

Research on the Difficulties and Countermeasures Faced by Normal Students Majoring in Mathematics Education in Post Practice

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Abstract

On-the-job teaching practice plays an important role in the reform of teacher education and the construction of rural teachers, but there are some problems in practice. This paper focuses on the difficulties faced by normal students majoring in mathematics education in post practice from four aspects: local government and education administrative departments, normal colleges and universities, post practice schools and normal students participating in post practice, and gives corresponding countermeasures.

Keywords

Internship; Normal students; Difficulties; Countermeasures.

1. Introduction

In July 2007, the Ministry of Education promulgated the "Opinions of the Ministry of Education on Vigorously Promoting the Practice and Support of Normal School Students" (Teacher [2007] No.4), clearly proposing that the practice and support of normal school students is an effective measure to promote the reform of teacher education, strengthen the practice teaching of normal school students and improve the quality of teacher training. It is required that normal colleges and universities should organize senior normal students to go to primary and secondary schools for not less than one semester of educational practice according to local conditions. All localities should closely combine the practice support for normal students with the strengthening of the construction of rural teachers, create favorable conditions according to actual needs, and actively arrange and accept normal students from normal colleges and universities to carry out practice support for rural schools. Under the promotion of the Ministry of Education, the internship for normal school students has been carried out in an all-round way throughout the country [1].

After six years of practice, exploration, summary and improvement, the School of Mathematics and Information Science of Guangxi Institute of Education has gradually formed a new mode of on-the-job teaching practice in line with the actual situation of specialized normal colleges and universities, and has achieved remarkable results. Since 2014, through measures such as student self-recommendation, college training and assessment, and merit-based selection, our college has selected and sent more than 200 college students majoring in mathematics education to nearly 20 township primary schools in stages and batches to participate in on-the-job internships, which have been welcomed by rural primary and secondary schools in Dongxing City.

2. Difficulties Faced by Internship

After the active development in recent years, the internship has achieved certain results, but at the same time there are also some deficiencies, which affect the full play of the role of the internship [2] [3], mainly reflected in the following aspects.

2.1. Local Government and Education Administration

Internship is a complicated work. Its work scale is relatively large, often involving dozens of rural primary and secondary schools in a region. It requires a lot of manpower and material resources to make a comprehensive and detailed understanding of the needs and scale of teachers in each school. Therefore, internship needs to cooperate with local governments, education administrative departments and normal universities [4]. However, some local governments place one-sided emphasis on short-term economic benefits, Not enough attention has been paid to local basic education, No corresponding rules and regulations have been formulated to ensure the favorable implementation of coordination in all aspects of internship. However, the education administrative department believes that on-the-job internship brings many troubles to its own work and does not play a huge role in promoting local basic education. Therefore, it is not actively cooperating with normal colleges to carry out on-the-job internship in local primary and secondary schools, thus restricting the effective development of on-the-job internship in normal colleges.

2.2. Teachers' Colleges and Universities

With the continuous reform of the basic education curriculum in our country, great changes have taken place in the education and teaching in primary and secondary schools. However, the education curriculum in normal colleges has not made corresponding adjustments in time, and the curriculum content lags behind, which cannot meet the requirements of primary and secondary schools for teachers' quality. At the same time, normal colleges and universities have not made clear regulations on the pre-job training of interns. The training content is divorced from reality, the training time is insufficient, the professional quality of the training teachers is not high, and they lack practical experience in rural education and teaching. In addition, there is also a lack of communication between normal colleges and internship bases [5]. On the one hand, normal colleges and universities lack understanding of the number of posts and professional needs required by internship schools, resulting in professional mismatch. On the other hand, internship schools lack a correct understanding of internship. Most normal colleges and universities treat interns after internship hastily with simple internship summary, and do not pay attention to internship experience summary and recognition.

