

*Original Paper*

The Obstacles and Relief Paths of the High-quality  
Development of “Internet + Quality Education”—Taking Pugu  
Township of Liupanshui City as an Example

Qiuting Liu<sup>1\*</sup>

<sup>1</sup> Department of Education, Southwest University, Chongqing, China

\* Qiuting Liu, Department of Education, Southwest University, Chongqing, China

Received: February 16, 2025    Accepted: March 1, 2025    Online Published: March 16, 2025

doi:10.22158/elsr.v6n1p163

URL: <http://dx.doi.org/10.22158/elsr.v6n1p163>

**Abstract**

*The article conducted a case study on the implementation of “Internet + quality education” in rural areas of Southwest China. It found that the infrastructure of “Internet + education” has basically realized full coverage. “Internet Plus” is subtly affecting the level of children’s qualitative development, and the effectiveness of the implementation of “Internet + quality education” has gradually become obvious.*

*Case presentations to look at the reality, “Internet + quality education” still face a lot of difficulties such as: an imbalance in the structure of the teaching force, insufficient Teachers’ innovative ability in information technology teaching; low degree of integration between “Internet+” and quality education; Parents’ knowing less about quality education; students lack self-control and other dilemmas. In view of this, we should optimize the structure of the teaching staff and improve the overall professional quality and innovation ability of information technology teaching; establish a high-quality “Internet + quality education” resource base and management system; establish a three-dimensional “Internet + quality education” home, school and community co-education network. Starting from the three paths, we can realize the relief of obstacles.*

**Keywords**

*Internet + quality education, quality education, rural children, quality development*

**1. Problem Formulation**

Quality education is implemented for the purpose of improving the quality of the whole nation and for the progress of social development and the comprehensive development of human beings, and must pay

close attention to the needs of the development of modern society for the quality of human beings (Wang, 2012). Since the 1980s, the Chinese government has required primary and secondary schools to implement quality education in relevant documents and laws and regulations (Yu & Song, 2011). In 2010, the “Outline of the National Medium- and Long-Term Educational Reform and Development Plan” (2010-2020) was clearly stated that “quality education is a key element of the national education system. (2010-2020) clearly pointed out that the implementation of quality education as the theme of education reform and development, to cultivate students’ sense of social responsibility, innovative spirit and problem-solving ability, etc. (Ministry of Education, n.d.). It can be seen that quality education is the main direction of education nowadays, and it is of great significance to the growth of children in mountainous areas (Qi, 2022). At present, the quality of education in mountainous areas has basically been able to implement the full range of schools, but the children in mountainous areas have not been able to get a better quality of education resources, which is reflected in the mountainous areas of the implementation of quality education and the Internet between the link is still shallow, the implementation of the Internet is not comprehensive enough, the information literacy of the students is relatively lack of, easy to be held hostage to the Internet’s negative impacts, and so on. Therefore, it is necessary to correctly introduce the “Internet +” to help children in mountainous areas to obtain more quality quality education resources, and promote the development of urban and rural compulsory education of high quality and balance.

The Internet in “Internet+” refers to a new type of information technology represented by big data, cloud computing and artificial intelligence, while “+” represents the transformative effect of the Internet on various industries, which catalyzes the change and development of traditional industries through the penetration of the Internet (Xie, 2016). “+” can also be understood as ‘linkage’, that is, the connection and interaction between the Internet and various industries, to jointly create new things and realize cross-border integration. In recent years, Internet + education has become an important part of education in various regions, and the title of Chapter 19 of the “Outline of the National Medium- and Long-Term Education Reform and Development Plan (2010-2020)” is “Accelerating the process of informatization of education”, which requires “Informatization of education into the overall strategy of national informatization development, and promote the modernization of educational content, teaching methods, and methods” (Yang & Shi, 2018). So the linkage of quality education and Internet + has an important practical significance.

This paper defines “Internet + quality education” as a kind of in the moral, intellectual, physical, aesthetic and labor five education teaching content presentation, students’ learning methods, teachers’ teaching methods, teacher-student interaction and other aspects of the depth of fusion with the Internet +. Only the Internet and quality education to realize the real linkage, in order to push China’s quality education to the real high-quality development, for the education of a strong country to strengthen the foundation of the cushion stone. Research will be the Internet and quality education “linkage”, both “cross-border

connection” and “dynamic integration”, to explore a quality education in line with the development of rural mountainous areas. “Internet+Education”, with a view to promoting quality education.

