

ABSTRACT

on the doctoral thesis theme «A regional element in the substance pattern of the subject and methodical preparations of bachelor biologists in pedagogical higher education» of a candidate to PhD degree in «6D011300 –Biology»

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Thematic justification. Article 29 of the Law of the Republic of Kazakhstan on Education stipulates that educational and methodological and scientific-methodological work will be carried out with the aim of integration of education and science, development and implementation of educational process, development and introduction of new educational technologies, training of teachers in educational institutions and relevant infrastructure.

The main objectives of the State Program of Education and Science Development in the Republic of Kazakhstan for 2016 - 2019 are to increase the stature of teachers' profession and their qualitative composition, to ensure quality training of competitive staff, to upgrade the content of higher and postgraduate education in the world trends.

The President of the Republic of Kazakhstan N.A. Nazarbayev in his annual Message to the Nation, attaches great importance to the development of education and potential of future generations, and outlines a wide range of ideas and responsibilities. As an example, in the Message of the President of the Republic of Kazakhstan "Strategy" Kazakhstan-2050 ": a new political course of the established state" in the main directions of education and vocational training, modern education, personnel training and retraining, the President said: "Transfer of the necessary technologies to the country and their application you need to train specialists. EXPO-2017 should give impetus to this process and help us to select new technologies for future energy development. We are a young nation and we can do it. "

This is what the State Program of Education Development in the Republic of Kazakhstan for 2011-2020 highlights: "Main directions for the formation of competitive advantages of personality in the creative competence, continuous education and upbringing, professional self-determination: creative and aesthetic; scientific and technical; ecological and biological; tourist-local history; military-patriotic; socio-pedagogical; educational and healthcare, etc. the content of additional education for children will be updated ". In this regard, the staff competitiveness insurance will be assigned to national holdings and companies, transnational corporations and foreign investors through additional, including equal shares.

The Head of the State N.A. Nazarbayev in his Message to the Kazakhstani Nation named: "The path to the Future - 2014" said: "I used to always say that youth is the pillar of our future. The state has opened all doors and opportunities to the new generation! This is what Nurly Zhol, our creative rhythmic youths are sparing, "thereby emphasizing that the younger generation are who we place the hope for, expressing their full potential for the development of their personality.

The President of the Republic of Kazakhstan N.A. Nazarbayev in his Message to the Nation: "Kazakhstan's Third Revival: Global Competitiveness" reflects five main priorities of the third modernization of Kazakhstan, defined by the President. The fourth priority is to improve the quality of human capital. It is being observed that first of all, the role of the education system should be changed. Our task is to make education a central part of the new model of economic growth. The program highlights the need for curriculum to focus on critical thinking and self-seeking skills.

If we comprehend that our country puts a great hope for young people, it becomes clear that young people's knowledge depends on the quality of education and well-being of the younger generation from the school's back to the high pedagogical community. Obviously, it is a teachers society, bearing a great responsibility on education and upbringing of our new generation. Therefore, the purpose of preparing future teachers in the higher education institution for practical work in education is one of the issues that should be thoroughly search. Besides, attention to the arising difficulties to the surrounding environment in education and environmental problems and in training and education of pupils distribution us ecological, intend to discuss the prospects. Knowledge-based ecology does not only work on theoretical concepts. This can be achieved by increasing the content of basic disciplines by the regional components in educational institutions that train specialists, by strengthening their own research of future specialists, by explaining the natural peculiarities of their region and its adaptability to the species. For example, the disciplines of the Natural Science cycle are ideal for the introduction of such exploration and regional components.

In this regard, it is envisaged to allocate 10-15% of the regional component in the curricula of biological disciplines in higher education institutions preparing biologists. Therefore, in the preparation of biological specialists, it is desirable to introduce several requirements to future teachers by incorporating into the content of the regional component:

1. Implementation of regional component promotes formation of future research skills of teachers;
2. Future teachers learn the method of linking biological content with local materials;
3. Research of regional materials develops the ability of students to organize their own activities using the different types of research such as experimentation, test and etc.
4. Students are more interested in studying biology.

