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# FORMATION OF SCIENTIFIC RESEARCH AND PROJECT ACTIVITIES AMONG STUDENTS OF GRADES 6 IN GEOGRAPHY LESSONS

#### Abstract

This article is devoted to the consideration of the topic of project activities in the implementation of the regional component in environmental education in geography lessons. An analysis of scientific literature on this topic is given. The interpretations of the concepts of various scientists involved in the issues of pedagogical local history and local history competence of students are given. This article covers the process of arousing students' interest in research work and conducting the process of students' engagement in the project in local history classes. The process of students' research work was fully covered, and their results were observed. The author emphasizes that the use of the local history component in the educational process is of great importance, especially in the project activities of students. In the process of mastering local history knowledge, students develop interest in cognitive activity, creative abilities, a desire to make their work useful to people, form an active life position, and awaken initiative and ingenuity. By engaging in local history activities, students become the first researchers of their immediate environment.

Keywords: education, teaching methods, local history lesson, geography, project activities, regional component, schoolchildren.

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# 6 СЫНЫП ОҚУШЫЛАРЫ АРАСЫНДА ГЕОГРАФИЯ САБАҚТАРЫНДА ҒЫЛЫМИ-ЗЕРТТЕУ ЖӘНЕ ЖОБАЛЫҚ ІС-ӘРЕКЕТТЕРДІ ҚАЛЫПТАСТЫРУ

### Аңдатпа

Бұл мақалада география сабақтарында экологиялық білім берудегі аймақтық компонентті жүзеге асырудағы жобалық қызметті ұйымдастыру тақырыбы қарастырылды. Тақырып бойынша осы саладағы зерттеушіғалымдардың еңбектері қарастырылып, өлкетану мәселелерімен айналысатын әртүрлі ғалымдардың берген түсініктері негізінде ғылыми әдебиеттерге талдау жасалды. Мақалада оқушылардың ғылыми-зерттеу жұмыстарына деген қызығушылығын ояту және өлкетану сабақтарында оқушылардың жобаға қатысу процесін жүргізу әдістемесі баяндалды. Оқушылардың ғылыми-зерттеу жұмыстарының барысы толық қамтылып, олардың нәтижелері талданды.

Автор оқу процесінде өлкетану компонентін қолдану, әсіресе оқушылардың жобалық іс-әрекетінде үлкен маңызға ие екенін атап өтті. Өлкетану саласын игеру барысында оқушылар танымдық іс-әрекетке, шығармашылық қабілеттерге, қоғамға пайдалы еңбек етуге, белсенді өмірлік ұстанымды қалыптастыруға деген қызығушылықты дамытады, бастама мен тапқырлық оянады. Өлкетану қызметімен айналыса отырып, оқушылар өз өлкесінің жаңа замандағы алғашқы зерттеушілері болады.

**Түйін сөздер:** білім беру, оқыту әдістері, өлкетану сабағы, география, жобалық қызмет, аймақтық компонент, мектеп оқушылары.

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### ФОРМИРОВАНИЕ У УЧАЩИХСЯ 6 КЛАССОВ НАУЧНО-ИССЛЕДОВАТЕЛЬСКОЙ, ПРОЕКТНОЙ ДЕЯТЕЛЬНОСТИ НА УРОКАХ ГЕОГРАФИИ

#### Аннотация

Данная статья посвящена рассмотрению темы проектной деятельности при реализации регионального компонента экологического образования на уроках географии. Дан анализ научной литературы по данной теме. Приведены трактовки понятий различных ученых, занимающихся вопросами педагогического краеведения и краеведческой компетенции у учеников. В данной статье рассматривается процесс пробуждения интереса учащихся к исследовательской работе и проведения процесса вовлечения учащихся в проект на уроках краеведения. Изучен весь процесс исследовательской работы учеников, а также проанализировали их результаты. Автором подчеркнуто, что использование краеведческого компонента в учебном процессе имеет огромное значение, особенно при проектной деятельности обучающихся. В процессе овладения краеведческими знаниями у учеников развивается интерес к познавательной деятельности, творческие способности, желание сделать свою работу полезной людям, формировать активную жизненную позицию, пробуждается инициатива и изобретательность. Занимаясь краеведческой деятельностью, ученики становятся первыми исследователями ближайшего окружения.

Ключевые слова: образование, методы обучения, урок краеведения, география, проектная деятельность, региональный компонент, школьники.