2.3. Internship Schools

At present, interns in normal colleges and universities basically carry out on-the-job internships in poor rural areas. The knowledge level of students in internship schools is generally low and the educational equipment is crude, which restricts the development of interns' internship content and ability to apply modern educational technology[6]; Some internship schools are worried that the internship of interns will affect the results and order of the internship schools. They do not allow students to give lectures on the platform, but only allow interns to do some educational and teaching assistance work, thus interns cannot get actual exercise. Some internship schools are still unable to provide interns with internship guidance teachers, or even if they are equipped with internship guidance teachers, they cannot provide effective guidance due to their limited quality level, which affects the effect of internship.

2.4. Normal Students Participating in Internship

The main body of internship is normal students, Their study in school focused on theoretical knowledge of the subject, Lack of practical teaching experience, As a result, the theory is divorced from reality and cannot be applied to the actual education and teaching process in rural areas. It is mainly manifested in the lack of basic teaching skills such as interns' teaching design, blackboard writing design and application of modern teaching technology, and the lack of class management experience in dealing with emergencies and educating problem students. Normal students who take part in internship generally lack social experience. From comfortable living and learning environment to difficult rural primary and secondary school teaching, there will be many deficiencies in life and teaching adaptability, resulting in fear of difficulties and poor internship effect.

3. Research on Countermeasures of Internship

3.1. Building a "Trinity" Cooperative Training Community of Universities, Government (Education Department) and Primary and Secondary Schools

The School of Mathematics and Information Science of Guangxi Institute of Education has long cooperated with the education bureaus of Xingning District and Dongxing City of Nanning City and more than 10 schools under its jurisdiction to train primary school teachers. A "trinity" cooperative training community of universities, government (education department) and primary and secondary schools has been established, and a cooperative training mechanism of "universities leading, government coordinating and primary and secondary schools participating" has been formed. In recent years, normal students majoring in mathematics education in our college have concentrated in 10 or so schools in Dongxing City for internship. According to the allocation of mathematics teachers in primary schools within the jurisdiction of Dongxing City Education Bureau, There are plans to set up post posts. Normal students apply for posts according to their actual situation. The Education Bureau will unify pre-job training for more than half a month to improve normal students' teaching ability, head teacher management ability and various teaching management ability to cope with one semester of post practice. To our credit, the Dongxing City Education Bureau has offered each normal student a monthly salary of more than 2,300 yuan, which is basically the same as the income of the local substitute teacher. This policy has given normal students great encouragement and recognition, and has greatly improved their recognition of the teaching profession.

3.2. Reform the Teacher Education Curriculum and Highlight the Cultivation of Practical Ability

In the internship mode, normal universities should reform the curriculum system and adjust the curriculum structure. Our college has set up three modules for mathematics education major: "Teacher's Education Theory Course", "Teacher's Education Skills Course" and "Teacher's Education Practice Course" to consolidate normal students' teaching theory knowledge, improve normal students' teaching skills and strengthen normal students' basic teaching skills. In addition, the college has adjusted the content of the core curriculum of teacher education-"Mathematics Teaching Method", It has added frontier contents suitable for the new curriculum reform of basic education, such as interpretation of new curriculum standards, lesson presentation, professional development of teachers, etc., so that normal students can timely understand the development trend of the basic education teaching reform in our country and improve the theoretical cultivation of mathematics teaching. In terms of teaching methods, reform teaching methods, cultivate teaching skills and highlight practical ability. At present, the teaching methods given by our college to normal students are as follows: giving tasks in advance-preparing lessons in groups of students-demonstrating classroom

teaching-evaluating each other among students-summarizing and refining teachers, supplementing and perfecting them. Through group lesson preparation, normal students' cooperative consciousness and ability to actively explore knowledge are cultivated. Classroom demonstration trains normal students' teaching skills. Students' mutual evaluation trains normal students' ability to analyze and solve problems. Teachers summarize and refine and strengthen key points. In addition, our college has also hired experts from the Institute of Education and first-line excellent primary and secondary school mathematics teachers to give special lectures to normal students, organize normal students to watch teaching videos, and go to primary and secondary schools to observe probation, so as to improve the teaching ability of normal students.

