

# Resources and opportunities of ICT for Chinese rural students in EFL: The pursuit of quality and balanced development in compulsory education

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**Abstract.** China's educational equity has advanced recently, and information and communications technology has drawn more attention as a classroom tool and a crucial component of educational equity. The purpose of this paper is to investigate the availability, benefits, and drawbacks of ICT technology in rural China's English as a foreign language classroom. In addition, it will carry out a thorough examination based on China's most recent education policy. According to the research, using ICT in the classroom might increase students' motivation and involvement. However, there are certain issues that require collaboration from all societal segments. In reality, in-depth research on the application of ICT resources in rural students' EFL instruction may work as a template for other developing countries and promote the balanced worldwide expansion of rural education. Theoretically, understanding how ICT resources function to raise the standard of English instruction for rural students is advantageous because it provides a theoretical framework for relevant policy planning.

## 1 Introduction

Since the 13th Five-Year Plan ended and new policies were implemented, there has been a progressive reduction in the educational gap between rural and urban areas. AI and dialogue robots have started to be used in rural classrooms, and the advancement of information and communications technology has also given rural English as foreign language (EFL) classrooms new life. Rural students have greater access to learning materials and opportunities due to these two reasons. Thus, the aim here is to investigate the problem of ICT resources and opportunities for rural students in EFL classrooms, as it incorporates a number of factors, including instructors' ICT proficiency, principals' knowledge, and government allocation and decision-making.

In modern society, there is no doubt that ICT plays an irreplaceable role in all aspects of society. Compulsory education is a crucial period for students, and English is one of the main courses in China. As a way for teachers to teach students, ICT resources have a certain impact on students' learning outcomes. The findings of this study can offer some tactics and recommendations for enhancing the use of ICT resources and academic achievement for Chinese students attending rural primary and secondary schools. They can also serve as a

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scientific foundation for the development of pertinent policies that will further advance the achievement of educational equity.

## **2 The policies and ICT improvement of Chinese rural school**

With the completion of China's 13th Five-Year Plan in 2020, resources and opportunities for various instruments in EFL have been real chances in rural China. Up to 2017, China's average expenditure rate of ICT in the educational system totally accounted for 17% of all national IT spending. As of June 30, 2018, China has 211 million rural Internet users with an Internet penetration rate of 36.5% [1]. These figures represented a huge rise from 2017 and offer a feasible means of obtaining resources for quality education between urban and rural. However, rural schools still faced weakness in education facilities compared to urban counterparts.

Since 2023, China has been implementing the policy of Opinions on Building a High-quality and Balanced Basic Public Education Service System focusing on fulfillment of the provision of fair and quality basic public education services to equally-aged students in the stage of compulsory education [2]. Simultaneously, the development of ICT in a decade contributes to the enhancement of diverse fields, including geography, biology, education, economics, ecology, etc. Eventually, these incentives have enhanced the situation of students in Chinese rural schools nowadays, although there is still disparity, an ICT divide, in urban and rural education resources [3]. In rural China, the role of ICT as a mediator and supplier of resources for EFL lessons is growing in importance. Utilizing ICT, the Chinese government promoted the sharing of quality education resources and assisted rural schools in improving their educational quality [2].

## **3 Studies on factors in resources for rural students**

Accessibility of ICT can be explained by various factors, such as school, teacher, project, and student [4]. A major point in the dearth of resources for rural EFL students and the development of teachers' educational ability is the absence of ICT components such as software packages and related facilities. Additionally, there is a belief among many EFL teachers that achieving high exam scores is the most important thing, which limits the ICT availability of students and the openness of its resources [5]. Research has demonstrated that rural students were less likely to benefit from IT than urban ones [6]. One of the problems is the contrast between the "information richer area" and "information poor area" particularly in terms of ICT, known as the "digital gap", leading to the difference in the quality of education in China [7]. As a result, teachers' ability and desire to use ICT in EFL instruction will be restricted, obstructing students' access to online resources.

Meanwhile, the fundamental information scales in rural schools are predictors of the application of ICT in class. The media rooms and related facilities in rural schools have connections with the ICT opportunities for students. The ICT environment and the size of the school are the main causes of ICT adoption in schools [8]. In addition, some rural students experience low self-esteem and anxiety when they consider the accessibility of ICT [7]. Social influence has an impact on teachers' inclination to adopt ICT to some degree. To some extent, this also reflects Chinese collectivism when others – like leaders and colleagues – hope that teachers will employ ICT for teaching EFL. The possible variables above affect how EFL is taught in rural schools.

## **4 ICT benefits for rural students in EFL**

Integrating ICT into EFL classrooms has many benefits. Firstly, applications of ICT in education increase the likelihood of rural students' achievement [9]. In Malaysia, a developing country, rural students hold a belief that having access to ICT facilities improves their academic performance [10]. This thought has been validated by successive research. The finding unfolded that effective usage of ICT in EFL classes significantly promotes students' engagement, communication, and independent learning [11]. Further research shows that using computers encourages learners to form their unique study learning strategies and spark interest and excitement. Using images, movies, and animations to introduce ICT gadgets to students not only piques their curiosity but also frees teachers to be more imaginative and less harried [5]. Additional studies have illustrated that integration of ICT with education enhances the attendance of students in class, and modifies the traditional form of EFL class [12]. Meanwhile, instant feedback after a lesson is quite efficient for learners to correct themselves and figure out innovation. Times and spaces cannot be a barrier to EFL students in rural areas to relevant information, stimulating their knowledge growth [13]. Thus, ICT use in rural schools definitely advocates students' capability of learning.