**Introduction.** People began to talk about the regional component as a separate field of knowledge back in 1924. Academician S. Oldenburg wrote: "People were interested in the area where they lived, its nature, population, history, in a word, the most different aspects of life" [1].

The regional component combines natural history, geographical, environmental, historical information and is a comprehensive component of education. The unifying feature is that all these directions characterize one area. The regional component is closest to geography, since information is combined based on territorial characteristics. The regional component in geographical education evaluates the significance of territorial isolation, the beauty of landscapes, the rarity and importance of natural data (climate, flora and fauna, etc.), which connects it with the ecology of a given territory.

The regional component performs one of the most important functions of education – the educational function, since it requires a citizen, in particular, schoolchildren and students, to have a caring attitude towards the subject of geography.

In recent years, there has been a trend in Kazakhstan towards the greening of geographical education. In my work, to attract students, I use various forms of teaching the geography of the East Kazakhstan region, such as: – practical work, which includes not only the analysis of literary sources, but also excursions, meteorological and hydrological observations on the ground. In my opinion, all of the above forms of education will help schoolchildren and students not only study the regional features of the city of Ust-Kamenogorsk and the East Kazakhstan region, but also, based on their own research, trace and possibly identify environmental problems and prospects of their native land.

The essence of the regional component in environmental education lies in students' comprehensive physical and economic-geographical knowledge of environmental problems in the region with the help of various sources and observation.

Basically, the regional component is used in extracurricular activities of students and is determined by the program, the tasks and contents of which are based on the targets of state compulsory education standards at all levels of education.

One of the main active forms of teaching regional geography is research work, which helps students develop creative experience. Research work can have various types of organization of activities for students in grades 9-11. For example, a frequently used method of project-based learning. This method was developed by the American philosopher and educator John Dewey.

The main goal of using the project method when implementing the regional component in environmental education in geography lessons is students' independent study of environmental problems of their region. and an analysis of psychological and pedagogical literature shows that the process of forming the ecological culture of the younger generation attracts the attention of many researchers. V.A.Slastyonin, I.F.Isaev, E.N.Shiyanov consider environmental culture as one of the priority areas that forms the basis of the content of the basic culture of the student's personality. The features of its development in certain age groups of students (preschoolers, primary schoolchildren and teenagers) are revealed in his works by N.S.Dezhnikova, N.A.Ryzhova, G.I.Makeenkov, I.I.Petrova, T.A.Serebryakova, N.A.Sokolova, S.A.Surkina. The need to develop a teacher's ecological culture is justified by O.M.Doroshko. Problems of theory and practice of school environmental education are considered in the works of S.N.Glazacheva, E.V.Girusova, A.N.Zakhlebny, I.D.Zvereva, E.N.Dzyatkovskaya, D.S.Ermakova. D.N.Kavtaradze. V.P.Kalenskoy, E.A.Kogai, V.M.Korsunskaya, B.T.Likhacheva, N.N.Moiseeva, V.P.Nedbaeva, V.V.Pasechnik, I.N.Ponomareva, HE.Ponomareva, L.V.Popova, I.T.Suravegina, D.I.Traitaka, N.M.Chernova, I.P.Cherednichenko. The ecologization of the material of individual academic disciplines is given attention in the works of N.F.Vinokurova, E.A.Vlasova, E.Yu.Zhukova, T.N.Efimova, A.P.Ryzhenkova, I.F.Tokareva. The expediency of educating students on environmental material is reflected in the works of N.M.Verzilina, A.K.Shulzhenko, V.A.Sukhomlinsky. Features of the development of environmentally friendly personal qualities in various educational environments and forms of activity in his dissertation research are revealed by S.N.Atanova, A.M.Akhmedova, Ya.E.Ambrazhevich, E.V.Kolesova, G.G.Nedyurmagomedov, T.V.Mukhlaeva, Z.A.Khusainov [2].

*Basis provisions.* In the modern 21st century, in the period of information development, it is very important for a person to be able to make correct and quick decisions. The development of project activities in schoolchildren forms the ability of students to think creatively, make quick decisions, think logically, organize and establish connections with society. The use of the local history component in increasing students' interest in project activities allows them to individually consider and study the history and geography of their native land.

**Materials and methods.** Methods of pedagogical diagnostics of environmental components of personality are given by S.N.Glazachev, A.A.Nechai, EY.Nogteva, I.N.Ponomareva, S.S.Kashlev, A.P.Sidelkovsky, V.A.Yasvin. Methodological system for the development of independent activity of students in the study of geographical local history [3].

