

Teaching Construction of prospective Mathematics Teachers Practical Capacity



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INTRODUCTION

Chinese government focus on developing the ability of prospective secondary mathematics teachers. One of the government's focuses is to practice practical ability. The University-Government-School-+ (UGS+) model can connect all elements to improve current teacher skills and prepare them when they have graduated and worked. USG+ creates a system with 1 goal, 2 sources of knowledge and multiple communication between prospective secondary teachers, schools and the society into one and synergize.

BACKGROUND

- Many studies say that the Chinese governments have stated that Chinese prospective mathematics teachers' educational and teaching abilities have not yet fully adapted to the needs of primary and secondary schools(X. D. Zhu & Hu Yan,2009).
- The theoretical curriculum of normal universities in China seldom pays attention to specific important teaching. The prospective secondary mathematics teachers' practical knowledge lacks of the corresponding curriculum.
- Many normal universities only arrange one-time teaching internships. Prospective secondary mathematics teachers have few opportunities to participate in internship activities and lack practical experience in school.
- In the traditional Chinese perspective secondary mathematics teachers training system, pre-service training and post-service training do not form an integrated overall design, and the undertaking units are also different.

PURPOSE

Using UGS + model to improve the practical ability of pre-service secondary mathematics teachers.

BASIS

Based on the background, UGS model has emerged in which normal universities, local governments, primary and junior high schools cooperate in training perspective secondary mathematics teachers(Tuo Zhang,2017).

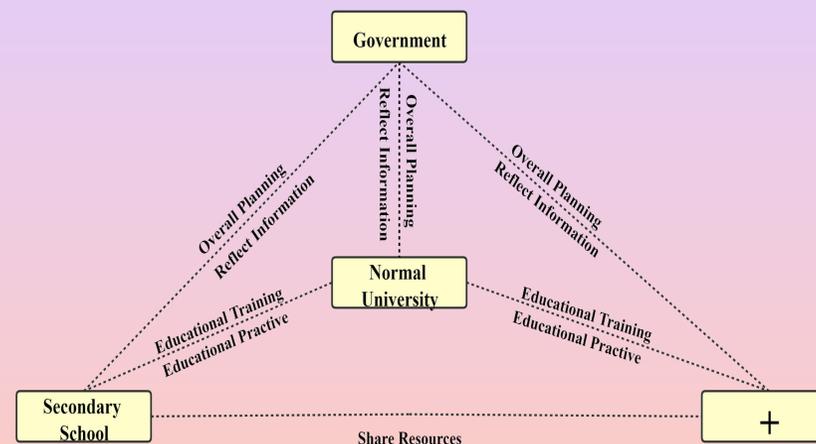
UGS model highlights the practical concept of perspective secondary mathematics teachers education and training by establishing a perspective secondary mathematics teachers education community and an open teacher education training model.

UGS+ MODEL

Based on UGS, this study absorbs other elements of society's cooperation and proposes the UGS+ perspective secondary mathematics teacher's practical ability co-education model system.

The UGS in the cultivation model refers explicitly to universities, governments, secondary schools, and "+" includes local scientific research institutes, school leaders, social education institutions.

Open cooperation, sharing and linkage is the core value concept, with highly consistent goals and intersubject cooperation are notable features.



UGS+ model

DISCUSSION

The entire model relies on the two practical sources inside and outside the university to carry out practical activities such as course training, education observation, simulation exercises, practical study, internship, and reflection internalization.

- One goal. Improving perspective secondary mathematics teachers practical ability.
- Two sources. The practice training platform for perspective secondary mathematics teachers includes on-campus practice sources and off-campus practice sources.
- Multiple communication. All subjects at UGS+ model should share information resources, communicate, formulate training plans together, establish a high-quality educational practice base, and select outstanding college teachers and secondary school teachers for guidance.

CONCLUSION

The practical knowledge and abilities of pre-service secondary teachers are the basis for cultivating outstanding teachers. They should be cultivated in universities and require substantial collaboration and cooperation from all parties in the community.

Form a structural system with consistent goals, clear weights, rich contents, diverse subjects, and complementary advantages, and complete the joint cultivation of perspective secondary mathematics teachers, which is conducive to improving the current weak state of pre-service education practice.