ICT is now more important to EFL than it has ever been. At the stage of compulsory education, admittedly, the proficiency of teachers and applications of ICT exists a gap between rural and urban schools under Standards for Information Technology Application Ability of Primary and Secondary School Teachers (Trial) [14]. Furthermore, information-based teaching allows for tailored instruction by providing students with individualized learning materials based on their requirements and learning characteristics as well as feedback to support their learning [14]. Various applications can boost students' self-efficacy, produce varying degrees of freshness, offer immediate engagement and feedback, and have an impact on grades [15].

## **5 ICT challenges for rural students in EFL**

The primary impediment to ICT development in rural schools is their ICT infrastructure, which is said to be brought on by aging and low-quality ICT equipment, a lack of technical support, and other outside factors [8]. What is worse, the uneven distribution of information education resources will have a differential impact on students' learning resources and accomplishments, particularly in rural China, and is a crucial component of improving educational fairness [16]. Students in elementary school are not capable of exercising self-control or discernment. Because of this, students in multimedia-equipped classrooms are easily distracted and utilize ICT to watch network content after class, which is detrimental to the development of the three perspectives that students need to have. Meanwhile, the use of ICT technology to track students' learning has grown in popularity in China. The investigation's breadth is restricted to multiple-choice and decision-making questions, which is insufficient, and students' acceptance of ICT will also have an impact on the outcome [17]. Furthermore, there is a chance that students' privacy will be compromised because using ICT necessitates the gathering and processing of a lot of personal data about them [16]. Some rural EFL teachers do not acquire the ability of ICT integration although schools will provide some ICT teaching resources for teachers, they cannot meet the needs of teachers, and the quality level of ICT training is not uniform [18]. Besides, teachers simply regard ICT as a demonstration tool to replace the blackboard in EFL classes in rural primary schools, which hinders the practice of communication and is detrimental to the development of students' communication skills [15].

## **6 Implications**

The experience in the UK makes it clear that integrating ICT into the classroom necessitates funding and support from national policies, as well as increased investment in hardware, infrastructure, and training, as well as motivating social forces to engage in educational activities [17]. Moreover, to support educational fairness and close the digital gap, education authorities should invest more in ICT equipment for rural primary and secondary schools. To prompt teachers' capacity to educate, offer ICT instruction and hands-on lectures [9]. Information supervision is also a component of ICT instruction, and departments that are involved in this must guarantee student information security, enhance the privacy and security of ICT equipment, and stop information leaks that could have negative effects.

Additionally, teachers in remote areas can actively acquire pertinent ICT skills and combine ICT and EFL instruction. Teachers should modify their mindset and balance the time spent on different tasks because it has always been believed that a significant element influencing the use of ICT in the classroom is their own personal will [14]. If teachers receive varying degrees of support – for example, peer encouragement, school leadership support, and technical support – they will be more likely to adopt new technology [5]. Chinese students always learn passively when they are taught traditionally. However, students can actively gather online information resources for in-depth study and evaluate their performance using an online feedback system to enhance their learning capacity and foster student autonomy and dialectical thinking with the help of ICT and multimedia equipment.

Institutions that are relevant should provide supporting software that is more suited for China's rural primary and secondary school students, emphasizing the needs of the students and fostering their communication and EFL skills [16]. Through gamification features, students are incentivized to respond, and open forums offer a platform for student communication. to increase students' self-efficacy and intrinsic motivation for online learning, particularly for students in rural areas [6]. The use of ICT by teachers may be more efficient and seamless if they are not overburdened with additional instructional duties. While the practice of one teacher teaching multiple topics still occurs in rural primary schools in China, school officials should fairly assign teachers to their roles and provide them more time to plan EFL lessons. Related departments should also work to address this issue as soon as possible [19]. In order to create effective learning and teaching environments, educators should organize their students into groups and assist them in enhancing their learning capacities through the use of PBL and ICT.

## **7 Conclusion**

The funding of this paper indicates that ICT resources play a certain role in EFL classrooms, such as arousing students' interest and giving immediate feedback, but there are also problems to be solved. With the implementation of China's educational equity initiative, ICT resources in rural areas are increasingly used in EFL classrooms. The application of ICT in the classroom and the accessibility of students are influenced by EFL teachers' personal willingness and ability, the size and information resources of the school, the introduction of national policies, and other factors. Schools in some parts of rural China are still not fully equipped with ICT equipment, so the government should do a good job of local equipment to meet the basic needs. ICT resources for EFL China rural students can be expanded through a variety of channels, including the state, schools, teachers, and social forces. This essay seeks to provide an overview of the state of ICT resources in EFL instruction at the rural mandatory level. It also discusses China's educational policies and practices, the effects of ICT equipment used in the classroom, and the difficulties that arise, and offers some solutions. Therefore, the equitable distribution of ICT resources in China will further improve the country's educational status.

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