The sequence of development of independent activity of 6th grade students includes four stages (fig. 1) [3].

The first stage – non-independent activity – is characterized by the organization of independent activity of students aimed at mastering samples. The role of the teacher at this stage is motivational and organizational. The study of educational material is organized on the basis of the use of a reproducing geographical and local history module, which ensures the formation of the foundation for independent activity. This stage includes introduction, geographical location and administrative division.

The second stage – semi-independent activity – is characterized by the organization of students' independent activities together with the teacher. This stage involves transferring knowledge to a typical situation, analyzing a fact or event, and developing techniques and methods for students' independent activities. The role of the teacher at this stage is stimulation of activity and counseling. The study of educational material is provided on the basis of a reconstructive and variable geographical and local history module. This stage includes the following topics: relief, climate, inland waters.

The third stage – independent activity – is characterized by the organization of independent activity of students, the intensification of the search activity of schoolchildren. The student has a need for self-education. At this stage, teacher support is possible. The role of the teacher at this stage is evaluative and regulatory. The study of educational material is carried out on the basis of a heuristic geographical and local history module. This stage includes the following topics: vegetation cover, soil cover, wildlife, protected natural areas.

	STRUCTURE OF TH	IE METHODOLOGICAL	
TARGET COMPONENT	CONTENT COMPONENT	PROCEDURAL COMPONENT	TECHNOLOGICAL COMPONENT
Ideal goal:	Informative	Independent work stage	Geographical and local history module
End-means: Planned results of mastering the content	Axiological	Semi-independent	Reproducing
	Praxeological	work stage	Reconstructive- variative
	Personal	Independent activity stage	Heuristic
Target-subject: Development of independent activity of students		Stage of creative activity	Creative

Figure 1. The structure of the methodological system

The fourth stage – creative activity – is characterized by the organization of independent activities of a creative nature. The teacher designs forms of creative activity, controls its implementation and organizes assessment and self-assessment of its results. The study of educational material is carried out on the basis of a creative geographical and local history module. This stage includes the following topics: population, economy, historical and cultural heritage.

It is not enough to develop independent activity of students in the study of geographical local history only in lesson form. In this regard, extracurricular work within the circle takes on special significance.

We have developed a program for the geographical and local history club "Young Local Historian", which involves the inclusion of students in independent activities to study the immediate socio-natural environment. The content of the program includes 5 sections. The introduction is focused on motivating students to study their region. In the first section, "Learning to know my area," students gain knowledge about methods of getting to know their region. The section "My area on the map of the region and district" allows you to create a spatial-hierarchical geographical image of your area. The section "Studying the nature of our locality" is aimed at studying the natural components of our small homeland. In the section "Studying the population and economic activity. The structure of the program corresponds to the logic of students' development of independent activity.

An important methodological condition for the development of independent activity is methodological tools, including a textbook, a workbook, an electronic atlas and a school local history museum [4].

In modern conditions of informatization and computerization, an electronic atlas is also a significant means of developing independent activity of schoolchildren, which is entrusted with the task of ensuring the educational process, both when learning new material and when consolidating acquired knowledge. The advantage of an electronic atlas over a printed one is its mobility in changing information. Currently, the electronic terrain atlas contains 9 maps, as well as graphs, profiles and diagrams.

An important condition for the development of independent activity of students is the school museum of geographical and local history. The value of extracurricular work on the creation of a geographical and local history museum lies in the fact that museums are transmitters and guardians of culture, and most importantly, independent activities are organized on their basis, the stages of development of which remain the same – from reproductive to productive and creative. Nowadays, when special importance is attached to instilling in students the skills of independent work with various sources of knowledge, the exhibits of the school museum of geography and local history will form a very important basis for writing essays, compiling complex characteristics of various geographical objects, drawing diagrams, graphs and other works [5].

The methodological basis of the study was:

- cultural approach (O.S.Gazman, S.N.Glazachev, N.B.Krylova, B.T.Likhachev, V.A.Slastenin), which creates conditions for introducing students in the process of learning, education, development and self-development to universal human culture, which allows us to consider relationships in the system "man – society – nature" through various types of activities fixed in cultural experience, as well as expanding the content field of ecology beyond the boundaries of biological disciplines [6];

- system – activity approach (Yu.K.Babansky, L.S.Vygotsky, E.N.Dzyatkovskaya, A.N.Zakhlebny, I.D.Zverev, N.V.Kuzmina, A.N.Leontyev, V.V.Pasechnik, I.N.Ponomareva, A.P.Sidelkovsky), within the framework of which the process of development of students' ecological culture is considered as a system of activities, including the requirements of social order and moral imperative, goal, objectives, content, stages, approaches, principles, functions and results-oriented [7];

