Professional training future geography teachers

I A Tyunkova
Pedagogical Institute of Irkutsk State University, Irkutsk, Russia
E-mail: tunkova_i@mail.ru

Abstract. The article presents the experience of geography teachers’ training at the Pedagogical Institute of Irkutsk State University. We considered the fields of concern and activities that contribute to the effective formation of methodological and professional skills. It was revealed that the diverse extracurricular activities in geography, carried out in the interaction of the pedagogical university with public organizations, municipal information and methodological center and schools, is effective for the development of creative abilities of future teachers. The engagement of students in the created information and education space directly affects the result of the educational process, develops the ability to solve professional issues. Practical knowledge in the development and implementation of joint cultural and educational activities to popularize geography allows students to apply their experience and skills. Hands-on experience with advanced teachers of geography of the city and region, participation in scientific and practical conferences and methodological seminars makes it possible to form a stable motivation of graduates to pursue a master's degree and improve their professional qualifications. This practice allows mastering and using basic scientific and theoretical knowledge and practical skills in professional activities, is one of the mechanisms for managing education quality in training competitive specialists.

1. Introduction
The Federal Educational Standard of Higher Education (FES HE) for the training program "Pedagogical Education" (with two educational program specializations) defines the goals and objectives of teaching and educating qualified personnel in the field of geographical education with the requirements that are implemented in the major professional academic program (MPAP). The training program provides the achievement of intended results with the target orientation of the educational process for the development of general professional and professional competencies, which are considered as the ability to perform professional activities.

In accordance with the job description, defined as pedagogical activity for the implementation of programs of basic and secondary general education, professional competencies are formed. These include the ability to master and use essential scientific knowledge and process-oriented exercise in professional activities, as well as the ability to teach a subject using modern methodological approaches and educational technologies in accordance with the requirements of state standards.

Among the most important priority tasks in developing the professional competency of a teacher within the framework of the new educational standard there are arrangement of conditions for pursuing educational goals - the formation of key competencies of future teachers; creating and using educational milieu; planning and implementation of professional self-education; and continuous development of research skills.
Thus, new requirements for the quality of higher education imply changes in the organization, content and learning technology of graduates.

The development of competencies through the organization of educational milieu and the creation of a system of educational and extra-curricular multidirectional projects determines the willingness of future geography teachers to work in the present context.

2. Models and methods

Our research is based on methodological approaches to creating a unified space for educating the personality of a modern geography teacher with a high level of geographic culture, ready to solve real problems of practical pedagogical activity [1, 2].

Based on the study and evaluation [3, 4] and the existing methods of organizing extracurricular activities of students of pedagogical faculties [5, 6], a modern way of solving pedagogic problems in the training teaching staff [7, 8] was revealed. It was determined that the creation of a socio-pedagogical milieu is possible with targeted practical activities [9].

Achieving intended results on the development of professional competencies of future geography teachers is impossible without a systematic work. In this article we highlight the practice of creating a system of methodology, developing and testing various forms of extracurricular activities in the context of close interaction of various participants. We also identified areas, organizational forms and ways of involving students in various projects implemented at the university. A favorable milieu has been created for solving problems that provide for the formation of professional and methodological readiness of students for future pedagogical work.

Regional scientific, methodological, public and educational institutions are involved in organizing and conducting extracurricular activities in geography. Scientific and practical conferences, methodological seminars, meetings and master classes are held.

Cooperation agreements with schools, regional and municipal educational institutions and educational authorities of various levels allow arranging joint educational and scientific projects.

The obligatory participation of students in these events provides an opportunity to gain experience in the field of practical solutions of geographic issues. Possession of techniques and methods of planning, diagnosing, and correcting the educational process, as well as research and reflexive skills develop the abilities to solve pedagogical issues.

3. Results and discussion

The development of professional skills of future geographers in the system of two-level pedagogical education at Irkutsk State University is realized in interaction with employers and diverse involvement of various participants in the educational process. Scientific, public, methodological and educational institutions of the region are involved for the comprehensive training of specialists. This helps to create an informational and educational milieu that contributes to the implementation of the major professional academic program (MPAP) for the bachelor's program “Life Safety – Geography” and the master's program “Geographic Education”.

The chair of Geography, Life Safety and Methods systematically conducts events with the involvement of internal and external students, as well as school teachers of the city and region. Also, master classes, workshops, qualification upgrading courses and retraining courses for geography teachers are held.

Joint activity with V.B. Sochava Institute of Geography of the Siberian Branch of the Russian Academy of Sciences (IG SB RAS) ensures the construction of a system of continuing education “school-bachelor's-master's-graduate school-doctoral studies-advanced training”. The main forms of joint activity are as follows: master classes on current scientific research; involving in the educational process of leading researchers of the IG SB RAS in the relevant disciplines; implementation of research work by undergraduates under the guidance of leading researchers of the IG SB RAS; participation of the researchers of the IG SB RAS as experts in various scientific and educational
events held by the chair. More than 25 graduates have continued their postgraduate studies in recent years.

With the scientific support of the V.B. Sochava Institute of Geography SB RAS and the Irkutsk regional branch of the Russian Geographical Society, the chair holds the All-Russian scientific and practical conference with international participation, "Baikal-Motherland-Planet". The mainstreams of the conference are productive interaction between scientific institutions, higher educational institutions, members of the public, teachers of secondary schools and student groups; development of a system of cultural and educational activities in educational institutions. The obligatory participation of students and teachers in the conference improves professional skills in practical solution of geographical issues and preparation for future activity. The topics of the reports testify to the results of advanced methodological developments in teaching geography at school and cultural and educational activities.

