacy skills is essential to recognizing their potential as educators who support the digitization of education in rural primary schools. To foster the exceptional abilities of rural primary school teachers, rural primary education needs to get past the problem of evaluating performance solely on test scores, focus on developing teachers' professional literacy, raise the digital proficiency of rural primary school teachers, and encourage the long-term growth of teachers. In addition, more digital educators should be employed in remote primary schools. To improve the quality of digital education in rural primary schools, cultivate a large number of new teachers, technical skills, and management talent in digital education.

#### **3.3 Analysis of Integration Functions**

One component does not suffice to establish a social action system in its entirety. Any system is made up of various components and resources that are joined and arranged in an ordered fashion according to set procedures and guidelines, resulting in the formation of an organic whole. One of the most important ways to fully actualize "1+1 $\geq$ 2" and give full play to the "partial" utility is to integrate and coordinate the activities of the subsystems within the social system. This will cause the subsystems to operate in a consistent manner and create a combined force<sup>[15]</sup>.

Getting the right amount of resources for both urban and rural primary schools, breaking down the barriers between urban and rural digital education in primary schools, and scientifically building a new way for digital education to grow together in both urban and rural primary schools are the first two things that need to be looked at in order to effectively support the use of digital top-level design in rural primary education. The second aspect is the optimization and improvement of rural primary education's digital talent system. In distant places, there are elderly primary school

instructors who are not as proficient in using new teaching intelligence technologies. Boost training, mentor new educators alongside middle-aged and senior educators, and create a cohesive digital education system that combines administration, instruction, and learning.

#### 3.4 Examining the mode maintenance function

In addition to highlighting the significance of the shared value system for system upkeep, the cultural subsystem also considers the impact that cultural elements—beliefs, conventions, systems, and concepts—have on maintenance, particularly those related to social justice and morality<sup>[16]</sup>. The mode maintenance function must be established in the following two aspects in order to accomplish the digitization of rural primary education: first, the teacher incentive system. Primary education in rural areas requires a significant influx of new instructors with advanced digital literacy. To lure teachers to the grassroots, we should put in place a system of incentives that is commensurate with their assessment, compensation, and professional title. The second is stepping up primary education's digital publicity to raise awareness of the value of digital education among parents, teachers, schools, the government, and students. In addition, it urges educators to have a noble demeanor, go far into the countryside, and help students see their own value and worth.

### **4. The digitization of rural primary education as it actually exists from a structural functionalism perspective**

In the current digital age, digitization education has emerged as a crucial tool and technological assurance for advancing the high-standard growth of rural education. It improves and streamlines the educational experience for rural pupils by bringing previously unheard-of possibilities and comforts to the area. Rural primary schools, as a crucial component of basic education, are tasked with the heavy burden of fostering the next generation of social pillars within the framework of the educational system. There are several challenges in the process of pushing for the digitization of rural primary education because of real-world issues, including unequal resource distribution and unqualified instructors.

#### 4.1 There is a lack of digital materials available for basic schooling in rural areas

Inequitable resource distribution is an issue in rural primary education, which often deals with the dual challenges of inadequate funding for education and a shortage of supplies. First of all, there is a deficiency in funding for education in rural elementary schools. Lack of funding for education causes many rural primary schools, particularly those in isolated locations, to have antiquated hardware. The quality and effectiveness of online education are impacted by the comparatively sluggish creation of network infrastructure in rural regions<sup>[17]</sup>, which results in inconsistent network connections. However, regional choices are influenced by variables like school climate and pay scale, and many new educators are reluctant to go further into grassroots teaching, which leaves rural primary schools severely short-staffed with digitally proficient instructors.

Second, elementary schools in rural areas lack adequate material resources. The growth of digital education is severely hampered by the antiquated and often nonexistent multimedia teaching equipment in certain isolated rural primary schools in China. Simultaneously, the lack of software resources also restricts the range and depth of instructional materials offered in rural elementary schools. Furthermore, even though some rural primary schools have basic digital teaching technology, it is a waste of money because these resources cannot be used to their full potential due to a lack of skilled technical assistance and maintenance.