3.3. Establish a Perfect Management Mechanism for Internship

On-the-job internship requires interns to take classes on top of the class during the internship, and interns should participate in teaching and management in all aspects. To this end, our hospital has established a perfect management mechanism for on-the-job internship. Before the internship, the school worked closely with the Dongxing City Education Bureau, and the Dongxing City Education Bureau determined the schools to take up the posts and distributed them to all schools in the form of official documents. In order to ensure the smooth and effective implementation of the on-the-job internship, our school has identified on-the-job instructors for interns, and the on-the-job school has also equipped interns with experienced "old with new" instructors. Our college has put forward high requirements for the students who practice on the job: every intern should carefully prepare lessons and write lesson plans in the on-the-job school; Take the initiative to contact the guidance teacher, consult modestly, follow the guidance teacher to attend the lecture first, carefully make records during the lecture, carefully observe and learn the teaching style of front-line teachers; Pay more attention to teaching and students. In class, we should fully mobilize the enthusiasm of students and enlighten their wisdom. Conscientiously reflect on one's own teaching and be good at summarizing the gains and losses in teaching. Earnestly write a summary of educational practice. In addition, internship instructors should also use various methods, such as QQ or WeChat groups, to strengthen communication with interns, to understand the problems existing in students' internship at any time, and to give timely help. Local education bureaus, on-the-job internship schools and colleges and universities should also strengthen exchanges. School leaders must often visit internship schools so as to have a deeper understanding of the internship situation and solve the problems encountered in on-the-job internship in a timely manner. Through the establishment and improvement of this long-term communication mechanism, effective communication and cooperation between interns, schools and internship units can be realized.

3.4. Teachers' Colleges and Internship Schools Strengthen Guidance to Interns

Teachers colleges and universities should provide each intern with on-campus guidance teachers so that they can get key guidance in classroom teaching and class management, so as to ensure the teaching and management effect of on-the-job practice. In addition, we should also pay attention to interns in life and psychology. Intern schools should also arrange guidance teachers to give comprehensive and detailed guidance to interns, including guiding interns to understand their learning situation, study teaching materials and curriculum standards, and design teaching plans. Listening to and commenting on lessons; Guide interns to do a good job in student work, etc. Therefore, in the process of normal school students taking up their posts, they receive the guidance of both the teachers of the internship school and the teachers leading the university. This guidance team forms a joint force in the guidance process to jointly promote the professional growth of normal school students.

3.5. On-the-job Internship Normal Students Improve Their Teaching and Head Teacher's Management Ability through the "Three Learning" Approach

Once normal students go to rural primary and secondary schools for internship, they usually take math classes in two classes and serve as the head teacher of one class. The task is very heavy. Under the circumstance that the university guidance teachers cannot be in place, how to improve the intern's teaching and the head teacher's management ability through self-learning is the key to the success of the internship. I think the teaching and management ability of interns can be improved through three "studies" [7]. The first learning is to "learn" from teachers. The teachers in the internship school have the longest contact time. Internship schools usually assign each intern a mentor, Interns must first learn from their tutors, Because front-line teachers have rich teaching and class management abilities, learning from tutors is the most direct and effective means to improve the teaching ability of on-the-job interns. Tutors can transform decades of direct experience into indirect experience and impart it to interns, thus shortening the exploration time and enabling interns to grow rapidly. Secondly, we should learn from other teachers, learn their understanding and grasp of teaching materials, the elegant demeanour of classes, the methods of managing classes, etc. The second learning is to "learn" from students, which means to understand the basic situation of students, including interests and hobbies, learning habits, etc., to establish good communication channels, to ensure smooth communication between teachers and students, so that the knowledge they teach can be accepted by students as much as possible. The third learning is that interns "learn" from each other. At present, considering the safety of on-the-job interns in colleges and universities, each school will generally have more than two students to practice together, "three people, there must be my teacher". Each intern has its own advantages. Everyone can learn from each other and learn from each other's strong points, which is more conducive to the improvement of teaching level.

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