Exploring the Path of College Students' Participation in Education Poverty Alleviation under the Background of "Internet+": Taking "A Class in Childhood" as an Example

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Abstract: Since the 19th National Congress of the Party, China has been paying more attention to education as well as emphasizing education equity. In order to respond to the national call, the traditional offline teaching mode is combined with the Internet to build an "Internet+" education poverty alleviation model with university students as the main teachers, online teaching as the main focus, and offline field research as the supplement. This paper takes the online teaching platform "A Class in Childhood" as an example and explores the path of college students' participation in education poverty alleviation. In summary, the platform is committed to using the sufficient, professional, and high-quality educational resources and teachers' power of universities to alleviate poverty in education and culture for elementary schools in remote and poor areas. Meanwhile, the platform has alleviated the contradiction between the educational resources in rural areas and urban areas, helped the psychological health development of local children, and brought new inspiration to the way of education poverty alleviation in poor areas.

Keywords: Internet+, poverty alleviation, A Class in Childhood, education

1. Introduction

The report of the 19th National Congress of the Communist Party of China points out that poverty alleviation should focus on the combination of poverty alleviation and wisdom alleviation, as well as the use and popularity of modern information and communication technology [1]. Various industries have entered the era of "Internet+", and "Internet+" has been widely used in various fields because of its huge development potential. The "Internet+" has been widely used in various fields, achieving a high degree of cross-border integration in multiple fields and disruptive changes in many fields. In an era of the rapid development of information technology, live webcasting and sharing of high-quality resources deserve to become a mode of educational service and bring profound changes to the field of education. College students' proactive participation in the excellent platform provided by society will stimulate great energy. Society should give more understanding, support, and help to the online live classroom teaching mode. Accordingly, this paper explores the "Internet+ Education" program which enables education to fly higher and farther with the wings of the Internet.

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2. The Inevitability of Poverty Alleviation Through Education in the Context of "Internet+"

2.1. Improving the Utilization of Education Resources

Under the background of "Internet+", applying the advantages of the Internet to poverty alleviation in education greatly improves the utilization rate of education resources and the efficiency of education dissemination [2]. Besides, it also helps alleviate poverty through precise education. First of all, "Internet+" can promote the continuous evolution of economic forms, thus driving the development of social and economic entities and providing a broad network platform for reform, innovation, and development, including education reform and innovation. The emergence of more network platforms can better serve people to participate in education poverty alleviation. Second, "Internet+" represents a new social form, which can give full play to the optimization and integration of the Internet in the allocation of social resources, deeply integrate the innovations of the Internet into various fields of economy and society, and enhance the innovation and productivity of the whole society. In the work of poverty alleviation in education, "Internet+" not only plays the role of educational innovation but also provides the impetus for poverty alleviation work so that it can be carried out more extensively, deeply, and quickly, instead of a single, traditional method [3].

2.2. Making up for the Shortcomings of Offline Teaching

Online teaching can make up for the shortcomings of offline teaching by innovating teaching activities. As Table 1 shows, with the support of the Internet, online teaching can solve some problems of the traditional teaching mode.

Volunteer External factor Teaching time teaching method Transportation is The teaching time is limited by the arrangement of courses for college students, inconvenient, investment Offline funds are high, and the living so they cannot volunteer to teach during conditions of volunteers are class time. They can only use the time of limited winter and summer vacation and internship Volunteers can participate in There are fewer restrictions on online volunteer teaching activities teaching. College students can conduct Online anytime and anywhere at a online teaching activities in their low cost dormitories when there are no classes

Table 1: A comparative analysis of online teaching and offline teaching.