## 2. Research Design

This study is based on a case study, selecting elementary school and junior high school students in Pugu Township, Panzhou City, Guizhou Province in the southwest as the research object, and most of the investigated contents are objective data, mainly in terms of significant variables. In order to ensure the quality of the research data, the content of the questionnaire was determined after many discussions. The interviews in this study were conducted after the questionnaires were returned in order to gain an in-depth understanding of the reasons behind the answers to the questionnaires.

### 2.1 Subjects of the Study

An elementary school and a middle school in Phu Quoc Township were selected for the questionnaire survey, and the grades in which the students were placed were differentiated according to grades 1-3, grades 4-6, and middle school, based on which the questionnaires were distributed. In order to ensure the quality of the questionnaire results, a certain percentage of the number of people in the corresponding grade sections were required to participate in filling out the questionnaires. In order to ensure the authenticity of the study, three elementary school teachers and three parents were randomly selected for interviews, and the principal of Hope Primary School in Pugu Township was also interviewed, so as to objectively and truthfully present the current situation of “Internet + quality education” in Pugu Township, to find out the dilemmas and challenges faced by Pugu Township in the implementation of quality education in the context of Internet +, and to put forward targeted development paths. To find out the dilemmas and challenges of implementing quality education in Pugu Township under the background of Internet+, and to put forward targeted development paths.

### 2.2 Data Description and Research Method

The study distributed 150 questionnaires through online channels, utilized SPSS27.0 to clean the data, eliminated invalid questionnaires, and finally obtained 122 valid questionnaires, with a validity rate of 85.30%. Among them, 10, 85 and 27 questionnaires were distributed for grades 1-3, 4-6 and junior high school, accounting for 8.2%, 69.67% and 22.13% respectively. The questionnaire is in anonymous form, which protects the privacy of children in mountainous areas on the one hand, and can guarantee the authenticity and validity of the questionnaire on the other; it consists of three parts, namely, the basic demographic information, the information related to the Internet+, and the self-assessment form of quality development level (Qixun, 2022), which make up the main body of the questionnaire. The Self-assessment of Quality Development Level (Qixuan, 2022) is divided into five modules of moral, intellectual, physical, aesthetic, and labor based on the Guidelines for Moral Education in Primary and Secondary Schools issued by the Ministry of Education, and the questions of each module are divided into 7, 8, and 9 dimensions based on the policy documents issued by the state, which has been proved to have a better reliability and validity. The questionnaire is divided into 4 scoring levels, using Richter’s

4-point scale, with higher scores indicating a better level of children's quality development and vice versa, indicating a poorer level of quality development, which clearly presents the development level of children's quality education in Phu Quoc Township.

### **3. The Case Presents: "Internet + Quality Education" Implementation Status Quo**

In the background of the rapid development of the Internet +, the Internet in the implementation of quality education in Pugu Township has shown the primary form of mutual linkage, the development of information technology in education is subtly affecting the quality of children's development level in Pugu Township, the implementation of quality education results have gradually come to the fore.

#### *3.1 "Internet + Education" Related Infrastructure Basically Realizes Full Coverage*

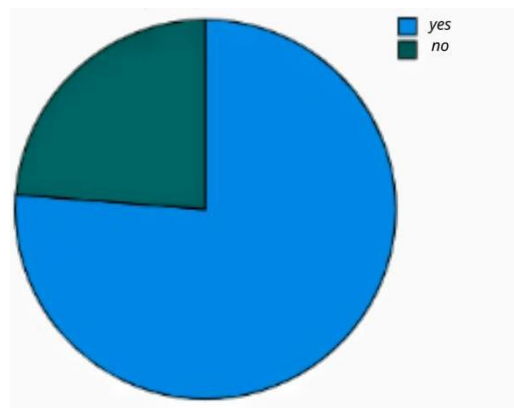
In the primary and secondary schools participating in this survey, after a field visit, we found that each class has been equipped with multimedia equipment connected to the Internet, realizing a coverage rate of 100%, and teachers are teaching more frequently with multimedia networking, which is in line with the "Ten-year Development Plan for Education Informatization (2011-2020)" issued by the Ministry of Education, which puts forward that the basic coverage of all areas and all levels of schools with broadband Internet access will be realized by 2020. Realize the comprehensive coverage of broadband network in all regions and schools at all levels and all types of schools, schools at all levels and all types of schools are basically equipped with multimedia teaching environment under network conditions and other requirements (Yang et al., 2021). As a whole, the Internet has deeply influenced the development of compulsory education in Phu Quoc Township.