- competence -development approach (E.V.Berezhnova, V.V.Davydov, D.S.Ermakov, L.V.Zankov, I.A.Zimnyaya, V.V.Kraevsky, A.V.Khutorskoy D.B.Elkonin), which assumes purposeful and consistent subject-subject interaction between teachers and students, aimed at the harmonious development of the personality of schoolchildren [8];

- axiological approach (N.D.Nikandrov, E.Yu.Nogteva, O.N.Ponomareva, V.A.Slastenin, A.K.Shulzhenko), which creates conditions for value self-determination of the student's personality in the system of environmentally-oriented activities;

- integrative approach (V.S.Bezrukova, M.N.Berulava, A.V.Zolotareva, E.A.Kogai , L.V.Mezhonova, N.N.Moiseev, I.T.Suravegina, N.K.Chapaev), providing for the integrity of the pedagogical process, the unity and interconnection of the content, means, forms and methods of classroom and extracurricular activities in the process of forming the ecological culture of students [9];

- technological approach (L.V.Bayborodova, L.A.Baykova, L.K.Grebenkina, G.K.Selevko, V.A.Slastenin, A.P.Chernyavskaya, N.E.Shchurkova, V.V.Yudin), which makes it possible to develop innovative technologies for the development of the ecological culture of schoolchildren, to predict and design the pedagogical process in order to achieve high performance.

The theoretical basis of the study includes philosophical, sociological, psychological and pedagogical theories and concepts of environmental education:

- ideas of methodology and theory of pedagogical research (M.A.Galaguzova, N.I.Zaguzov, A.I.Kochetov, V.V.Kraevsky, E.V.Berezhnova, D.A.Novikov, V.A.Slastenin );

- works on pedagogical modeling (O.S.Anisimov, A.N.Dakhin, G.K.Selevko , A.P.Tryapitsyna);

- works devoted to the description and design of pedagogical technologies (L.V.Bayborodova, V.P.Bespalko, L.K.Grebenkina, V.V.Guzeev, A.P.Panfilova, G.K.Selevko, V.A.Slastenin, A.P.Chernyavskaya, V.V.Yudin);

- ideas of environmental pedagogy (N.N.Iordansky, M.V.Krupenina, S.T.Shatsky, B.A.Sukhomlinsky, V.A.Yasvin);

- philosophical and psychological-pedagogical concepts of personality (B.G.Ananyev, L.I.Bozhovich, L.S.Vygotsky, A.N.Leontiev, A.Maslow);

- theory of teaching methods in biology, chemistry and ecology (N.D.Andreeva, N.M.Verzilin, V.V.Guzeev, V.M.Korsunskaya, V.V.Pasechnik, I.N.Ponomareva, D.I.Traytak);

- research into problems of theory and practice of environmental education (S.N.Glazachev, E.V.Girusov, E.N.Dzyatkovskaya, D.S.Ermakov, A.N.Zakhlebny, I.D.Zverev, A.T.Zverev, D.N.Kavtaradze, E.A.Kogai, V.M.Korsunskaya, B.T.Likhachev, N.N.Moiseev, V.V.Pasechnik, O.N.Ponomareva, N.F.Reimers, V.A.Sukhomlinsky, I.T.Suravegina, N.M.Chernova, L.Yu.Chuikova, etc.) [10].

A combination of the following research methods was used [11]:

1. theoretical methods : analysis of philosophical and psychological-pedagogical literature on the problem and topic of research, materials of scientific and practical conferences, periodicals; comparison, generalization, induction, deduction [12].

2. study of widespread and advanced pedagogical experience in the formation of students' environmental culture, analysis of school documentation, products of creative and design- research activities of schoolchildren [13].

3. empirical methods: participant observation; interview, questionnaire; observation and pedagogical analysis of various types of activities at school; diagnostic methods for assessing the levels of formation of ecological culture and its individual components in various subjects of educational activity, developed by S.D. Deryabo, O.M. Doroshko, S.N. Glazachev, S.S. Kashlev, E.Yu. Nogtevoy, V.A. Yasvin [14]:

- testing; pedagogical experiment; design and modeling;

- statistical and graphical methods for processing research results.

School local history broadens the horizons of schoolchildren, develops creative abilities, gets to know the nature of their region, instills in them to study, love and protect it.

