

The Current Situation, Difficulties, and Optimization Paths of County-level Teacher Training in Border Areas: Based on Y County in Yunnan Province

Jia Yu*, Yaofen He

School of Education, Yunnan Minzu University, Kunming, 650031, China

**Corresponding author*

Abstract: *As the implementer and participant of teacher training programs, the author of this article analyzes the current situation of teacher training in border areas based on a survey of Y County, Yunnan Province, and summarizes the main practices and experiences gained in county-level teacher training in border areas. The research results show that county-level teacher training in border areas faces some difficulties in professional knowledge, teaching ability, teacher education philosophy, and information technology education equipment. Finally, based on the research results and personal training experience, an optimization path is proposed to provide useful references for teacher training work.*

Keywords: *Border areas; Teacher training; Training path*

1. Introduction

Education, as an important factor of production, plays a promoting role in regional development. Doing a good job in education in border areas has more profound significance for regional development [1]. As an important component of the education industry, education in border areas can promote the prosperity and development of various ethnic regions, playing a crucial role in maintaining ethnic unity and achieving long-term national stability. In recent years, the Ministry of Education and other departments have successively issued the Opinions on Comprehensively Deepening the Reform of Teacher Team Construction in the New Era (2018), the Action Plan for Teacher Education Revitalization (2018-2022), and the New Era Basic Education Strong Teacher Plan (2022), aiming to promote teacher education reform and improve the quality of the basic education teacher team. Under the high attention of the Party and the government, special training programs such as the National Training Program and Provincial Training Program, as well as measures such as strengthening basic education teachers in the new era and providing targeted support, are all helping to cultivate a teacher team in border areas, enhance teacher literacy and teaching abilities. The development and implementation of teacher training programs at all levels and types also reflect the active exploration of education development by the education administrative departments in border areas. However, teacher training in border areas is still facing some difficulties due to objective factors such as regional environment, school environment, material treatment, and subjective factors such as personal qualities and professional emotions.

The author has been responsible for the training tasks of the school's national training program since 2016, and has undertaken and implemented training projects such as the "Teacher Replacement Project", "Rural Principal Training Project", and "Preschool Teacher Care Ability Enhancement Project". As implementers and participants of teacher training, I have had some reflections on the issues of teacher training and development. In view of this, this study combines the actual training situation in Y County, Yunnan Province to analyze and study three questions: the current situation of county-level teacher training in border areas? What problems are facing? What are the ways to optimize?

2. Implementation of county-level teacher training in border areas

Yunnan Province is located on the border of the motherland, and due to its unique natural environment, geographical location, social and other factors, it has had a great impact on its educational

development, restricting the education development in the border areas. The current development of basic education in the border areas still has a significant gap compared to advanced regions in China. Y County is located in the Wumeng Mountain area at the junction of Yunnan, Guizhou, and Sichuan provinces in the northeast of Yunnan Province. With a relatively remote geographical location and underdeveloped transportation, the overall education situation in the county ranks behind that of the entire city. Starting from 2018, the school where the author works has been responsible for the online and offline national training programs in Y County for six consecutive years, including training for young teachers, training for backbone teachers, and centralized training for full-time teachers. I am relatively familiar with the overall situation of teacher training in Y County. During the training period, I conducted in-depth interviews or discussions with the main staff of the education administration department, relevant leaders of primary and secondary schools, and teachers in Y County to gain a better understanding of the current training situation in Y County.

2.1 Basic situation and main measures of teacher training

From 2018 to 2024, Y County has carried out a total of 27 large-scale training programs at all levels, both online and offline, with a total of 32000 trainees and a total investment of about 1 million yuan in training funds. The training targets include backbone teachers, school homeroom teachers, school leaders, new teachers, three teachers, subject teachers, etc. The training programs include national and county-level special training such as the National Training Plan for Young Teachers to Enhance their Abilities, New Teacher onboarding Training, remote and weak school training, primary and secondary school mental health teacher training, and Chinese language teacher reading exercises. The main training methods are online, offline, and centralized online and offline training. The training units mainly come from local education administrative units and various universities.

In terms of teacher training measures, the education administrative department of Y County mainly focuses on the following aspects.

1) Implement comprehensive training for primary and secondary school teachers. By closely focusing on the different requirements of teachers in different stages, disciplines, age groups, and schools at different levels, and through theoretical learning and practical training, we continuously improve the professional development level and educational practice ability of teachers.