#### *3.2 "Internet +" Subconsciously Affects Children's Quality Development Level*

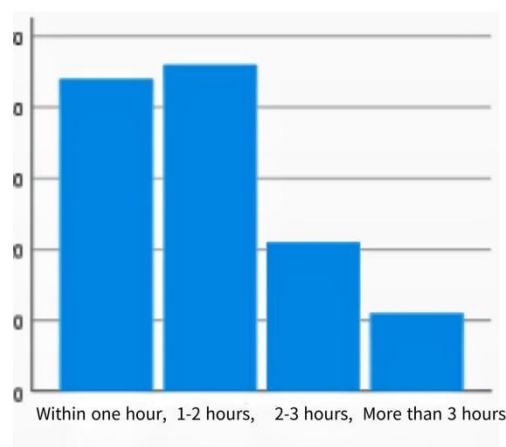
Entering the new era of information society, quality education requires the cultivation of "all-round development of human beings" connotation is constantly enriched, which requires that it should cover more concepts to promote the all-round development of human beings, and quality education is required to cultivate more all-round development of human beings with information literacy. The comprehensive coverage of "Internet Plus" has brought great convenience to children's learning in Southwest China, from online course learning through the Internet to boutique course learning, to online interactive classroom and live course learning, "Internet Plus" makes students' learning more flexible and diversified, and makes students' personalized needs more diversified. Internet+" makes students' learning more flexible and diversified, makes students' personalized needs satisfied, and makes students' experience of 'Internet +Education' more realistic. The Internet is injecting vivid power into the education ecology and comprehensively influencing teaching and learning.

In the primary and secondary schools in Pugu Township that participated in this questionnaire survey, from the point of view of students' use of the Internet for learning, the vast majority of children have participated in "Internet + education", and more than 80% of them believe that the school carries out on-line course teaching through the Internet, and participate in the "Internet + education" through cell phones, tablets, TVs and other electronic products. About 36% of children study online for less than 1 hour a day

on average, about 38% study online for 1-2 hours, and about 22% study for more than 2 hours; in addition, students not only use electronic products to participate in “Internet + education”, such as taking online courses, but also use electronic products to participate in “Internet + education”. In addition, students not only utilize electronic products for “Internet + Education”, such as studying online courses, consulting study materials, and studying in interest classes, but also use electronic products for entertainment and recreation on the Internet. This shows that children in Phu Quoc Township are able to utilize electronic products to serve their learning needs and satisfy their hobbies, and to obtain rich information from the Internet and expand their horizons. The Internet is subtly affecting the quality development level of students. (Shown in Figures 1 and 2)



**Figure 1. Have you Participated in “Internet + Education”?**



**Figure 2. You Average about “Hours of Online Learning Per Day”**

*3.3 The Effectiveness of Quality Education Implementation in the Context of “Internet Plus” Is Gradually Becoming More Prominent*

Combined with the research data, it is found that the implementation of quality education in Southwest

China in the era of “Internet +” has been effective. With the promotion of the strategy of rural revitalization, Pugu Township has actively responded to the Party’s call to actively carry out quality education, and better implemented the national policy requirements for the implementation of quality education in the countryside, and quality education has achieved certain results, with the effectiveness of moral and intellectual education being particularly prominent, but it still needs to be continuously strengthened and improved according to the requirements of the socialism with Chinese characteristics entering into a new era and the rapid development of the information society.

On the whole, the implementation of quality education in Pugu Township is better, as shown in Table 2, the average value of children in the self-assessment module of moral education reaches 3.5, indicating that the implementation of moral education in Pugu Township is good; the average value of the module of aesthetic education is 2.92, which scores the lowest among the various modules of quality education, indicating that the implementation of aesthetic education in Pugu Township is poorer in comparison with the other modules, and it needs to be strengthened, and the art education in the rural areas is still the weak level of school education, and it is the best way to improve the quality education in Pugu Township. Art education in rural areas is still a weak level of school education and a prominent part of quality education. In order to cultivate a well-rounded person, we should not only pay attention to the development of individual qualities, but also cultivate the overall structure of qualities. The “wooden barrel principle” tells us that the amount of water in a wooden barrel depends on the height of the shortest plank (2013). If one aspect of the effective structure of quality is poor, the function of this structure will be weakened, and the person will have unsatisfactory performance in the corresponding situation. That is why it is necessary to pay special attention to the harmonious development of the student’s talents and personality and to avoid one-sided development.