The goal of local history is to equip children with knowledge about the nature of their region, including the connection between dead and living nature, people, economy, history and culture.

My current topic: "Formation of a research, project, creative personality in students in geography lessons based on an updated program with familiarization with the nature of their region."

# Sample / Participants / Group

The experimental work was tested at Communal Government Institution No. 20 named after A. Baitursynov of the Akimat of the city of Ust-Kamenogorsk.

The following research methods were used [15]:

- sorting;
- control, evaluation;
- survey;
- analysis, generalization;
- diagnostics;
- experiment.

Practical value: based on the results of the experiment, the presented material is practically valuable, scientifically and theoretically significant, significant material, indispensable for school teachers involved in teaching and research.

"Questioning students in geography lessons to identify current problems in the development of the nature of their native land". The survey was conducted among grades 6-10 using Google testing Forms .

Google Forms is an online tool that allows you to create forms for data collection, online testing and voting.

Unlike most online survey designers, Google Objects gives you access to all the features without any restrictions – just sign up for a common account for all Google services . In addition, Google Forms have a simple and uncluttered design. The ability to customize the form using templates and created themes is another important feature of this tool.

My tasks in conducting the research:

1. Increasing Kazakhstani patriotism and human responsibility for the native land in geography lessons based on the updated program;

2. give impetus to the development of students' worldview, as well as interest in their native land;

3. increasing interest in carrying out design and research work.

Survey questions on the topic "Nature of the native land" were received on the Google platform Forms for the following questions.

1. How do you feel about extracurricular travel activities? Good, Average, Boring

2. did you go on extracurricular excursions? (to museums, tourist places, cultural, natural, historical places)

3. What popular tourist attractions of the East Kazakhstan region do you know?

4. What types of tourism activities do you prioritize? (Tourist trip, competitions, excursions, museum visits)

5. Who do students prefer to attend extracurricular activities with ? With parents, class, alone

6. Which tourism destination will you choose? Active sports tourism, inactive thought field tourism.

The pedagogical experiment was carried out in grades 7, 8, 9, 10. The total number of students who took part in the experimental survey was 277 (Appendix B).

**Results and Discussion.** Classes that actively participated in the survey: 6th grade (47.6 %), 7th grade (21.9%), 8th grade (16.3%), 9th grade (14.2%). The diagrammatic proportion of students surveyed can be seen in Figure 2.



Figure 2. Number of students in the online survey on the topic "Nature of the native land" by grade (277 answers)

Analyzing the survey, when asked how you feel about extracurricular tourism activities, 74.7% of students responded that they were good, 22.4% were average, and 2.9% were boring (fig. 3).



Figure 3. Question diagram How do you feel about extracurricular tourism activities ? (277 replies)

Tourists who have a good attitude towards extracurricular tourism activities are active and seasoned children, while children who are more attentive do not like tourism, do not participate in social activities, and there are also a number of groups of students who are not interested in any area of the tourism field. Students who are active in outdoor activities want camping and competitions in schools.

Schoolchildren love to go on hiking trips. Students put the tourist trip in first place, excursions in second, competitions in third, and visiting museums in fourth (fig. 4).



Figure 4. Diagram for assessing tourism activities (277 answers)

When asked which direction of tourism schoolchildren put in first place, active sports tourism is 70.8%, inactive mental tourism is 29.2% (fig. 5). Students put physical health first in tourism because they enjoy recreation more actively than mentally. They also like to go to hiking competitions rather than visiting excursions and museums. And in order to guide children towards a healthy lifestyle, it is advisable to organize extracurricular activities in schools.



Figure 5. Students' choice of tourism destination (277 answers)

To the question – Have you gone on extracurricular excursions? 39% of students responded that they visited museums, 27.8% visited a summer camp, 23.1% – cultural, natural, 10.1% – historical (fig. 6).



Figure 6. Answer to the question did you go on excursions?

According to the results of the survey "Nature of the Native Land", extracurricular tourism activities not only influence the physical development of students, but also broaden their horizons and create conditions for the realization of creative characteristics and full self-expression and overcome the discrepancy between the physical and spiritual development of each person. Students noted objects from popular tourist places in Eastern Kazakhstan: lakes Alakol , Markakol, Katon-Karagai, Sibe , Ak Baur , etc. [14].

All tourists noted the connection between tourism and culture, and also said that human development is influenced not only by physical, but also by cultural, spiritual, and emotional development.