Making mention at the programs of the Nazarbayev Intellectual School at the moment, from the first grade of the first grade, the worldview textbook starts with the topic of "I am a researcher." It points out that the disciplines of the natural science cycle are based on the research, and on the basis of these studies it is necessary to show that young people should be trained in real data and phenomena.

Regional studies include the data demonstrating the natural, economic, social and cultural interrelationships of the study region. At the same time, the integrated approach of the regional components is the most effective way of emotional

formation, not only rational, but also a system of value-based communication, the scientific worldview of the students, the unified image of the environment, the scientifically-based ecological and socio-cultural attitudes.

Problems of regional studies in education can provide synthesis of regional and technological information. Technological information can help guide scientific and technological advancement, while local information can help to adapt to true environment.

Among the methodologists involved in the introduction of the regional component in the content of education in the study of natural sciences the following names cannot go unnoticed: N.A. Nakhova, N.N. Baranskii, A.S. Barkov, L.F. Grexankina, Yu.S.Reprintseva, C.B. Vasilev, O. V.Skorkina, M.D. Dammer, S.N. Igoshina, Yu.V. Kuleshova, T.A. Zorina, E.G. Terentieva, Ye.A.Alekseeva, P.V. Gora, Yu.K. Babinsky, Z.Abasov, A. Azanbekova, L.Sh. Aripbayeva and Sergei Sergeants. In the system of secondary and high school the effectiveness of using regional materials is found in the works of well-known methodologists: N.D.Andreeva, V.P. Solomin, I.Y. Azizova and S.S. Ryabova.

Pedagogical preparation of natural science students, formation of personality values and important relationship qualities of a future specialist includes the scientific-methodical work of the following scientists, showing the effectiveness of use of the material in improving the knowledge of the subject: A.E. Abylkasymova, T.C. Sadykov, K.A. Aimagambetova, J.B. Shildabayev, N.Tormanov, K. Kaiym, A.P. Seiteshov, G.A. Umanov, Sh.Taubaeva, N.D.Khmel, Z.A. Isaeva, V.P.Bespalco, K.Zhunisova, R.Alimkulova, K.Zhumagulova, R.Sh.Izbasarova, S. Kuanysheva.

The use of regional materials in the educational process and performance of reseraches in this context can be found in the scientific works of well-known Kazakh geographers A.S. Baysenova, K.D. Kaymuldinova. The works of A.S. Beisenova analyze the study of scientific works in the geography and ecology of Kazakhstan, K.D. Kajmuldinova's work has revealed the educational significance of regional studies and local materials. The value of these works was guided by our own study.

Types of regional studies - cognitive, historical, scientific, etc. We know that the The type of work that we consider as our regional component is related to the scientific area. Because we aim to explore local materials in the environment depending on their natural state. From this point of view, as a regional component, we aimed to introduce the bioecological status of the Kazakhstan snakes. Because snakes occur in all regions of Kazakhstan, depending on the natural state of each region, their body structure (length, type, mobility, etc.), livelihood activity (feeding, feeding, etc.), environmental benefits and injuries. p. changes. In the course of this study, it demonstrates the vitality and adaptability of life to the environment. Future teachers who are able to explore these flexibility, along with mastering regional methods of research, are relying on the unity of the world, and then are prepared to implement these skills in the education of pupils.

Determining our subject matter is based on **several contradictions**:

- the absence of works to explicitly use snakes as a regional component,

although there are works that emphasize the efficiency of the use of regional material in education;

- convenience of studying of Kazakhstani snakes as a regional component in the regional context;

- absence of methodology of using snakes as a regional component;

- insufficient method of preparing future biologist specialists for the use of the regional component.

These facts have given us the groundwork for our research topic «**A regional element in the substance pattern of the subject and methodical preparations of bachelor biologists in pedagogical higher education**».

Research object- pedagogical higher educational institutions biologists professional training process.

Research subject- education of bioecology of snakes of Kazakhstan as a content component of biological training of pedagogical universities.