**Table 1. Status of Implementation of Quality Education in Phu Quoc Commune (children’s self-assessment form)**

	Minimum	Maximum	average
Moral Education	2.13	4.00	3.50
Intellectual Education	1.63	4.00	3.13
Physical Education	1.75	4.00	3.16
aesthetic education	1.70	4.00	2.92
labor education	1.78	4.00	3.12

#### **4. Reality: “Internet + Quality Education” Implementation of the Dilemma**

The report of the 20th Party Congress puts forward that “education, science and technology, and human resources are the basic and strategic support for the comprehensive construction of a socialist modernized country” and “adhere to the people-centered development of education, accelerate the construction of a

high-quality education system, develop quality education, and promote educational equity” (2022). With the development of China’s education, the nine-year compulsory education policy is fully implemented, the majority of rural children and teenagers in the Southwest region, “no school” problem has basically been solved. Although the infrastructure of “Internet + education” has basically achieved full coverage, the facilities and equipment related to the implementation of quality education through the Internet are still seriously insufficient; due to geographical differences and the dual structure of urban and rural economy and other objective factors, the distribution of educational resources between the east and west, urban and rural areas, the distribution of quality and balanced integration of quality and high quality development, and so on. These problems are still hindering the forward development of education in the Southwest China region, and there is still a long way to go before rural children can have a good education in the era of “Internet Plus”.

#### *4.1 Imbalance in the Structure of the Teaching Staff, and Insufficient Ability to Innovate in Informatization Teaching*

First of all, the imbalance in the structure of the teaching force is reflected in the serious aging of teachers. Due to the serious aging of some teachers, the coverage of teachers in primary and secondary schools in Pugu Township who use Internet+ for education and teaching is narrower, making it more difficult for schools to improve teachers’ IT teaching application ability as a whole. Due to the serious aging of teachers and the reluctance of young teacher trainees to teach in rural areas, the overall educational level of teachers in Phu Quoc Township is low, making training and learning of education information technology more difficult, further contributing to the difficulty of popularizing education information technology in schools. In addition, the school’s hardware facilities can only meet the most basic Internet teaching, belonging to the primary stage of education informatization, far from the current requirements of the state advocated by the information technology education, scientific use of information technology to improve the level of teaching and learning is even more difficult to realize the idea, all of these are to impede the implementation of the Internet + quality education problems.

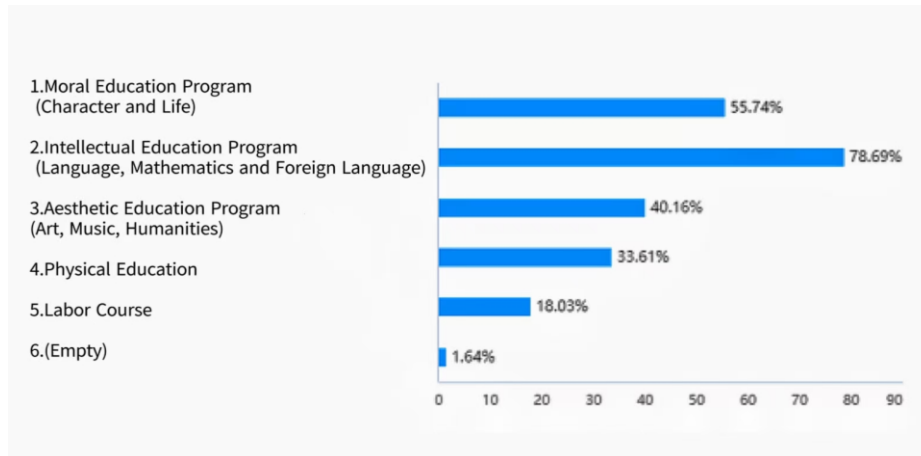
Secondly, the imbalance in the structure of the teaching force is manifested in the lack of teaching force and the existence of a large number of “top teaching” phenomenon. Inadequate teacher strength in mountainous areas is another major challenge to the development of quality education in mountainous areas in the era of “Internet +”. Geographic remoteness, poor basic living conditions and facilities, and limited space for future development are all important reasons why schools in mountainous areas are unable to recruit teachers or young teachers are unwilling to stay. After completing their undergraduate studies in the city, young teachers adapt to the convenient transportation and infrastructure of the city and are unable to tolerate the difficult environment of the mountainous areas, leading to a shortage of teachers in mountainous areas. The most direct consequence of the shortage of teachers is that quality education cannot be implemented comprehensively and effectively, not to mention the high-quality development of quality education. The phenomenon of a large number of “top teaching” is due to the fact that many teachers enter the mountain education system by taking exams related to their undergraduate

majors, but later, due to the serious wastage of teachers in the schools, some teachers are assigned to teach subjects that are not related to their own majors, or even one teacher teaches three courses that span a wide range of subjects. In addition, some young teachers choose to come to the mountainous areas to teach in order to give themselves “gold-plated”, with a utilitarian mentality can not concentrate on teaching, but also affects the quality of teaching, “gold” after the resignation, resulting in the mountainous areas of the school can not find the same specialty in a timely manner of teachers to teach students, the students can not adapt to the new school, and the students can not adapt to the new school. Students can not adapt to the new teacher, can only find the existing teachers to teach. “Teachers have to cope with the inspection of schools by leaders at all levels, and they are pestered by all kinds of activities other than teaching, and they do not have the time and energy to understand, learn and master the “Internet+” education and teaching methods. Teaching methods. This leads to the quality of education in mountainous areas can not guarantee the quality of education, students can not get quality education resources, thus also hindering the quality of education towards high-quality development.