After analyzing the students' questionnaires, it was revealed that 67.3% of students consider it necessary to introduce students to the culture of their native land, while 26.2% answered that it should be introduced based on interest. When asked, "At what age do you think it is necessary to develop children's interest in the natural and cultural heritage of their native land?" 56.1% of students answered preschool age, and 41.1% responded school age (Figure 1, b). Furthermore, 68.2% of respondents were interested in the flora and fauna of their native land; the remaining 29.9% indicated occasional interest, and 1.9% expressed no interest in this topic (Figure 1, c). Among those surveyed, only 22.4% of students visit cultural events, museums, or exhibitions once a month, while 58.9% stated they attend such events once a year, and the remaining 18.7% do not attend at all (Figure 1, G). In response to the question, "Do you know about celebrities and heroes of the region?" 40.2% responded "know," 49.5% "know a little," and 10.3% "don't know" (Figure 1, e). Additionally, 64.5% expressed interest in participating in a scientific circle on "Local History" (Figure 1, f). Knowledge of the culture, history, and nature of their native land was reported as follows: 23.4% have comprehensive knowledge, while 53.3% have intermediate knowledge (Figure 1, g). Among those surveyed, 57% expressed a need for specialist assistance in obtaining information about the region's nature, history, and culture. Regarding attitudes towards extracurricular activities of a local history nature, 58.9% responded positively, and 37.4% neutrally. When asked about effective forms, techniques, and events for developing students' interest in their native land, many mentioned "excursions", "clubs", "local history promotional events", "tour trips", "trainings", "direct contact with nature", "scientific projects", "challenges", "forums" and "virtual tours".

Based on the study results, it was found that the majority of students are eager to receive and engage with new information, demonstrating developed independent activity skills. They are also open to constructive dialogue and interaction with teachers; thus, developing an appropriate behavioral model and ensuring adequate motivation for educational activities is crucial. Based on these findings, the main functions of local history activities at a university were identified as research, documentation, educational, and organizational.

In connection with the current topic I have posed, the scientific direction presented in geography lessons under the heading of developing students' scientific research, creative personality with familiarization with the nature of their region will be continued. As a result of the survey, thoughts arise about how well students know their native land, as well as what questions they pay attention to when drawing up daily lesson plans, connecting them with their native land.

During the course of teaching geography to students, we brought together students with an interest in local history. We began to prepare projects that meet their interests.

During the survey, I noticed among the students interested in history, the nature of their native land. With the help of the project, I introduced the students to the benefits that the project gives them so that they could get answers to their questions.

At the first stage, students became familiar with the structure of the project and the stages of its preparation. Topics and issues of interest to students were discussed. As a result, 7 students were interested in the topics of history, natural sites and tourist places of their native land, 3 students wanted to consider the issues of forming tourist sites and increasing the tourism potential of their native land (table 1). In the first stage, we determined the topic of 10 students and the relevance of the research problem. The purpose of the work and the tasks that are set during the implementation of the project have been approved [15].

At the second stage, the structure of the project was prepared in accordance with the objects of student research. First of all, I explained to the students what parts the project structure consists of. After this, the students formed the content of the projects independently. Later, we completely checked, analyzed and made changes to the content of the work of each of them. Students were given various necessary advice on preparing projects.

At the third stage, students began independent research work. Because the main stage of the project is that at the stage of collecting information, students began to summarize all the necessary material, taking into account the recommendations of the leader. During this period, as a manager, I worked only as an appraiser and guide. Students received materials related to their topics from books in city and school libraries, city museums, and reliable Internet sources. It was instructed to collect all the material and divide it into sections corresponding to the structure of the project.

Student	Research topic
1	Natural monuments of the East Kazakhstan region
2	Development of tourism potential of the territory of the Bukhtarma River
3	History of Kurchum district
4	7 wonders of the East Kazakhstan region
5	Contribution of historical figures of the Ulan region to the development of
	Kazakhstan
6	Ways to develop tourist places in the East Kazakhstan region
7	History of the origin of toponyms of the East Kazakhstan region
8	The mystery of the historical and archaeological complex Akbaur
9	100 sacred places of Kazakhstan: Eastern Kazakhstan
10	Tourism sectors that can be developed in the East Kazakhstan region

Table 1. Subject of students ' research

The fourth stage is where students combine and analyze all prepared materials and complete the project. At this stage, as a leader, we monitor the progress of students' work and monitor the process of their research. The main difficulties that students encounter at the final stage are the process of analysis, summing up the project, recommendations for solving the problem. At this stage, students' individual thinking was taken into account. Together we identified ways to solve the problem. During this period, students were distinguished by a variety of interesting ideas in solving problems and love for their native land.