2) Provide training on mental health education for primary and secondary school teachers by inviting them in or sending them out. Providing mental health education and training to teachers can enhance their mental health literacy, optimize teaching quality, and promote the comprehensive development of students. The mental health of teachers directly affects whether students can develop healthily.

3) Continuously strengthen the management and training of new teachers. We propose to organize a rapid growth action for young teachers and propose a three-year growth goal for newly hired young teachers, which requires adaptation within 6 months, approval within 1 year, formation within 2 years, and initial results within 3 years [2].

4) Strengthen the training of backbone teachers, train and cultivate school level backbone teachers, county-level backbone teachers, and city level backbone teachers through different training methods and requirements. Organized by the Education and Sports Bureau, advanced training is provided through expert guidance, inter school cooperation, centralized training, classroom tracking, classroom teaching competitions, "National Training Plan" research courses, grinding courses, lecturing, discussing courses, and same class heterogeneity.

5) Refine the training for weak subject teachers and strengthen their on-the-job training. We strengthen the training of teachers in weak subjects, make full use of winter and summer vacations to enhance basic skills training, and focus on school-based training. Each school's teaching department will provide in-depth guidance on "classroom teaching" and "theme school-based teaching research", with "online teaching research", "subject backbone", "pairing with famous schools", and "pairing with famous teachers" as the three training platforms.

6) We assist in the growth of the three talents and fully leverage the radiation role of the "three talents" studios at or above the county level. We promote the cultivation and tracking guidance of the "three talents", enhance their management and educational teaching abilities within the county, and cultivate a group of subject business backbone.

From the above implementation of teacher training, it can be felt that the higher authorities and

educational administrative units in Y County attach great importance to teacher training work. Especially in recent years, the education administrative department of Y County has attached great importance to teacher training, combining local conditions in terms of training scale, number of trainees, and subject coverage. In an interview with the head of the local education administration department, he introduced: "Strengthening the education and training of teachers at all levels and types can strengthen the teacher team and improve the level of professional development of teachers. This is not only an inevitable requirement for the healthy development of China's education industry, but also a practical need and urgent desire for the development of teachers themselves. It is also a fundamental guarantee for deepening education reform and improving education quality. In recent years, the county has attached great importance to education work, especially in the field of teacher education and training. Through these special trainings, we have achieved some results, the level of teacher professional development has been improved, and student performance has also made some progress. However, overall, due to basic conditions and other reasons, teacher training work is not optimistic and there are still some difficulties."

2.2 Main achievements and basic experience

The rural teacher training guide issued by the Ministry of Education emphasizes the importance of provincial and municipal coordination, district and county organization, and proposes relying on local training teams, integrating external expert resources, and adopting a task driven approach to enhance the classroom teaching ability of rural teachers[3]. Under the promotion of special training programs such as the National Training Program and Provincial Training Program, the training of county-level teachers has been strengthened and optimized, focusing on meeting the actual needs of rural teachers. Y County has achieved some results and experience in recent years of training practice.

1) Teachers have improved their teaching philosophy, transformed their teaching behavior, and updated their teaching and research methods. In the training, the education administrative department of Y County adheres to the combination of training and research, training and educational reform, and centralized and decentralized training. The teaching and research abilities of teachers have been improved, teaching concepts have been strengthened, teaching methods have been transformed, and classroom teaching efficiency has been greatly improved.

2) Teachers have recognized the convenience and importance of online remote training. The number of participants in remote training has increased, and their enthusiasm has also been enhanced. The awareness of teacher curriculum reform has significantly increased, and in classroom teaching, the past "cramming" teaching method has been changed.

3) Teachers have gained an understanding and mastery of the general process and methods of educational research, and are able to select research topics based on the actual situation of education and teaching. They can carry out educational scientific research in a more standardized manner, and gradually establish the awareness of educational research serving classroom teaching.

3. Challenges faced by teacher training in border areas

In border areas, teacher training still faces many challenges and problems, and efforts are still needed to train teachers in professional knowledge and teaching abilities. There are also shortcomings in training teacher education concepts and information technology education. These aspects are closely connected and collectively affect the effectiveness of teacher training. The existence of these problems is like a series of gaps, hindering the professional development of teachers in border areas and the improvement of educational quality.