#### *4.2 The Low Degree of Integration of the Internet and Quality Education*

The use of “Internet +” to carry out reforms in mountainous areas of education is to meet the children and parents of mountainous areas of high-quality education of the good wishes of the inevitable path, “Internet +” is the realization of the overall arrangement of the national quality of quality education resources is an important initiative to effectively solve the dilemma of the lack of quality education resources in mountainous areas. Lack of quality education resources in mountainous areas. However, the reality is that primary and secondary schools in Phu Quoc Township do not have access to high-quality quality education resources, “Internet +” related equipment can only meet the most basic classroom teaching, resulting in the use of “Internet +” implementation of quality education utilization rate is relatively low, the linkage between the two aspects. The linkage between the two is relatively shallow, still belonging to the primary stage of “Internet + education”. Among the children who participated in the questionnaire survey, 81.97% thought that their schools had arranged online courses, but 18.03% still thought that their schools had not organized online courses. Further understanding of the online courses arranged by the school, it will be found that the intellectual education courses are far ahead, followed by the moral education courses, and comparatively speaking, the online courses such as physical, aesthetic, and labor courses are carried out less, or even not carried out. The reason for using the Internet to promote the intellectual education program is to fulfill the heavy teaching task. After the new curriculum reform, a part of the weekly teaching time is set aside for moral, physical, aesthetic and labor education, and the class time left for the teaching of intellectual education is even more tight, so the use of the Internet to implement the intellectual education has become the most arranged online courses, resulting in other quality education has been seriously neglected. Secondly, schools do not have more quality education resources to help teachers carry out “Internet + education”. This is manifested in the lack of relevant smart classrooms, smart facilities for aesthetic education, physical education and labor education, which can only be carried out in real-life teaching and cannot be effectively linked with the Internet. (Figure 3)





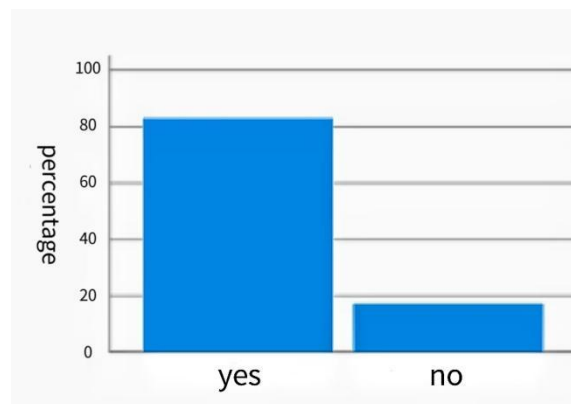
**Figure 3. What Are the Online Courses Arranged by the School?**

#### *4.3 Parents' Hidden Worries about Their Children'S Addiction to the Internet and Their Low Understanding of Quality Education*

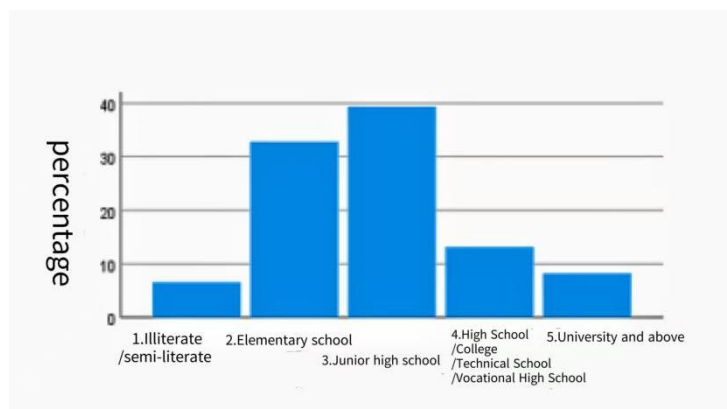
The survey found that although students' parents support their children's use of the Internet for learning (Figure 4), they are more worried about their children's addiction to the Internet and games when using the Internet, and their lack of self-control, and they think that the introduction of the Internet into education will affect their children's learning and ruin their children's future, and they will prohibit their children from using cell phones and other electronic products except for the time required by the teachers of the school to conduct on-line teaching and cut off their children's opportunities for exposure to the Internet other than in their living environments. They will prohibit children from using electronic products such as cell phones except for online teaching required by school teachers, and cut off children's opportunities to access the Internet except for their living environment.