**Conclusion.** The results of applying teaching methods used to increase students' interest in creating scientific projects among 6th grade students at school No. 20 showed good results. Using a survey, we included 6th grade in our experiment, which showed very high interest in projects from 6th to 10th grades. We used the method that we considered at the beginning of the research work to implement the project and research activities of students. As a result, 10 6th grade students fully prepared their projects and defended them in class.

1. The study of the regional component plays an important role in the moral and aesthetic education of students. In geography lessons, students show interest in knowledge if the program is filled with interesting facts that characterize their region.

2. As part of the scientific and project activities of students, it is possible to conduct research on various natural complexes by the students themselves, which fully involves them in the educational process. The implementation of the regional component in the environmental education of schoolchildren and students is impossible without the introduction of local history into the geography course. It is necessary to introduce the following disciplines into the curriculum: "Project activities in geography lessons", "Sacred geography of East Kazakhstan region", etc.

3. summing up the results of a survey of students to identify current problems in the development of the nature of their native land in geography lessons, we found that schoolchildren like to put physical health in first place in the field of tourism and attend hiking competitions before visiting excursions and museums. In addition, we believe it is advisable to organize extra-curricular activities at school sites to guide children towards a healthy lifestyle.

4. in developing students' love for their native land based on the updated program, it is advisable to organize extracurricular activities more often;

5. Depending on the native land in our study, Altai was grouped into the following tourist and recreational resources: cultural, united, historical and archaeological. In addition, suggested tourist routes for various categories of tourists were systematized and proposed. In achieving the set goals and objectives, the following results were obtained [16]:

The theoretical and methodological foundations of geographical education are determined based on the updated content of education, it is determined that in school geography spiral learning when designing the content of a subject is based on the principle [17];

At geography lessons, a pedagogical experiment was conducted for students to study the nature of their native land, as well as identify current problems. The survey on the topic "Nature of the Native Land" was first received on the Google Forms platform. As a result of the survey, 10% of students wrote that they did not know or forgot about their native land in which they live, its natural and historical objects. The remaining 90% reported that they had visited the sights of Eastern Kazakhstan and were planning to do so in the near future [18].

In order to organize a local history expedition of students to their native land, tourist routes have been compiled, offered for various categories of tourists [19]. In particular, proposed routes for guests of the region, proposed routes for schoolchildren, proposed routes for pensioners; to proposals for applied purposes, based on training in the direction of "Local history" in school geography in increasing the worldview of students in their native land: in the teaching process, the teacher, in drawing up a short-term plan, gives more information about the nature of the native land in accordance with the topic of the lesson and offers additional video lessons. Currently, the focus is on video lessons compiled using the Camtasia and Bandicam programs. Therefore, I think that if a teacher compiles video lessons promoting the nature of his native land and sends them through his personal You-tube channel, then students' interest in the subject will increase.

Therefore, the task of a geography teacher is to use the regional component in lessons as often as possible with reference to the environmental component of geographical education.

#### References:

1. Милонов Н.П., Кононов Ю.Ф. Историческое краеведение. Просвещение.-1969.-С.319.

2. Никонова М.А., Бахчиева О.А., Душина И.В. Методика преподавания региональной географии в школе. Издательство АСТ, -2003.- С.188.

3. Коршунов М. Ю. Методика развития самостоятельной деятельности учащихся 6 класса при изучении географического краеведения. Новгород. – 2009.

4. Bakır T. Eğitsel amaçlı bilgisayar oyunlarının coğrafya derslerinde kullanılmasının öğrenci görüşlerine göre değerlendirilmesi. Yayımlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara. – 2015.

5. Kowalczyk-Anioł J. Rethinking tourism-driven urban transformation and social tourism impact: A scenario from a CEE city. Cities. – 2023. – T. 134. – C. 104178.

6. Stefaniak A., Bilewicz M., Lewicka M. The merits of teaching local history: Increased place attachment enhances civic engagement and social trust. Journal of environmental psychology. – 2017. – T. 51. – C. 217-225.

7. Dorji K. et al. Bhutanese science teachers' perceptions of the nature of science: a cross-sectional study. Disciplinary and Interdisciplinary Science Education Research.  $-2022. - T. 4. - N_{2}. 1. - C. 4.$ 

8. Таркова А. И. Развитие ценностно-смысловой компетентности в процессе обучения на примере дисциплин гуманитарного цикла. Молодой ученый. – 2012. – №. 10. – С. 390-392.