#### 4.2 The dearth of instructors using digital learning in remote elementary schools

Instructors are essential in helping rural primary schools go digital, but most of them struggle with a shortage of instructors with digital skills. The digital teaching proficiency of rural primary school teachers is comparatively low<sup>[18]</sup>. Because of their age, education, and other factors, some rural instructors are not very proficient with digital teaching technologies and are unable to fully utilize digital teaching resources in their classrooms. Primary school teachers in rural areas possess fewer knowledge reservoirs and practical experience in digital teaching<sup>[19]</sup>. They also lack appropriate training and support, which hinders their ability to effectively apply and organize digital teaching. Furthermore, some educators' conceptions of digital teaching are out of date and lack the spirit of inquiry and invention, which further impedes the advancement of digital teaching in rural primary schools.

#### 4.3 There are flaws in the current educational system

On the one hand, there is prejudice in the way education policies are implemented. The state has released a number of regulations to aid in the development of rural education, but in reality, for a variety of reasons, it is sometimes difficult to put these policies into practice, which impedes the advancement of digital education in rural primary schools. However, the method for managing schools is not flawless. Some rural primary school administrators have neither created clear policies regarding the digitization of education, nor have they properly enforced the regulations pertaining to it.

However, there is an imbalance between digital education resources in urban and rural areas. The majority of digital education resources, including instructors, educational money, and basic digital teaching facilities, are concentrated in cities due to a variety of circumstances. It is more difficult to adopt digital education in rural locations because parents and students there have varying degrees of comprehensive quality, have not received training, and have differing perspectives on and acceptance of the technology. Government, home schools, and society must work together to support the digitization of rural primary education, yet it is challenging to put their combined efforts into practice.

#### 4.4 Digital cultural values in elementary schools in rural areas differ

Primary schools in rural areas are experiencing a slowdown in their economic development, and the state of their educational infrastructure is deficient. This is particularly evident in the absence of an efficient incentive system in schools, which impedes the flow of highly qualified teachers to these areas. Another significant element influencing the digital issue of rural primary education is social and cultural concerns<sup>[20]</sup>. Education departments, schools, instructors, parents, students, and other stakeholders hold varying perspectives about the digitization of education. The absence of a cohesive educational framework makes it challenging to establish a compelling spiritual vision. Furthermore, some groups have misconceptions about the importance of primary education and believe that junior high school education is more significant because it has a greater impact on closing the achievement gap between pupils. The adoption and advancement of digital education in rural regions are sometimes hampered by cultural norms and traditional ideas. The aforementioned problems collectively represent the key impediments to the advancement of digital education in rural primary schools.

### **5. techniques to address the challenges of digitizing primary education in rural areas from a structural functionalism standpoint**

According to structural functionalism, the digitization of rural primary education is a complicated, methodical, and long-term project. To make this happen, primary education must support the digitization of rural primary education by enhancing the system of financial assistance, enhancing the effectiveness of staff development, enhancing top-level design, and fostering shared values.

#### 5.1 Improving the financial assistance program to increase the availability of digital tools for elementary education in remote areas

To guarantee the fundamental educational conditions of rural primary schools, the government ought to augment its funding allocation to these establishments<sup>[21]</sup>. Upgrade the hardware in remote elementary schools and supply the required instructional materials and virtual learning environments. For instance, interactive whiteboards, projectors, and PCs. Schools should increase network coverage and stability<sup>[22]</sup>, fortify their network development in remote regions, and create a favorable network environment for digital instruction. By establishing a perfect digital teaching resource platform, introducing high-quality software resources. For example, kids in remote elementary schools now have more access to excellent teaching materials, such as interactive courseware and the classrooms of well-known professors, thanks to the emergence of online education platforms. Integrating all kinds of teaching resources, providing diversified teaching contents and forms, stimulating students' interest and enthusiasm in learning, and meeting the diversified needs of rural primary education<sup>[23]</sup>.

To guarantee efficient use and superior resource sharing, relevant resource management rules and assessment standards must also be developed. Additionally, to make sure the school's hardware facilities can support digital teaching, the real circumstances and educational requirements of the school should be taken into consideration while choosing the proper digital teaching equipment. Expert technical support and maintenance staff are engaged to examine and upgrade them on a regular basis. Additionally, in order to use instructional equipment correctly, teachers and students receive training on digital tools. Regarding the availability of funds, teacher subsidies ought to be suitably raised, treatment ought to be enhanced, instructors ought to be kept, and excellent talent ought to be drawn back to further teachers' careers.