Another type of extracurricular training for students is the annual Interregional academic competition for schoolchildren of grades 8th-11th "Geographic Olympus". The academic competition helps future teachers not only to consolidate the theoretical knowledge gained in practice, but also gives them the opportunity to communicate in the professional field with geography teachers and methodologists, and allows them to study contemporary methods of preparing schoolchildren for academic competitions. Nine years of experience in the implementation of the interregional competition showed high activity and interest of students in the organization of all stages of academic competitions. Participation in cultural and educational projects contributes to the professional growth of students, the development of skills of cultural and educational event management and identification and use of the potential of the regional cultural and educational milieu.

The development of the competencies of students – future teachers of geography in the field of cultural and educational activities in the system of geographical education continues in the classroom of the Youth Club of the Russian Geographical Society (RGS) "Portulan". The priority areas are scientific and educational, historical and local history and expeditions. The club entered the rating of the best clubs and ranks 2nd among the Youth clubs based on higher educational institutions, and also became the best youth club of the Russian Geographical Society in the Siberian Federal District (2nd place). The most popular forms of work are local history games, online contests, quests and hiking trips. Students organize classes, intellectual games, quizzes for schoolchildren of different age, film screenings, participate in environmental campaigns and marathons. The club is a platform for holding events of the city project "Irkutsk – Learning City". Methodological seminars are regularly held on the organization of additional geographic education.

Due to close long-term cooperation with the Municipal Institution of Irkutsk "Information and Methodological Center for Education Development", students and teachers of the chair participate in the intellectual and educational marathon "Constellations of Baikal". As part of the marathon, the chair conducts various activities with the involvement of students:

- reports and round table discussions at the annual scientific and methodological seminar for teachers “Science-school”;
- preparation of schoolchildren for the regional stage of the All-Russian academic competition in geography “Winter School”;
- scientific and practical conferences of schoolchildren and teachers “Constellations of Baikal”, “Geoparks in the Baikal region”, “Step into the future, Siberia!”, “Eureka”, ecological game “Green Economy - Green World”, urban ecological research competition “Trails of the Baikal region”, remote competitions of team projects “Wheel of Geography” and “Siberian Land”. Teachers and undergraduates participate in the work of the sessions as experts.
- interdisciplinary integrated workshops for teachers on project and research activities and criteria for its assessment;
- competition of guidance paper for lessons, extracurricular activities and programs.
- interactive local history team quest-game “Following the Sun”, for young teachers and students of grades 9-11. In 2020 it was held for the seventh time and was dedicated to the
175th anniversary of the Russian Geographical Society. 250-300 players take part in it every year [10]. The partners of the event are the Department of Education of Irkutsk and the city public organization “Local history club “Irkutsk – Fort Ross”. The goal of the game is to develop the intellectual potential of schoolchildren and young teachers in the field of geographical education and heighten interest in the study of active local history. Active study of local lore is a type of intellectual leisure that combines work of local lore, city racing and game moments. This is both a sports competition and an intellectual quiz on knowing the city. The sports component includes the speed of passing the route, the ability to draw up a strategy for passing checkpoints and orienteering skills. The intellectual part consists in the content of the competition: route assignments include questions about the old names of city streets, outstanding historical sites, urban infrastructure, and the ecological state of the urban environment. Students take part in the game as organizers. They help to develop teaching materials, work as stage judges and evaluate the results.

The involvement of students in various forms of joint work of the department and various educational institutions helps to implement an activity-based approach in preparing bachelors and undergraduates for professional activities. Within the framework of cooperation agreements, both educational and industrial practices are organized, but also joint educational and scientific projects. This collaboration provides for collective research and experimental work on the development, testing and implementation of innovative educational programs, new methods of educational activities at the bases of secondary schools, lyceums and gymnasiums in Irkutsk and Irkutsk oblast. Mutual cooperation implies improving the systems of vocational guidance work, promoting the generalization and dissemination of advanced teaching experience. As part of these agreements, the leading teachers of schools in the city and the region conduct practice-oriented seminars, master classes on practical evaluation of effective forms and methods of educational activities, the specifics of educational work in primary and secondary schools in geography in the context of the introduction of new educational standards.

4. Conclusion

Thus, the improved methodological system of extracurricular work provides a stable and effective experience, the positive results of which are confirmed and maintained for a long time. The created model of extracurricular work in various fields with the involvement of scientific and public institutions, the Information and Methodological Centre and leading teachers, contributes to the development of professional competencies of future teachers-geographers.

A system of extracurricular activities provides facilities for the highest standards of efficiency, independence, responsibility of students, stimulates personal interest in maximum performance, and also contributes to their personal development, expansion and deepening of professional knowledge and the development of professionally significant qualities.

Practical experience in the development and implementation of joint cultural and educational activities to popularize geography allows students to apply their knowledge and skills. Acquaintance with the advanced work experience of geography teachers of the city and region, participation in scientific and practical conferences and methodological workshops help to form a stable motivation of graduates to continue further education, pursue graduate and postgraduate studies and upgrade professional skills.

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