Parents' lack of understanding of quality education is a challenge to the implementation of quality education at the family level. During the field research, three parents were randomly interviewed about their knowledge of quality education, two parents had no idea about quality education, and another parent didn't even know about quality education, didn't know about their children's learning and hobbies, which seriously affects the implementation of home-school cooperation in quality education. The influence of the family on children is subtle, and plays a pivotal role in the quality of children's development level, parents' "ignorance" will certainly affect the overall effectiveness of the implementation of quality education. In addition, during the interviews with parents, it was found that parents did not pay enough attention to their children's studies, and since most of the guardians had junior high school or elementary school education, and some of them were even illiterate, this directly led to the lack of effective family tutoring for the students after school (Figure 5), and the vast majority of the children had only their

parents as guardians. Most of the children's guardians are only one of the parents, mostly mothers, while fathers are always working outside the home, and mothers have to manage all the affairs of the family, so they are not capable of studying for their children; followed by grandparents and other relatives, although children are not left-behind children in the traditional sense, they are not far behind the left-behind children in terms of their situation, and they are prone to have a weak character, inferiority complexes, and so on, and they have more difficulties in studying, and they are not able to get good personality and psychological development. The children are not left behind in the traditional sense, but they are in a situation similar to that of left-behind children, and are prone to weak character, low self-esteem, and so on, and have more difficulty in learning, as well as in personality and psychological development.



**Figure 4. Whether Your Parents Support You to Participate in “Internet + Education”**



**Figure 5. Literacy of Your Caregiver (the Person Who Actually Takes Care of You at Home)**

#### 4.4 Students' Lack of Self-control and Vulnerability to Being Taken Hostage by the Internet

The study found that the implementation of quality education through the “Internet+” has both positive and potentially negative effects. The positive aspects are reflected in the fact that the popularization of the Internet has brought many conveniences and benefits to the learning and ability enhancement of

children in mountainous areas, such as being able to broaden their horizons, acquire new knowledge, improve their creativity and thinking skills, obtain powerful learning tools, improve their information literacy and information technology application skills, enrich their recreational activities, enhance their interest in learning, and improve their independent learning and self-management skills (Hao, 2022). Potential negative impacts are manifested in the time of Internet use and information screening. Firstly, children's self-control is weak and it is difficult for them to control the time of use, which affects their rest and other activities and is easy to become addicted. Secondly, it is difficult to avoid and screen negative information, affecting eyesight and other aspects of physical health, decreasing attention span, and weakening the ability to think on their own initiative. Therefore, the negative impact of the use of Internet + education and how to avoid, is the school needs to focus on consideration.

## **5. Relief Paths: The Future Direction of “Internet + Quality Education” Quality Development**

“Internet + quality education” is a new way to differentiate the integration of the Internet and education in the past, ultimately pointing to the comprehensive development of human beings. Since the proposal of education informatization, the connection between the two in the past is still relatively superficial, the students' learning style, way of thinking, the teacher's teaching methods have not yet undergone profound changes, the entire education ecology has not kept pace with the pace of information technology, the rural education in the Southwest region is even more so, the interface between the two and the interaction is conducive to the Internet with the moral, intellectual, physical education, aesthetic education and labor education to achieve a true integration, helping students to improve information literacy and quality of education. It helps students to improve their information literacy and overall development, meets the requirements of socialist successors to be cultivated in the new era, and promotes the high-quality development of quality education in mountainous areas.

### *5.1 Optimize the Structure of Teachers and Improve the Overall Professional Quality and Innovation Ability of Information Technology Teaching*

Whether China's quality education can achieve high-quality development depends largely on the optimization of the structure of the teacher team and the improvement of the professional quality of the teacher team (Hao, 2020). The development level of the teaching force is a key factor restricting the development of “Internet + quality education” (Yao & Liu, 2017). In the face of the serious aging of teachers, as shown in the following figure can be based on the specific circumstances of different teachers, “tailored to the individual”, to carry out targeted layered training. Hire Internet + education related senior technicians and experts into the school to carry out information technology training, new and old teachers, backbone teachers, subject leaders as the basis for the division of the batch of teachers to carry out training, and encourage the old teachers to participate in the study of the most basic information technology means, master the most basic information technology capabilities, new teachers just entered the school teaching can also be required to carry out Internet + training, and then according to the teacher's age, specialization and so on. New teachers who have just joined the school can also be required