3.1 Professional knowledge training level

Firstly, the training content lacks systematicity and coherence, as well as uniformity and progressiveness. Each training organized by the county has a theme, but due to the different experts or trainers invited, they each have their own specialties and research directions, which often leads to inconsistent teaching content and progressive layers, resulting in loopholes in the knowledge structure. In 2018, Teacher W was still a backbone teacher in a township school and was selected by the County Education and Sports Bureau to participate in the national training program for young backbone teachers [4]. Through training, Teacher W has achieved professional growth and has made improvements and breakthroughs in teaching skills and methods. With continuous personal efforts, she

was promoted to the position of principal of a township central primary school in 2021. According to Principal W, "Since 2018, I have participated in all the trainings held in the county whenever I have time, including backbone teacher training, principal training, information technology training, etc. Through these trainings, I have gained advanced teaching concepts, improved teaching skills, and enriched the use of teaching methods. At the same time, I have also gained self growth and development, and my career development has also changed. However, during the training process, it was found that there was a lack of systematicity and coherence in the multiple trainings organized in the county. The same expert was invited in several trainings, and the course content taught by these experts in different trainings was basically the same". The group of teachers in the county is relatively diverse, with significant differences in teaching experience, education level, experience, background, etc. The demand for training, individual acceptance ability, and application ability are also inconsistent

Secondly, the adaptability of training resources is insufficient, and high-quality training resources suitable for border areas are relatively scarce. Some advanced teaching concepts and methods may be difficult to implement in border areas, but there is a lack of consideration for these practical situations and the provision of solutions in training. Y County in Yunnan Province has a unique educational environment and student characteristics, but training often uses more common content and fails to fully consider the professional knowledge required for teaching in border areas, such as how to deal with teaching differences in multicultural backgrounds. There is insufficient targeted professional knowledge training, and teachers are unable to cope with special learning situations.

In addition, the training format is relatively single and lacks diverse means to strengthen teachers' understanding and absorption of professional knowledge. Mainly focused on centralized teaching, lacking diverse training forms such as truthful investigations, group discussions, and case analysis, which is not conducive to teachers' in-depth understanding and mastery of professional knowledge. Y County is a populous county in Yunnan Province. According to data from the Education and Sports Bureau, as of the end of April 2024, a total of 6238 people have been trained in various levels and types of training. The large number of trainees has led to the option of centralized training to complete teaching when organizing training. The training content is mostly in the form of special lectures, demonstration classes, and so on. A person in charge of the County Education and Sports Bureau said: "We are a typical example of 'a clever woman cannot cook without rice' during training. We have many ideas, and in recent years, our higher authorities have organized us to learn. We have also developed some ideas in organizing training." However, due to limitations in time, funding, and personnel, many ideas are still difficult to implement. We can only try to think of diverse training methods on the basis of completing training tasks normally.

Finally, there is a lack of follow-up tracking and feedback on the training effectiveness. After the training is completed, the problems and confusions encountered by teachers in actual teaching cannot be resolved and guided in a timely manner, which affects the actual effectiveness of professional knowledge training. During the conversation, several teachers mentioned that every time we participate in training, we are full of confidence and hope to gain new knowledge and improve our skills through the training. During the training, when I heard the teacher giving the lecture, I was also full of passion, and my mind was full of ideas on how to apply the new knowledge and skills I learned to my teaching after returning to school. But every time I return to school, the busy work comes under pressure, and the things I learn are temporarily not useful, and over time, I forget them. Another thing is to try to use some new things, but due to many factors, such as inconsistent student foundations, some problems cannot be solved in a timely manner, and the response effect is not good. In the face of difficulties, we do not know how to solve them. Without the teacher's on-site guidance, we really needed an expert to provide practical guidance from the sidelines.

3.2 Teaching ability training level

On the one hand, training lacks long-term planning and continuity, and lacks coherence. At present, according to the report on teacher training in Y County, it is found that training is often single or short-term, lacking a systematic long-term training plan, making it difficult for Y County teachers to truly internalize new teaching abilities into their own qualities. Whether it is the principal, homeroom teacher, backbone teachers, grade group leaders, teaching and research group leaders, or ordinary teachers, they cannot be trained overnight or twice in a day. Different training goals and plans should be set for different objects.

On the other hand, the integration of training content with actual teaching scenarios is not close enough, and the methods and skills learned by teachers in training are difficult to effectively apply in

the complex and diverse teaching environment of the border areas. The training methods overly rely on theoretical lectures, lack practical operations and interactive communication links, which is not conducive to the improvement of teachers' actual teaching ability. At the same time, there is insufficient attention to personalized teaching ability of teachers, and targeted training cannot be carried out according to the characteristics and needs of each teacher. Training on the development and utilization of characteristic teaching resources in border areas is also lacking, making it difficult for teachers to fully leverage local resource advantages.