#### 5.2 Enhancing the development of educators' digital skills to enhance the sustainability of digitization in rural elementary schools

Educator preparation and development programs must be strengthened, and teachers' digital literacy and instructional skills must be enhanced. Teachers are better equipped to handle the challenges of the digital teaching environment and are encouraged to teach innovatively through training, technological assistance, and resource sharing<sup>[24]</sup>. On a regular basis, conduct training sessions for instructors in digital teaching abilities to enhance their technical application skills. The training program will include topics such as using online learning platforms, multimedia teaching tools, and basic computer operation. Invite leaders in the field of educational technology to give lectures, share the newest ideas and techniques in digital education, assist educators in revising their curricula, recognize the value and necessity of digital education, actively challenge conventional wisdom, incorporate digital technology into their regular instruction, and enhance the educational process. In order for students to learn and develop in practice, teachers may foster their interest in and initiative for learning by implementing instructional strategies like project-based learning and inquiry-based learning. Students can study independently by watching instructional videos and reviewing materials before class, using the "flip classroom" teaching method. In class, they can also engage in discussion and group work.

Creating a system for evaluating instructors' digital teaching proficiency and assessing it on a regular basis will help educators recognize the benefits and drawbacks of digital instruction, and offer specific advice for further training. The assessment findings will also be a crucial foundation for assessing the professional titles and performance reviews of instructors, and they will motivate them to keep honing their digital teaching skills. Concurrently, enhance teacher-to-teacher interactions and collaboration, create a digital teaching exchange group, and motivate educators to share their resources and pedagogical expertise<sup>[25]</sup>. To give instructors more learning opportunities and showcase venues, arrange for them to routinely participate in seminars and contests focused on digital education. Through collaboration and learning, teachers can improve digital teaching.

### 5.3 Strengthen the institutional guarantee for the digitization of rural primary education by enhancing the top-level design of education

Establishing and enhancing the digital management system for rural primary education is the first step. After that, clarify education responsibilities and provide resources and assistance. Make sure that different educational functions in rural primary education are clearly divided and coordinated, that these functions operate efficiently through effective organization and scientific management, and that these functions work together to support the digital development of rural primary education. Simultaneously, the school develops implementation strategies based on the departments' digital education requirements. Ensure that policies are implemented effectively, fortify oversight and assessment of policy implementation, and offer a solid guarantee for the advancement of digital education in rural primary schools.

To encourage the balanced growth of urban and rural education, the second step is to set up a framework for exchanging educational resources between the two areas<sup>[26]</sup>. Create a network sharing platform for educational resources so that kids in rural primary schools have access to a greater variety of learning resources and work toward an equitable distribution of resources across urban and rural locations. Moreover, improve collaboration with communities and families. In order to address the digital challenge of primary education in rural areas, education departments, schools, families, and communities must work together. In order to jointly address the different issues brought about by digital education, a favorable environment of joint administration and joint promotion will be developed by enhancing communication and collaboration with parents and communities. We can create a market mechanism, entice businesses and nonprofits to work with rural primary schools to build digital education, increase the amount of digital teaching resources available to these schools through collaboration and donations, create an integrated force, and work together to advance the digital process of rural primary education.

### 5.4 Creating shared ideals to bolster the digitization of rural primary education's social recognition

Create a system of incentives for instructors, on the one hand. Teachers who choose to teach in rural areas receive salary subsidies. At the same time, a significant portion of evaluating instructors' professional titles is their appraisal of their class hours, digital teaching proficiency, and years of teaching, is an effort to bring elite digital educators back to their home cities for further education. The community should foster a positive learning environment and support educators in realizing their own value as educators.

Conversely, by enhancing the partnership between the home and the school, educators may better inform parents about the concepts, practices, and tools of digital education, increase parents' awareness of its significance, and enhance their confidence in digital learning. Simultaneously, we are able to comprehend the home context in which pupils are studying and offer them tailored learning assistance. To increase students' learning impact and interest, customized teaching is put into practice, and plans and schemes are developed based on each student's unique requirements and characteristics. To help parents become involved and supportive of their children's digital learning, schools can also extend invitations to parents to participate in digital teaching activities, such as co-producing educational materials online and taking part in online courses. With a variety of online learning platforms and tools, students may study autonomously in the digital age based on their own interests and requirements<sup>[27]</sup>. Additionally, help students who are struggling financially with family digital learning. Given the difficult financial circumstances faced by rural families, the government and social service providers can offer specific financial aid as well as technical support to assist families in purchasing digital learning tools like tablets and smartphones. We can only build a decent digital learning environment and support rural primary school pupils' holistic development by working together with families, schools, and society.