On the one hand, the COVID-19 epidemic restricted people's lives in 2020; on the other hand, it also contributed to the prosperity of online education nationwide. The convenient and time-independent nature of the Internet has also enabled the spread of online Internet teaching [4]. The Internet offers potential for educational equity in terms of sharing educational resources. Online education avoids the expense of textbooks, and other learning materials can be read electronically. This not only saves money but also makes it possible to teach "whatever you want to learn". For the current problem of serious imbalance between urban and rural education resources, Internet teaching is a good solution. Teaching volunteers can teach through the Internet to ensure that teaching continues, breaking the restrictions of time and space. At the same time, high-quality teaching

resources can be shared and used through the Internet platform. In summary, the popularity of the Internet provides the possibility for the inevitability of online teaching.

3. The Online Teaching Project "A Class in Childhood"

3.1. A Brief Introduction of the Project

In 2016, the "A Class in Childhood" Cloud Project was established. It is an educational non-profit program. Through an online teaching platform, volunteers teach eight quality subjects: art, music, Chinese, science, psychology, English, reading and writing, and health and safety, so as to village elementary school students in a dual-teacher mode, relying on multimedia classrooms in rural elementary schools to alleviate the lack of teachers and a single curriculum in rural elementary schools. The subjects are taught with good quality and are not counted in examinations in rural elementary schools [5]. The slogan of the platform is to make education unimpeded by distance. The vision is to remove incomplete class schedules in rural elementary schools. The mission is to use new technology to improve the unbalanced situation of education. The values are respect, passion, responsibility, and sharing. There is no restriction on the teacher's specialty and availability of teaching qualifications for different teaching subjects, and volunteers can choose according to their own abilities and interests. As of June 2022, the cumulative number of project elementary schools in the cloud classroom is 449, the cumulative number of students directly benefited is over 45,000, the cumulative number of teaching volunteers is 4,048, and the cumulative number of teaching sessions is 29,959.

3.2. The Cultivation of Teachers of the Project

In poor areas, teachers of non-major subjects such as art and music only account for a small proportion, and many of them are language and mathematics teachers and there is an aging trend of teachers. In addition, most rural teachers have never received IT training, and the teaching equipment they are equipped with is rarely used. Therefore, they lack the initiative to improve their comprehensive professionalism and will not take the initiative to ask for courses in non-major subjects [6]. Therefore, university students are chosen to teach online. Before they start teaching, four rounds of training are provided through the mode of live classes + online resources. The first round of training will be on the basics of the project, the second round will be on the use of related teaching tools, the third round will be on the writing of detailed classroom scripts, and the last round will be a one-on-one classroom trial, for which a staff member will give a score [7]. Only volunteers who pass the four rounds of training can become teachers of the "A Class in Childhood" project. The platform provides volunteers with a wealth of classroom resources, teaching experience, and skill sharing. With high scientific and cultural literacy and ideological and political cultivation, university students can not only contribute to the development of poverty alleviation work in rural areas but also improve their practical ability, transform theory into practice, enhance their teaching ability, and promote self-development and improvement. It is also an opportunity for them to recognize their own strengths and weaknesses in extensive social practice, and deepen their feelings of professional identity by participating in education poverty alleviation practice.

3.3. The Improvement in the Teaching Mode of the Project

Since the online distance learning method is new to the students and the team members are completely new to the students, the teaching activities are challenging to carry out [8]. The students needed to adapt to the teachers and the content, and the teachers had to adapt to the change of identity and the control of the classroom. The first few weeks of online teaching activities were less than ideal, with

little familiarity between students and teachers, and students were afraid to raise their hands to answer questions. Discipline management in a crowded class was a big problem. This obviously affects the learning effect and is a weakness of Internet teaching, as teachers are unable to communicate deeply with students face to face. Based on this situation, "A Class in Childhood" was immediately adopted.

The teaching method is a dual-teacher model. Two teachers are in charge, a volunteer lecturer and a teacher from a rural elementary school who monitors and supports the student's participation and interactive responses in class. The two teachers work together so that they can keep track of the student's classroom dynamics in real time, identify any problems in the student's learning, and communicate with the students individually to solve any network or software problems that may affect the overall teaching process of the class. The teachers of rural elementary schools can also lead their students to do relevant off-class practice to make up for the lack of online teaching.