3.3 Teacher education concept training level

Firstly, the frequency of training is relatively low, and it is not possible to update educational concepts for teachers in a timely manner, which makes them prone to lagging behind the trend of educational development [5]. Y County also hopes that relevant departments can strive for more projects and adopt various methods to solve the problem of limited training opportunities for improving the abilities and qualities of rural teachers. The training content is sometimes vague, lacking in-depth analysis and targeted guidance on specific concepts in the unique educational context of border areas. The training methods are more traditional, mostly one-way indoctrination, lacking interactive discussions and practical reflections among teachers, which is not conducive to teachers' profound understanding and internalization of new educational concepts.

Secondly, there is insufficient training on cutting-edge concepts such as personalized education and innovative education, which cannot meet the needs of border education development. Moreover, there is insufficient guidance in the training on how to integrate advanced educational concepts with the cultural characteristics of border areas, and the explanation of the integration of regional culture into educational concepts is not deep enough. Although the importance of regional culture is recognized, there is a lack of systematic and in-depth explanation and guidance on how to organically integrate it with modern educational concepts and how to reflect it in teaching. As a result, teachers' understanding of this key concept is superficial and difficult to truly implement in practice.

Thirdly, there is a lack of cultivation of a holistic educational philosophy. Some rural teachers lack a solid foundation in their knowledge of education, and their grasp of educational literacy is insufficient. They may have insufficient understanding of the relationships between educational elements such as schools, families, and society, which affects their comprehensive grasp and coordination of resources in educational work. The integration of the concept of multiple intelligences in border areas needs to be improved. Students here have diverse characteristics and potential, but training often fails to emphasize how to discover and cultivate the strengths of each student based on the theory of multiple intelligences. Teachers may still be accustomed to traditional single evaluation criteria, which is not conducive to the comprehensive development of students.

3.4 Information education and training level

Firstly, there is a shortage of training personnel who are familiar with the educational characteristics of border areas and proficient in information technology, resulting in a significant reduction in the quality and effectiveness of training. The education administration department rarely pays attention to the strengths of teaching experts when inviting them, but rather focuses more on their professional fields and titles.

Additionally, the depth and breadth of training are insufficient. Many trainings only focus on the basic operation level of information technology, with little involvement in in-depth content such as how to use information technology for teaching innovation, curriculum design, and personalized teaching. Although teachers have mastered some tool usage methods, they still feel confused about how to truly change teaching modes and improve teaching quality. In 2021, the Education and Sports Bureau of Y County organized a training activity to enhance the abilities of teaching researchers and directors. More than 100 teaching researchers and department directors from high schools, middle schools, and primary schools in the county participated in the training. The training organizer used live streaming equipment to broadcast the entire training activity to primary schools in the township, with more than 300 viewers, achieving good results. This is a case of fully utilizing modern information technology. However, many teachers have not mastered such live streaming technology, and the information technology equipment and updates in schools in border areas are relatively lagging behind. Even if teachers receive training, they may not be able to fully practice the content they have learned after returning to school due to equipment limitations, greatly weakening the significance of training.

4. Optimization path for county-level teacher training in border areas

4.1 Improve policy system

4.1.1 Increase fiscal investment

The government should increase special financial investment in teacher training in border areas to ensure sufficient financial support for training work. In the work report on promoting the training of primary and secondary school kindergarten teachers in Y County, Yunnan Province during the 13th Five Year Plan period, it is pointed out that the current training funds in Y County are seriously insufficient. Due to the shortage of local financial funds, training funds are scarce, and training project funds are limited, which cannot meet the needs of teacher training. Therefore, financial investment should be increased, and funds should be used for the development of training courses, recruitment of training teachers, purchase of training equipment and resources, etc. At the same time, a stable fund growth mechanism should be established to adapt to the constantly developing training needs.

4.1.2 Improve training mechanisms

Establish a hierarchical and classified training system. Based on factors such as teaching experience, subject matter, and ability level of teachers, targeted training plans should be developed to meet the personalized needs of different teachers, strengthen the pertinence and practicality of training content. Currently, there is a problem of training being too general in both border areas and more developed areas, and its pertinence is not strong. We should fully combine the actual education and cultural characteristics of border areas, design training courses that meet local needs, including ethnic cultural education, special education methods, etc., establish a training effect evaluation mechanism, track and feedback the training effect through scientific evaluation methods, so as to adjust and optimize the training plan in a timely manner.

