

Practical Exploration of Collaborative Training of Rural Primary School Mathematics Teachers in Normal Universities Based on "Trinity"

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Abstract

This paper first discusses the background and significance of the "Trinity" cooperative training of mathematics teachers in rural primary schools in normal universities. Secondly, a new "trinity" cooperative education mechanism has been established, which is led by normal universities, led by local education administrative departments and actively participated by primary schools in the training base. Including the construction of curriculum system, the cooperative development of curriculum resources, the co-construction of teacher teams, the cooperative development of teaching research, the active promotion of educational research, the cooperative construction of normal students' off-campus practice base in five aspects; Finally, the operation guarantee measures are given.

Keywords

Trinity, Cooperative Training, Primary School Mathematics Teachers.

1. INTRODUCTION

The core link of teacher education reform is the training mode of teachers. On 18 September 2014, The Ministry of Education issued "Opinions on the Implementation of the Training Plan for Outstanding Teachers" (Teacher [2014] No.5), proposing the requirement of training "outstanding primary school teachers" and "establishing a" trinity "of universities, local governments and primary and secondary schools, a new mechanism for coordinated training, promoting the comprehensive reform of teacher education, comprehensively improving the quality of teacher training, and training good teachers that satisfy the Party and the people." [1] It clearly puts forward the basic principles of "adhering to demand orientation, classification guidance, collaborative innovation and in-depth integration". In view of the weak links and deep-seated problems in teacher training, we will deepen the reform of teacher training mode, establish a new mechanism for colleges and universities to cooperate with local governments and primary and secondary schools, and train a large number of high-quality professional primary and secondary school teachers with noble ethics, solid professional foundation, outstanding educational and teaching abilities and self-development abilities. "[2] It can be seen that the establishment of a "trinity" primary school mathematics teacher training model among universities, local governments and rural primary schools is a clear requirement put forward by the Ministry of Education. Normal colleges and universities, which take training teachers in rural primary schools as their own duty, have an obligatory responsibility in training high-quality talents to meet the needs of basic education reform and development.

Since the School of Mathematics and Information Science of Guangxi Institute of Education was approved the construction project of Guangxi characteristic specialty and curriculum integration in 2013, The major of mathematics education takes "thick foundation, strong practice, heavy occupation, showing characteristics" as its guiding ideology, Closely focusing on

"how to train high-quality mathematics teachers in rural primary schools", Innovating the personnel training mode with professional development and sustainable development as the main line, Promoting the transformation of normal education to modern teacher education, We have carried out a series of professional construction and reform work, Taking the teacher education practice base of our school as the carrier, According to the requirements of "Professional Standards for Primary School Teachers (Trial)", This paper makes an in-depth investigation on the current situation of rural basic education development, And carefully studied the law of rural primary school mathematics teachers' professional growth, As well as development needs, At present, it has carried out in-depth cooperation with Nanning Xingning District Education Bureau, Dongxing City Education Bureau and rural primary schools. At the request of the Dongxing City Education Bureau, more than 60 normal students of mathematics education were sent to various rural primary schools in Dongxing City for on-the-job internships, which laid a solid theoretical and practical foundation for the formation of the "Trinity" cooperative training mechanism.

2. THE SIGNIFICANCE OF "TRINITY" IN TRAINING RURAL PRIMARY SCHOOL MATHEMATICS TEACHERS IN NORMAL COLLEGES AND UNIVERSITIES

The "trinity" cooperative training mode of teachers in normal colleges and universities is to take normal colleges and universities as the core, actively give full play to the advantages of local education bureaus and rural primary schools, and jointly train excellent teachers for basic education schools through in-depth cooperation among the three parties. This mechanism has practical significance in promoting the formation of the characteristics of normal universities and improving the quality of local basic education and teachers.

2.1. Innovate the Teacher Training Mode in Normal Colleges and Universities to Realize the Integration of Teacher Training, Training, Research and Service

The "Trinity" cooperative training mode for rural primary school teachers is an innovation in the personnel training mode of normal colleges and universities. This mode has changed the traditional teacher training mode and realized the integration of rural primary school teacher training, training, research and service through the "trinity". The purpose of this new model is to solve the weak links and deep-seated problems in teacher training. It can fully reflect the orientation of higher vocational colleges, take into account the needs of local economic development and the needs of teachers in rural primary education practice.

2.2. Cultivate Outstanding Rural Primary School Teachers and Gradually Improve the Overall Quality of Teachers

This mode has changed the teacher training mode that used to focus on theoretical teaching. The formulation and implementation of personnel training programs are all completed with the joint participation of normal universities, local education bureaus and basic education. Fully consider the actual needs of rural primary education. In the process of training, full-time and part-time teachers guide the whole process from theoretical training to practical teaching. Therefore, while the trained rural primary school teachers meet the needs of local education, the quality of teachers will continue to improve[3].

3. SPECIFIC PRACTICE OF "TRINITY" COOPERATIVE TRAINING MODEL FOR RURAL PRIMARY SCHOOL MATHEMATICS TEACHERS IN NORMAL COLLEGES AND UNIVERSITIES

A new "trinity" cooperative education mechanism has been established, led by Guangxi College of Education, led by local education administrative departments and actively participated by primary schools in rural training bases. Give full play to the leading role of normal universities in running schools, Leaders and experts from local education administrative departments and primary schools in rural training bases are invited to participate in professional construction, jointly formulate training programs, construct curriculum systems, jointly develop curriculum resources, jointly build teacher teams, jointly carry out teaching research, actively promote educational research, and jointly design and implement practical programs for normal students.