In the teaching mode, small classes are used, and students are divided into multiple classes and are free to choose their courses. Due to the limited equipment in rural elementary schools, a school is basically equipped with only one intelligent teacher, so the curriculum of rural elementary schools is set according to the teaching curriculum chosen by the volunteers. When matching volunteers and rural elementary schools, the platform will also make corresponding matches.

3.4. Problems of the Online Teaching Mode

3.4.1. A Lack of Effective Interaction

Although online teaching effectively breaks time and space restrictions in the traditional teaching mode, making students' learning time and form more flexible and enabling them to use teaching videos to learn anytime and anywhere, this way of teaching across the screen can seriously hinder the interaction between teachers and students and reduce teaching efficiency [9]. Face-to-face teaching is a very important part of the traditional teaching mode. Through expressions, words, body movements, and even emotions and tone of voice, teachers are able to generate good emotional interaction with students and accomplish the corresponding teaching objectives naturally in an effective interaction, thus ensuring teaching quality. On the other hand, although online teaching has the functions of activities such as check-in, roll-call, questioning, questionnaires, and accompanying quizzes, it obviously lacks emotional characteristics, which leads to the lack of effectiveness of interaction.

3.4.2. A Lack of Teaching Reflection

As the functions of the online teaching platform become more and more perfect, teachers' ways of online teaching become more and more fixed. Basically, they arrange the teaching contents and design the teaching methods according to the functions of the platform. In the long run, teachers' sense of optimization and innovation will be inhibited, and they will be satisfied or numb to the current teaching mode and effect, neglecting to reflect on their own teaching ability and teaching effect. Over-reliance on the platform's prepared courseware and course materials without innovation time makes the classroom lack vividness and is not conducive to teachers' own development [10].

3.4.3. Vulnerability to Interference from Equipment and Other External Factors

The variability of hardware equipment and network environment is, at this stage, the main factor affecting online teaching. The widespread popularity of online teaching puts forward higher requirements for the stability of the network server equipment of the platform operating companies. Many platforms cannot be accessed normally, content cannot be updated, resources cannot be uploaded and used, and many other problems occur because the server performance cannot meet the

actual usage requirements, which seriously affects the user experience. At the same time, the system compatibility of online teaching platforms is also an obvious problem. Many platforms can not take into account MACOS, Windows, Android, IOS, and other systems well, resulting in different experiences for users with different hardware devices. In addition, the interference of the network environment for online teaching is also obvious, and it is difficult to conduct online live teaching in areas with a poor network environment. Most of the rural areas are not well equipped with network infrastructure, and many volunteers have feedback that the equipment in rural elementary schools often lags, reboots, and disconnects during the class. Due to limited funding, a school usually has only one multimedia classroom to meet the conditions of online teaching, which makes it more difficult to carry out online teaching in rural areas.

3.5. Countermeasures to Improve the Effect of Online Teaching in Colleges and Universities

3.5.1. Rationalizing the Use of Resources

Restricted by a variety of factors, it is unrealistic to make all the rich online teaching courses on the Internet fully meet the online teaching needs of different schools. This requires teachers who are college students to collect, analyze, and integrate high-quality online teaching resources on the basis of their own teaching objectives and students' cognitive ability, and to reasonably integrate and utilize a variety of resources with the explanation of the classroom as the core, so as to comprehensively improve the applicability of online teaching content. For example, before starting online teaching, teachers can browse online excellent teaching video resources in advance, summarize the common teaching key contents, and record the main teaching video of this lesson, related exercises, and explanation videos by following the famous teacher's teaching skills with the cognitive ability of the students they teach. Then, from the resources on the Internet, individual high-quality resources that meet the teaching needs are selected, and then they are used as supplementary videos for teaching through the way of video recording and extra-voice explanation. In this way, it can enrich the online teaching content and improve the teaching quality, but also ensure the applicability of the teaching content and achieve the expected teaching objectives.