to undergo Internet+ training. Later, according to the age and specialization of teachers, higher requirements can be put forward for the IT skills of new teachers, and an incentive system can be formulated to reward teachers for the effectiveness of their IT training, and different requirements can be set up for them to meet after the training. At the same time, Internet+ teaching competitions and training achievement competitions can be organized. Schools should actively create a harmonious and relaxed humanistic environment, reduce the frequency of teachers' participation in various inspection activities, so that teachers can devote themselves to the teaching of Internet + quality education. Internet + era, the development of information technology has accelerated the update of all kinds of knowledge, constantly impacting the ecological environment of education, not only to make changes in the medium of dissemination of knowledge, but also to make changes in the way of thinking and access to knowledge of students, teachers are no longer the only source of students to obtain knowledge, the teacher will become a guide to help students learn how to learn, the data base of students' learning, the development of students' potential, the teacher and student Teachers will become guides to help students learn to learn, repositories of student learning, developers of student potential, and guides to the mutual promotion of teacher-student ethics. Therefore, it is very important for teachers to change their own concepts and strengthen their professional learning and information technology skills, "Technology will not replace the teacher, but the teacher who can use technology will replace the teacher who can't use technology." Teachers can only do with an open mind to accept the changes brought about by social development to the education ecology, use Internet technology intelligently in teaching practice, achieve the deep integration between the Internet and teaching, and keep abreast of the times to improve their own professional qualities and Internet + teaching skills in order to keep pace with the pace of information technology in education, and impart the most advanced scientific and technological knowledge to the students, so that they will not be eliminated from the era of the flood current (Wang, Yu, & Qi, 2021).

### *5.2 Establishing a High-quality "Internet + Quality Education" Resource Bank and an all-round Adaptation System*

Establishing a high-quality Internet+ and quality education teaching resource base that includes teachers' teaching and students' learning. Its main purpose is to meet the opportunity of rural children in Southwest China to obtain better quality education resources, and to promote the comprehensive development of children and educational equity. High-quality "Internet + quality education" resource base should have the following points: first, the knowledge content of the quality education resource base to ensure that the knowledge covered by the resource itself has a complete logic, which is conducive to promoting the mastery of the complete knowledge of students. Secondly, a high-quality "Internet + quality education" resource base should cover a rich variety of materials, including students' learning process support materials, teachers' teaching process support materials and extension and expansion materials, and under each major category, it contains courseware, teaching design, question banks, etc., and then differentiate them according to the text category, material category and animation category. The material should be differentiated according to text, material and animation. Attention should be paid to the use of the Internet

to replace new materials in a timely manner, eliminating backward materials to ensure the dynamic cycle and effectiveness of the resource library. Finally, it should contain the structure of the curriculum system in line with the textbooks, which is conducive to teachers and students to use the resources as they go, it should be noted that teachers in the process of using the resource base should be based on the physical and mental development of the students and the existing degree of knowledge mastery of the curriculum in accordance with the knowledge of the logic of the organization, and the structure of the knowledge should be transformed into easy to pass and make students easy to understand the classroom content, which is a knowledge structure of the process of breaking and reconstruction. This is a process of breaking and reconstructing the knowledge structure, which requires teachers to have a certain degree of professional competence and IT teaching innovation.

The establishment of a high-quality quality education resource base is not a one-size-fits-all solution, and it needs to be matched with an appropriate platform for communication and interactive feedback system, so that teachers and students can solve problems in the process of using it in a timely manner, and provide effective feedback suggestions and opinions. It also needs an all-round appropriate management system for its orderly management and supervision. First of all, establish a resource upload audit mechanism, encourage teachers and the community to participate in the expansion of the resource base, and encourage everyone to become a resource contributor to the quality resource base. Secondly, the public welfare of the quality education resource bank should be clearly stipulated, and the nature of the use of the resource bank should be regulated in the system, so as to avoid the interest and distortion of the nature of the use of the resource bank. Finally, it is also necessary to establish the management and regularized supervision mechanism of the quality education resource bank to ensure the normal operation of the resource bank.

### *5.3 Establishing a Three-dimensional "Internet + Quality Education" Home, School and Community Co-education Network*

The implementation of "Internet + quality education" cannot be realized only by the internal strength of the education system, but must rely on the strength of society as a whole to build an effective "Internet + quality education" network of home, school and social coeducation. The establishment of a three-dimensional common education network platform is conducive to the integration of educational values between different fields of the family, school and society, and the construction of a quality lifeline for the quality development of quality education with a new pattern of all-round education.