Research goals: Determination of bio-ecological features of the snakes living in the territory of Kazakhstan with the purpose of enriching the content of biological disciplines in the discipline of students in higher education institutions and their introduction in the educational process.

Scientific forecast:

It is possible to form the basis of the analysis of the technique of introduction of the results in the subject content by conducting concrete researches on the basis of example of bio-ecology of Kazakhstani snakes, the skill of use of the regional component of future biologists in the university.

The following *tasks have been set* for the purpose of research and scientific research:

1. Theoretical bases of the use of the regional component in the preparation of biological specialists in pedagogical higher education institutions.

2. Research of biological peculiarities of the Kazakhstan snakes as a regional component in teaching biology in higher education institutions and the possibility to introduce them into the educational system.

3. Providing a methodology for the use of a regional component in the training of biologists in pedagogical higher education institutions.

4. Determination of conditions and results of carrying out pedagogical experiment on introduction of a local lore component in the course of preparation of experts-biologists. Terms and conditions of conducting a pedagogical experiment.

Theoretical and methodological basis of the research:

Theoretical analysis of scientific and methodological, psychological and pedagogical literature, the analysis of the state educational standards, the Internet materials on research, the analysis of biological problems, the development of personality of domestic and foreign scientists, analysis of the work in the field of psychological and pedagogical development of the regional component teaching.

Research methods: theoretical analysis of scientifically-methodical, psychological and pedagogical literature, Internet materials for solving the set goals; Analysis of educational programs in the specialty "Biology"; Analysis of

methodological and pedagogical works of local and foreign scientists on the complementarity of teaching with regional materials.

Practical methods: pedagogical experiments, control experiments, interviews, questionnaires.

Research base: Research and experiments: Abai Kazakh National Pedagogical University, Department of Botany and General Biology; Taraz State Pedagogical Institute Department of "Biology and Biology Teaching Methods"; Aktobe Regional State University named after A.Zhubanov Department of Biology. Also, the results of methodological researches were tested at the Department of Biology and Methods of Teaching Ecology at the Russian State Pedagogical University named after A. Hertsen.

Research Stages:

In accordance with the goals and objectives of the research work was carried out in three stages between 2014-2017.

The first stage (2014-2015) - theoretical basis of the use of the regional component in the preparation of biological specialists in pedagogical higher education institutions.

The composition of the snakes that live in Kazakhstan, the biological and ecological features. On the basis of the scientific methodological literature, the contribution of the local content component to the content of biological training disciplines was determined.

The second stage (2015-2016) - the methods of introducing snakes in the content of students' training.

Third stage (2016-2017) - analysis and accumulation of results of pedagogical and experimental work; clarification of experimental and experimental conclusions; justification of research results and conclusions, registration of the thesis.

Scientific breakthrough:

Materials on bio-ecological features of Kazakh snakes as a regional component have been introduced in the content of subject and methodological training of biologists in pedagogical higher educational institutions.

The practical significance implementation of the local history component in the content of education pedagogical University in order to form future specialists-biologists research skills.of the study involves the study of the biomedical component of future biologists and their formation in the content of education.

The rationale of research results are ensured by the use of modern pedagogical research methods, lack of methodological contradictions in the research, statistical and logical analysis of results, conducting research as a teacher-experimenter of the thesis author.

Ground-rules for thesis defense:

- theoretical bases of introduction of the scientific apparatus about snakes living in the territory of Kazakhstan as a regional component in the content of biological education;

- methods of snakes studying aimed at supplementing the content of biological disciplines and increase the research quality of steppe practice with the regional component, ways of their effective use in lessons;
- methods of using research results in education;
- experimental results and conclusions in verifying the effectiveness of the proposed methodological system in the learning process.

Testing and implementation of research results:

Materials of the thesis were published in 31 papers, in the editions of the Committee on Education and Science of the Republic of Kazakhstan - 5, in the international and republican scientific conferences - 24, in magazines included in Scopus - 1 article and specialties "Education" of the Republican Educational and Methodological Council of MES RK , published by the Educational-methodical association "Introduction to Biology".

Thesis structure: the thesis consists of introduction, two parts, conclusion, list of used literature and appendices.