## 6. Conclusion

The digitization of education is currently a significant factor in advancing educational advancement. This paper's research examines the challenges facing China's rural primary education system in the context of digitization from the structural functionalism perspective and suggests solutions in line with the findings. The keys to resolving the issue of digital education in rural primary schools are strengthening the development of digital education resources, enhancing the digital teaching proficiency of teachers, establishing and enhancing the digital management system of rural primary education, and encouraging students' digital learning. Increased investment in hardware facilities, such as high-speed Internet networks and intelligent teaching technology, may greatly enhance the teaching environment in rural primary schools. Simultaneously, the advent of superior software tools, such as digital teaching materials and online learning environments, may provide pupils with an increased quantity of educational resources. In terms of training teachers, frequent technical training and updating teaching ideas may effectively increase teachers' capacity to teach digitally and better prepare them to meet the demands of the teaching environment. Additionally, enhance parent support for digital education and fortify the partnership between the home and the school. Personalized learning may be used to improve learning outcomes and assist students in overcoming the challenges presented by digital learning.

In the digital age, promoting the high-quality growth of rural education through digital transformation has emerged as a key strategy and source of technical assistance. The area of rural education has never had greater convenience or opportunity thanks to this reform, which has also given rural pupils a better, more effective educational experience. Closing the digital education gap and raising educational standards is a pressing issue. With digital teaching, students' curiosity and inventiveness are piqued, leading to additional materials being made available to them via the network

platform, and an increasingly flexible and customized education. Develop pupils' digital literacy while also helping them become more competitive and able to adjust to societal demands. Ensuring that every student has access to high-quality digital education materials requires multi-party cooperation, and closing the digital education gap is crucial to achieving educational fairness, raising standards, and fostering literacy.

There are still certain restrictions and shortcomings, despite the fact that this study conducted a thorough analysis of the methods to address the digital challenge of rural primary education from the perspective of structural functionalism. There is not enough large-scale empirical survey data to support this study. This might cause some variations in the research findings' accuracy and universality. To increase the research's scientific validity and credibility, the empirical inquiry should be reinforced going forward, and more accurate and genuine data should be gathered via surveys and interviews. This study ignores other aspects, such as regulatory environments and social support, that may impact the growth of digital education in favor of concentrating only on digital educational materials, teachers' abilities, and school administration systems. Therefore, in order to more thoroughly identify the underlying causes and solutions of the digital issue of rural primary education, future studies should expand the research horizon and thoroughly explore a variety of aspects. The purpose of this research is to guide China's rural education system's digital upgrade by offering a theoretical and practical viewpoint on the digital transformation of rural primary schools. Encourage the digitization of primary education in rural areas and raise the standard of rural education as a whole.