The three-dimensional home-school-society co-education network should do the following three things. The first is that schools take the lead in establishing institutionalized "home-school-society co-education committees," and the government provides technical equipment and other support to establish "home-school-society co-education websites," and the central connection point of the entire network should be the school-led committees, which manage the websites. The central link of the whole network should be the school-led committee, which manages the website, and through this, it radiates to families and the public. The key point is to cultivate teachers' awareness and ability to carry out home-school-social co-education through the Internet, and deal with the problems encountered in the process of home-school-

social co-education in quality education through the “bridge” of teachers; we should also continuously strengthen the awareness and publicity of home-school-social co-education, and encourage more parents, public-spirited people, non-profit organizations, etc. to join us. We also need to strengthen the awareness and publicity of home-school-society co-education and encourage more parents, public-spirited people and non-profit organizations to join in, so as to expand the quality education resources available to students. Secondly, families, as the important main body of the co-education network, should assume an important role in the implementation of “Internet + quality education”. Because no matter how perfect the implementation of quality education in schools is, if there is no good family education and the active cooperation of parents, it is impossible to realize the healthy development of children’s personality and psychology and the comprehensive development of quality, and it is also impossible to realize the high-quality development of quality education. The establishment of a common education network should firstly change parents’ prejudice towards the Internet, and fundamentally change their own concept of education; secondly, to help parents to establish a sense of responsibility, the committee can regularly provide parents with relevant Internet training, improve parents’ ability to use the Internet to communicate with schools and teachers, and how to carry out training in family education, so as to provide parents with experience in family education that can be used as a reference. Third, social forces are an important pillar in the implementation of “Internet + quality education”. The government should encourage social Internet+ enterprises to provide public welfare assistance to rural education, help develop shared application resources with local traditional cultural characteristics, local advantages, and school-based characteristics, and rural remote quality education resource libraries to ensure that children in mountainous areas have access to quality education resources at any time and any place, and to support education informatization and the development of educational reforms in the majority of impoverished areas and schools in mountainous and rural areas. Provincial universities have established one-to-one support or one-to-many support centers to help schools in mountainous areas of the province establish generative resource libraries, improve the ability of schools to use the Internet to share free and remote access to equivalent educational resources, so that teachers and students can jointly access and participate in the use of quality education resources and generate wisdom education.

### **References**

- Advancing unswervingly along the road of socialism with Chinese characteristics [N]. (2013). *Hunan Daily*, 2013-01-25(016).
- Gu, M. Y. (2023). There is no modernization of national education without modernization of rural education. *Chinese Journal of Education*, 2023(9). <https://doi.org/10.1007/978-981-19-6355-1>
- Hao, H. L. (2022). *Investigation and research on the current situation of 3-6 years old children’s participation in “Internet + education”*. Hebei University.
- Hao, W. W. (2020). Comprehensive optimization of teachers’ structure is urgently needed to promote the modernization of rural education. *Chinese Journal of Education*, 9, 32-37.

- Ministry of Education. (n.d.). *Outline of the National Medium- and Long-Term Education Reform and Development Plan (2010-2020)* [EB/OL]. Retrieved from [https://www.gov.cn/jrzq/2010-07/29/content\\_1667143.htm](https://www.gov.cn/jrzq/2010-07/29/content_1667143.htm)
- Qi, X. (2022). *Research on quality education for rural left-behind children*. Anhui Agricultural University.
- Wang, Z. (2012). Consciously and firmly promoting quality education to let children grow up healthily and happily. *Education Research*, 33(1), 65-68.
- Wang, Z. J., Yu, X. Y., & Qi, M. M. (2021). Analysis of the focus point of rural education informatization development in China under the background of “Internet+”. *China Electrification Education*, 2021(10).
- Wen, H. F. (Ed.). (2019, December). *Principles and Methods of Basic Education Reform in China*. Beijing: Education Science Press.
- Xie, M. (2016). *Research on teaching wisdom under the background of “Internet + education”*. Jilin University.
- Yang, R. Y. et al. (2021). *China rural education development report 2010-2020* (05: 6). Beijing: Science Press.
- Yang, Z. S., & Shi, Y. Z. (2018). Policy evolution and theoretical exploration of quality education. *Educational Research*, 39(12).
- Yao, X., & Liu, Y. R. (2017). Path analysis of optimizing the structure of rural small-scale school teachers. *Journal of Educational Science of Hunan Normal University*, 16(4), 23-27.
- Yu, B., & Song, N. Q. (2011). The Role of Primary and Secondary School Principals in the Implementation of Quality Education. *Education Research*, 32(6), 23-27.