Rural Teachers' Professional Development under the Model of "Internet plus" Volunteer Teaching in Normal College

Jian ZHAO*Wenjing YANG
School of Educational Technology, Northwest Normal University, China
*KjYwj0911@163.com

Abstract: "Internet plus" Volunteer Teaching Service Project in Normal College was carried on by 8 normal colleges and 17 deeply impoverished counties in Gansu Province in China and this project was designed to improve Information Communication Technology(ICT) of normal students and rural teachers through field teaching mixed with remote teaching. The present study analyzed the current situation and difficulties of rural school teachers' professional development, based on an investigation of the adaptability of rural teachers in "Internet plus" Volunteer Teaching Service for Normal College, and proposed a set of long-term mechanisms for rural teachers' professional development to improve the teaching quality of rural weak schools.

Keywords: Mobile Technology, Unit Teaching, Classroom interaction behavior

1. Introduction

The development of rural education is related to the breadth and depth of the implementation of the rural revitalization strategy. The State Council's "Guiding Opinions on Actively Promoting the" Internet Plus "Action" emphasize the requirement to explore the new mechanism of providing education services, expand the coverage of high-quality education resources, and ensure the fairness of the allocation of education resource,(Guiding Opinions on Actively Promoting the "Internet Plus" action,2015). According to The Lisbon Education and Professional Teacher Training Development Strategy, the capability-depend methodology is required to solve the problem of training for new generation professional talent in the education field and the critical point is how to maintain sufficient flexibility during the innovation,(V Valentyna C,2020). Guay F. etc. in the scientific work "Teacher structure as a predictor of students" perceived competence and autonomous motivation: The moderating role of differentiated instruction "notes that through their competencies the teacher to some extent positively affects the formation of students" autonomy(Guay F. ,2017). Studies on influencing factors of rural teachers' professional development include Wang J, Tigelaar D. E. H. etc. all believed that the professional development of rural teachers was limited by rural economic and cultural development and educational cognition level,(Wang J,2021). Xiao Zhengde believes that the development dilemma faced by rural teachers mainly includes five aspects: heavy teaching tasks, great psychological pressure, reduced career satisfaction, high job burnout, and low career happiness,(Xiao,2011). L. s. et al. proposed that the key factors affecting the development of teachers' professional ability include internal factors, namely motivation, activity, emotion, and will, and external factors, including the content, technology, methods, tools, and forms of educational materials,(Guay, F. ,2017).

The researches whose topics are teachers' development in the rural area, but most of them mainly focus on the teachers themselves and related external environment. However, there are few kinds of literature about how rural teachers can achieve long-term development under the "Internet plus" model of supporting teaching in normal universities(Generally refers to colleges and universities that train various types of teachers). In recent years, China's education reform has focused on improving teachers' ICT in rural areas. "Internet plus"Volunteer Teaching Service Project in Normal College make it achieved that schools in the rural areas could share higher quality education resources of urban areas. For solving the rural school unable to open national courses completely,(Ministry of Education

issues guidelines on strengthening the application of "three classrooms",2015)" as the main goal, breaking the time-space limitations using the Internet, the project was designed to promote rural small-scale school education teaching quality as the common desire. Achieving multiple breakthroughs and comprehensive innovation has the significance of leading exploration in China. The Study is focused on the following questions: What are the difficulties rural teachers' professional development in the "Internet plus" Volunteer Teaching Service Project in Normal College? How can teachers in rural areas achieve long-term professional development under the model of "Internet plus" Volunteer Teaching in Normal Colleges?

2. Method

This study focuses on the rural teachers' professional development in the "Internet Plus" Volunteer Teaching Service Project in Normal College, which was first implemented in Gansu, China. Based on the literature research method and questionnaire method, this study analyzes the factors influencing the professional ability development of rural school teachers from two aspects: the current situation of professional development of rural teachers in"Internet plus"volunteer teaching and the current situation of dual-teacher classroom teaching structure, and puts forward the professional development path of rural teachers according to the obtained data. The research object is 379 rural school teachers who participated in the project, covering 175 primary and secondary schools and teaching points in 154 administrative villages of 62 towns and townships in 9 cities and 17 counties and districts.