3.5.2. Improving the Effectiveness of Teacher-Student Emotional Interaction

Teachers should enhance the awareness of teacher-student interaction in the online teaching process, mobilize students' learning interest, and add emotional communication between teachers and students by designing diversified and interesting interactive links, so as to improve the effectiveness of lectures. For the online classroom, during the live broadcast, a relaxed and active lecture atmosphere can be created through language, expressions, and tones, encouraging students to raise their hands and speak, organizing more group discussion activities, increasing the frequency of teacher-student interaction during the live broadcast, and enhancing students' sense of classroom participation. Besides, the trophy issuing function, dice function, and timer function of the online platform can be used more to mobilize the classroom atmosphere. Teachers can also design some classroom-related practical assignments to be completed together with the cooperation of the teaching assistants in rural elementary schools.

3.5.3. Conducting Function Optimization

Streamlining the functions and operation of the online teaching platform and improving the operability of the platform play an important role in enhancing the effect of online teaching in colleges and universities. University students generally have good computer operation and Internet learning

ability, and they are more capable of learning and using the online teaching platform and other information tools.

4. Conclusion

In conclusion, "Internet+" has a profound impact on poverty alleviation through education. It can improve the unbalanced development of education and make full use of college students as educational resources. Society should give more understanding, support, and help to the online live classroom teaching mode. In today's era, with the rapid development of information technology, live webcasting and sharing of high-quality resources deserve to become a mode of educational service and bring profound changes in the field of education. College students' proactive participation in the excellent platform provided by society will stimulate great energy, and it is expected that education can become fairer in the future.

References

- [1] Wu, Y. M. and Wu, S. L. (2022). Research on educational equity in China under the perspective of "Internet+". Grade & Classic (20), 103-105.
- [2] Huang, B. (2022). Analysis on the fair development path of education: Take Guishiyun Primary and secondary school education resources cloud platform as an example 111(08), 56-58. DOI:10.16852/j.cnki.45-1390/g2.2022.08.033.
- [3] Jiang, Y., Guo, P. H. and Li, S. L., et al. (2022). Practical research on "Internet+ education" under the theme of educational equity. Science and Technology Vision 374(08), 101-105. DOI:10.19694/j.cnki.issn2095-2457.2022.08.30.
- [4] Huang, Q. (2021). Research on promoting the balanced development of urban and rural compulsory education in the "Internet+" era. University Of Nanhua. DOI:10.27234/d.cnki.gnhuu.2021.001175.
- [5] Wu, Q. (2020). Research on the balanced development of compulsory education under the background of "Internet+". Nanchang University. DOI:10.27232/d.cnki.gnchu.2020.002989.
- [6] Xiao, Y, J. (2019). Thinking on rural education equity in the era of "Internet+". New Course 504(12), 99.
- [7] Wang, Y. F. (2023). The practical dilemma and improvement strategy of "Internet+" art volunteer teaching in Northwest Ethnic Region. Electro-Chemical Education Research 44(02), 86-91. DOI:10.13811/j.cnki.eer.2023.02.010.
- [8] Wu, H. R. (2022). The basic characteristics and implementation strategies of the "Internet+" volunteer teaching mode for college students. Journal of Lianyungang Normal College 39(04), 93-96. DOI:10.15927/j.cnki.lygszxb.2022.04.004.
- [9] Luo, X., Li, T. T. and Lian, Y. X. (2021). Research on "Internet+ Volunteer Education" Support mode: Take Nanyudian Township, Runan County, Henan Province as an example. Rural Area, Agriculture, Farmer (version B) 562(08), 45-48.
- [10] Zhang, Z. (2021). In the practical research of "Internet+ education" targeted poverty alleviation: Take the "Changzhou Bell Tower- -Ankang Zhenping" education cooperation project as an example 1461(34), 37-39.