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## References

- [1] P. Zhang and S. Jin, "Development strategies of rural teachers' local feelings: Based on AGIL model of structural functionalism," *Heihe Journal*, no. 03, pp. 70-74, 2024.
- [2] C. Feng and C. Zhang, "The practical difficulties and practical transcendence of vocational education serving rural revitalization: Based on the perspective of structural functionalism," *Adult Education*, vol. 44, no. 04, pp. 77-83, 2024.
- [3] R. Liu, "Analysis of structural functionalism and its social theory," *Tianjin Social Sciences*, no. 05, pp. 52-56, 2005.
- [4] C. Chen, "Digital transformation of education enables the coordinated development of urban and rural education," *Journal of Hebei Energy Vocational and Technical College*, vol. 23, no. 02, pp. 40-43, 2023.
- [5] N. Zhai and Y. Zheng, "Research on digital technology empowering the balanced development of compulsory education in urban and rural areas," *Contemporary Teaching and Research Series*, vol. 9, no. 06, pp. 29-32, 2023.
- [6] S. Ren, R. Zhang, and M. Hu, "Digitization of education empowers rural education modernization: What should be, what is difficult and what can be done," *China Audio-visual Education*, no. 01, pp. 85-90+103, 2024.
- [7] J. Ma, "Value orientation and practice direction of digital empowerment of rural education," *Journal of Wuxi Vocational and Technical College*, vol. 23, no. 01, pp. 75-79, 2024.
- [8] S. Lu, "Seize the digital opportunity to help rural education overtaking in corners," *Gansu Education*, no. 06, p. 5, 2023.
- [9] Q. Chen, "The implication of the times and the way to explore the high-quality development of rural education under the background of digital transformation," *Lifelong Education Research*, vol. 35, no. 03, pp. 37-44, 2024.
- [10] X. Zhang, B. Liu, and C. Lu, "Promoting the revitalization of rural education with digital education: A case study of digital implementation of central primary education in Zhonglou Town, Lanshan District, Rizhao City," *Shandong Education*, no. Z4, pp. 20-21, 2023.
- [11] C. Xu, "Analysis of the island rural digital education path under rural revitalization: Taking Zhoushan City, Zhejiang Province as an example," *Rural Economy and Technology*, vol. 33, no. 19, pp. 269-272, 2022.
- [12] W. Wei, "Research on the application path of digital technology in rural primary and secondary education," *Teachers*, no. 14, pp. 60-62, 2024.
- [13] Q. Kong and X. Kong, "On the view of educational system," *Jinyang Academic Journal*, no. 05, pp. 96-98, 2004.
- [14] J. Qing, "Promoting the high-quality development of secondary vocational education: Practice patterns and ways of relieving: An analysis framework based on structural functionalism," *Vocational Education*, vol. 22, no. 21, pp. 15-23, 2023.
- [15] Y. Zheng, "Practical problems and path optimization of collaborative innovation and development of vocational education groups from the perspective of structural-functional theory," *Education and Occupation*, no. 09, pp. 52-56, 2022.
- [16] J. Turner, *The Structure of Sociological Theory* (7th ed.), Z. Qiu and M. Zhang, Trans., Beijing: Huaxia Publishing House, 2016, p. 42.
- [17] H. Ma, "Research on consolidating the achievements of poverty alleviation through education under the rural revitalization strategy," *Rural Agriculture Farmers (A Edition)*, no. 11, pp. 56-58, 2022.
- [18] D. Yang, "Research on the construction of teaching and research culture in rural primary schools," M.S. thesis, Southwest University, Chongqing, China, 2021.

- [19] J. Ding, "Application of digital teaching resources of 'smart classroom' platform in classroom teaching: Taking digital teaching resources of common nursing technology as an example," *Science and Technology Wind*, no. 10, p. 75, 2020.
- [20] T. Li, "Study on the localization training mechanism of rural primary school teachers in western China," M.S. thesis, Guizhou University of Finance and Economics, Guizhou, China, 2018.
- [21] Y. Guo, "Research on the problems and countermeasures of rural primary education development in JX county under the background of rural revitalization," M.S. thesis, Hebei University of Science and Technology, Hebei, China, 2020.
- [22] Y. Jiang, "Research on digital village construction in Hebei Province," M.S. thesis, Yanshan University, Hebei, China, 2023.
- [23] Y. Mou, "Study on optimizing English classroom teaching strategies in primary schools," *Campus English*, no. 17, p. 160, 2018.
- [24] R. Luo, "Realistic dilemma and relief path of digital transformation of teachers' teaching," *Audio-visual Education Research*, vol. 44, no. 12, pp. 102-107+121, 2023.
- [25] Q. Xu and X. Wu, "Vocational college teachers' digital competence under the background of digital transformation: Development logic, connotation elements and promotion strategies," *Vocational and Technical Education*, vol. 44, no. 23, pp. 13-20, 2023.
- [26] L. Zhao and R. Dai, "Study on the relief of rural teachers' occupational anxiety under the background of digital transformation," *Journal of Yunnan Normal University Philosophy and Social Sciences Edition*, vol. 56, no. 01, pp. 148-156, 2024.
- [27] Y. Xiao and H. Lv, "The way to examine and relieve the risk of the new teaching form in colleges and universities empowered by digital education," *University Education Science*, no. 02, pp. 24-32+92, 2023.