3.1. Collaborative Construction of Curriculum System

The reform of curriculum and teaching content system is the focus and difficulty of teaching reform in normal universities. In the process of curriculum setting, integration is taken as the guide to realize the continuity of pre-service and post-service courses in time and content, and to continuously enrich and enrich the research of mathematics education major in normal universities.

Collaborative Construction of "3 + X" Curriculum System. Closely around the three main basic curriculum groups of "basic curriculum group for mathematics specialty, basic curriculum group for modern educational theory and basic curriculum group for application of mathematics information technology", Constantly optimize the curriculum system and integrate teaching resources so that students can get "the most suitable education". For example, on the basis of offering professional basic courses, educational basic courses, arts and physical education courses can also be added. At the same time, various elective courses are offered, such as mathematical modeling, primary school mathematics problem-solving thoughts, primary school mathematics classroom teaching case analysis, children's development learning and primary school education foundation, etc., so that students can independently study the courses of interest (X) and obtain "best development".

3.2. Cooperative Development of Curriculum Resources

According to the reality of rural primary education and the "3 + X" curriculum system, the teaching resources are initially matched, and the resource systems of auxiliary teaching resources, auxiliary learning resources and online courses for several courses are constructed. Efforts are made to establish a co-construction and sharing mechanism of digital resources and realize the informatization of teaching services.

3.3. Build a High Quality Teaching Team

Our college is equipped with professional guidance teachers for normal students of mathematics education. It is used to guide normal students' probation, teaching design, trial speaking, lesson presentation and practice. At the same time, Nanning Xingning District Education Bureau and Dongxing City Education Bureau are invited to recommend excellent primary school mathematics teachers to participate in the training of normal students in our college, which provides theoretical and practical guidance for improving normal students' teaching and head teacher management ability. Primary school tutors serve as teaching tasks for practical teaching courses in our college, offering teaching work, art lectures for head teachers, and participating in skills training guidance for normal school students. Professional tutors and primary school tutors form teaching teams, divide labor and cooperate, and jointly cultivate and guide the professional development and career development of normal students.

They jointly carry out teaching research, carry out teaching reform, and improve the teaching level and personnel training quality of the teaching team in a planned and phased way [4].

3.4. Cooperate in Teaching Research and Actively Promote Research on Educational Topics

Focusing on the teaching of professional courses in teacher education, we will carry out teaching research with primary school teachers to realize complementary advantages and win-win cooperation. We can discuss and study the problems in the process of primary school teacher training so as to form a good talent training mode. In-depth research on educational topics should be carried out to solve practical problems in education and provide a practical platform to meet the needs of teachers' professional development.

3.5. Cooperate to Build off-campus Practice Bases for Normal Students

Xingning District Education Bureau and Dongxing City Education Bureau have arranged several primary schools as off-campus practice bases for normal students, giving normal students the opportunity of probation, internship and post placement, arranging guidance teachers, and providing necessary learning, working conditions and practice opportunities such as teaching observation classes and the work of head teachers. With the extension of the internship time for normal school students, our college can send some excellent normal school students to these primary schools for internship every year when conditions permit. At present, more than 60 normal students majoring in mathematics education in our college have gone to Overseas Chinese Primary School, Malu Town Primary School, Experimental Primary School, Dongxing Town Primary School and Jiangping Town Primary School in Dongxing City for on-the-job internship. These rural schools, Due to poor living and working conditions, The location is also relatively remote, and the school's teachers are seriously insufficient, which seriously restricts the development of basic education in rural areas. The on-the-job teaching practice implemented by our college can effectively relieve the shortage of teachers in rural primary schools[5]. In addition, the selected normal students are all relatively excellent, and they have a certain role in promoting the improvement of the quality of education in rural primary schools.

4. THE OPERATION GUARANTEE MEASURES OF THE "TRINITY" COOPERATIVE TRAINING MODE OF RURAL PRIMARY SCHOOL MATHEMATICS TEACHERS IN NORMAL COLLEGES AND UNIVERSITIES

4.1. Policy and Financial Support

We will support the reform of the enrollment and selection, training mode, curriculum system and teaching staff of outstanding primary school teachers, so as to provide possible convenient conditions for the implementation of the training mechanism for outstanding primary school teachers. The primary schools participating in the teacher training program will be given policy and financial support in running schools, educational and teaching reforms, educational research, etc.

4.2. Construction of Stable Educational Practice Base

A stable practice base has a considerable number of part-time teachers with rich practical experience, and has the places and facilities needed to carry out professional practice teaching and cultivate practical ability in an all-round way. It can meet the "double tutor" system of "trinity" cooperative training. At the same time, it is necessary to innovate the teacher education training platform and establish a regional teacher education alliance or basic education alliance.

4.3. Construction of Teaching Staff

We will establish and improve the selection and assessment system for full-time teachers in schools, and continuously improve the educational level of teachers, their educational theory level, practical ability and scientific research ability.

4.4. Perfect the Modular Curriculum System of Primary School Teacher Education

Appropriate adjustment of teacher education courses, increase the proportion of teaching skills courses. Pay attention to the research of primary school curriculum, strengthen the connection between subject and professional curriculum and primary school curriculum, and enhance its adaptability and pertinence.

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