3. Results and Analysis of Data

In this part, we analyzed the collected data, which reflected the difficulties and appeals of 379 rural teachers who participated in the survey during the project implementation. The problems are mainly found in the low professional ability of information technology, the unclear orientation of teacher training, lack of professional knowledge of teachers, and poor adaptability of the teaching model of the "double-teacher classroom".

Before the implementation of the project, most rural teachers believed that limited teaching methods, single teaching evaluation, backward education concepts, and lack of teaching resources hindered the improvement of the learning quality of school students. After the implementation of the project, we found that rural teachers had a great improvement in these aspects. (See Figure 1)
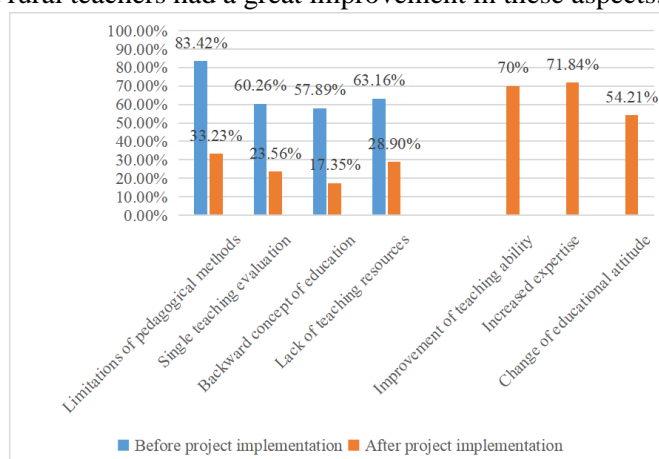

Figure 1. Comparison before and after project implementation.

The survey found that 68.34% of the teachers in the dual-teacher classroom thought that the cooperation between the main teacher and assistant teacher was low, resulting in a poor teaching effect(See Table 1). The results show that 75.73% of rural teachers think their schools are short of teacher resources, while 53.56% think their schools have an unreasonable teacher-team structure(See Table 2).

Table 1. *Problems to be Improved in Dual-teacher Classroom*

	Frequency	Percent	Mean	Standard Deviation
Increase the communication and cooperation between the lecturers and auxiliary teachers	259	68.3%	.68	.466
Strengthen the classroom management of auxiliary teachers	234	61.7%	.62	.487
Increase the interaction between auxiliary teachers and students	200	52.8%	.53	.500
Strengthen the supporting role of network technology	148	39.1%	.39	.489

Table2. *Factors Influencing Curriculum Ofering in Small-scale Rural Schools*

	Frequency	Percent	Mean	Standard Deviation
Shortage of Teachers	287	75.7%	.76	.429
Teachers' Lack of Subject Professional Knowledge	199	52.5%	.53	.500
Teachers Lack Professional Quality	94	24.8%	.25	.432
Structure of the Teaching Staff is not Reasonable	203	53.6%	.54	.499
Subject Teaching Tools are Inadequate	197	52.0%	.52	.500
Other	8	2.1%	.02	.144

4. Conclusions

Based on the "Internet plus" teaching support service project in normal colleges and universities implemented for the first time in China, this research analyzes the surveyed data, tries to use information technology to break down the barriers of time and space, and improve the professional development of rural teachers, to ensure the quality of education and promote the Equity in education, and promote the development of education. The results show that from the perspective of teachers' development, it is necessary to clarify the self-awareness of teachers' professional development, improve the technical practice ability of teachers' professional development, enhance the adaptability of teachers' dual-teacher classroom teaching mode, reduce teachers' remote dependence, and enhance classroom participation. Secondly, from the perspective of external environmental impact, it is necessary for the relevant education departments of the country to jointly ensure the accuracy of teacher training and solve the problem of the structural shortage of rural teachers. Finally, although we have done some research and surveys, summarized and analyzed the current situation and difficulties of rural school teachers, and proposed a long-term development mechanism, the research object is from Gansu, China, which is not enough to represent all rural school teachers. The practice process must conform to the actual situation. The "Internet plus" teaching in normal colleges and universities is a new teaching model, and more exploration and research are needed in the future.

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