4.1.3 Expanding training channels

By fully utilizing modern information technology and conducting online training courses, teachers can receive training anytime and anywhere. In order to further implement the spirit of Y County's comprehensive deepening of education reform, enhance the subject professional research and classroom teaching leadership abilities of Y County's teaching and research staff and department directors, and promote the efficient development of classroom teaching quality, it is necessary to strengthen cooperation and exchange with schools in developed areas, select teachers from border areas to study on a temporary basis in schools in developed areas, and invite excellent teachers from developed areas to provide teaching support and training in border areas. Social forces are encouraged to participate in teacher training, and training resources and support are provided through public welfare organizations, enterprises, and other means.

4.1.4 Establish incentive and feedback mechanisms

Provide material and spiritual rewards to teachers who actively participate in training and achieve significant results in teaching. In terms of professional title evaluation and excellence evaluation, teachers who have participated in training and performed well should be given priority consideration, such as bonuses and honorary titles, to stimulate their enthusiasm for participating in training. In addition, a training feedback mechanism should be established to encourage teachers to provide timely feedback on problems and suggestions during the training process. Based on this, the training party should continuously improve the training work, regularly track and investigate the training effect, understand the application of teachers in actual teaching, and further optimize subsequent training.

4.1.5 Strengthen the construction of training resources

Establishing a teacher training resource library in border areas, including training courses, teaching cases, teaching videos, etc., can effectively solve the prominent contradiction between training and learning. Currently, Y County has 6807 in-service teaching staff, and the number of teachers is large. They often cannot train only during holidays. However, due to the heavy workload of teachers during class hours, it affects normal teaching. The teacher training resource library is convenient for teachers to learn and refer to independently, which can effectively solve this problem. It can develop local textbooks and teaching resources suitable for border areas, integrate local elements, and enhance teachers' sense of identification with local culture and teaching adaptability.

4.2 Innovative training models and methods

1) Strengthening case teaching training can collect and organize successful educational and teaching cases in border areas, allowing teachers to deeply understand how to deal with special teaching situations, such as dealing with student differences in multicultural backgrounds, by analyzing these real cases. At the same time, teachers are encouraged to share their own case studies and explore solutions together.

2) Practical teaching can be carried out by combining local abundant resources. We organize teachers to conduct on-site inspections and research at various levels and types of schools, to experience the management models and teaching methods of different schools, and then integrate these experiences into our own teaching practices.

3) Strengthen group cooperative learning mode in training. We will divide teachers into small groups to conduct collaborative research and exploration around specific themes of education in border areas, promote communication and collaboration among teachers, and collide with teaching methods and strategies that are more suitable for the local area.

4) Conduct themed workshops for renowned teachers, invite local experts and teachers to interact and exchange ideas, and impart relevant knowledge and experience. Through these targeted training models and methods, the professional competence and teaching ability of teachers in border areas can be better improved, adapting to regional characteristics and needs.

4.3 Improving training quality and effectiveness

4.3.1 Strengthen training process management

Develop a detailed and scientific training plan to ensure the systematic and coherent training content. During the training process, strict attendance management is implemented to ensure the participation and investment of teachers. Professional training management personnel are arranged to effectively organize and coordinate various aspects of the training, and possible problems are promptly resolved.

4.3.2 Improve the evaluation mechanism

Establish a comprehensive evaluation system, conduct a comprehensive pre training assessment before the start of training, understand the initial level and needs of teachers, in order to carry out targeted training. We conduct periodic evaluations during the training period to understand the teacher's mastery of knowledge and skills, and adjust the training pace and methods in a timely manner. After the training, a comprehensive evaluation is conducted to measure the effectiveness of the training through various aspects such as exams, assignments, and actual teaching performance. At the same time, teacher self-evaluation and peer evaluation are introduced to make the evaluation more comprehensive and objective.

4.3.3 Emphasis on practical aspects

We add simulated teaching in training to create a realistic classroom environment, allowing teachers to conduct simulated teaching in this environment; We encourage teachers to conduct more case studies, design and/or select cases closely related to their daily teaching. We organize teachers to analyze, discuss, and propose solutions; We organize teachers to observe and reflect on teaching, arrange for teachers to teach each other, observe the teaching methods and classroom management of others, and adjust their own teaching strategies.

5. Conclusion

The country attaches great importance to the education industry, emphasizing the need to promote educational equity and improve the quality of education. In the border areas, we need to continuously improve the policy system, strengthen the precise allocation of training resources, ensure that teachers in the border areas can access high-quality training content, innovate training models, fully utilize information technology, break geographical restrictions, and enable border teachers to share advanced educational concepts and methods, contributing to the development of education in the border areas and truly implementing the country's earnest expectations for education.

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