9. Gil Llinás J., Tobaja Márquez L. M. An Educational Method Based on Student-Generated Questions. International Journal of Educational Methodology. – 2023. – T. 9. – №. 2. – C. 333-343.

10. Князева Т. Н. Индивидуальный образовательный маршрут ребенка как условие осуществления психолого-педагогической коррекции младших школьников с ЗПР. Коррекционная педагогика: теория и практика. – 2005. – № 1. – С. 62-66.

11. Bugingo J. B. et al. Improving teachers' and students' views on nature of science through active instructional approaches: A Review of the literature. Science & Education. -2024. -T. 33. -N. 1. -C. 29-71.

12. Simon M., Budke A. Students' comparison competencies in geography: results from an explorative assessment study. Journal of Geography in Higher Education.  $-2024. - T. 48. - N_{\odot}. 1. - C. 94-114.$ 

13. Lewicka M. Place attachment, place identity, and place memory: Restoring the forgotten city past. Journal of environmental psychology.  $-2008. -T. 28. -N_{2}. 3. -C. 209-231.$ 

14. Chlachula J. et al. Territorial assessment of the East Kazakhstan geo/ecotourism: Sustainable travel prospects in the Southern Altai Area. Geosciences.  $-2021. - T. 11. - N_{\odot}. 4. - C. 156.$ 

15. Politsinskaya E. V., Lizunkov V. G. Organization of Student Project Based Activities through Individual Learning Routes. International Journal of Emerging Technologies in Learning (iJET).  $-2019. -T. 14. -N_{\odot}. 11. -C.$  186-193.

16. Taber, K. S. The cultures of science education across the world. Studies in Science Education, -2012,- 48(2), 229–235.

17. Abraham M. R. The learning cycle approach as a strategy for instruction in science. International handbook of science education. -1998.  $-N_{2}$ . Part 1. -C. 349-362.

18. Catling S. Pre-service primary teachers' knowledge and understanding of geography and its teaching: A review of International Geographical Education Online.  $-2014. - T. 4. - N_{\odot}. 3. - C. 235-260.$ 

19. Zhensikbayeva, N.Zh., Abiyeva, G., Sabyrbayeva, B.T., Avgusthanova, G.A., Kabdrakhmanova, N.K., Amangeldy, N. Studying the development potential of tourism industries in the South Altai by hydrological, climatic, geomorphological way and visualization using GIS. Geojournal of Tourism and Geosites.-2024.-53(2), 528–537.

### References:

1. Milonov N.P., Kononov YU.F. Istoricheskoe kraevedenie. Prosveshchenie.-1969.-S.319.

2. Nikonova M.A., Bahchieva O.A., Dushina I.V. Metodika prepodavaniya regional'noj geografii v shkole. Izdatel'stvo AST, -2003.- S. 188.

3. Korshunov M.YU. Metodika razvitiya samostoyatel'noj deyatel'nosti uchashchihsya 6-h klassov pri izuchenii geograficheskogo kraevedeniya: doktorskaya dissertaciya, Nizhegorodskij gosudarstvennyj pedagogicheskij universitet, Nizhnij Novgorod, Rossiya.- 2009.

4. Bakır T. Eğitsel amaçlı bilgisayar oyunlarının coğrafya derslerinde kullanılmasının öğrenci görüşlerine göre değerlendirilmesi. Yayımlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara. – 2015.

5. Kowalczyk-Anioł J. Rethinking tourism-driven urban transformation and social tourism impact: A scenario from a CEE city. Cities. – 2023. – T. 134. – S. 104178.

6. Stefaniak A., Bilewicz M., Lewicka M. The merits of teaching local history: Increased place attachment enhances civic engagement and social trust. Journal of environmental psychology. – 2017. – T. 51. – S. 217-225.

7. Dorji K. et al. Bhutanese science teachers' perceptions of the nature of science: a cross-sectional study. Disciplinary and Interdisciplinary Science Education Research.  $-2022. - T. 4. - N_{2}. 1. - S. 4.$ 

8. Tarkova, A. I. Razvitie cennostno-smyslovoj kompetentnosti v processe obucheniya na primere disciplin gumanitarnogo cikla. Molodoj uchenyj.-2012.-10, S.390-392.

9. Gil Llinás J., Tobaja Márquez L. M. An Educational Method Based on Student-Generated Questions. International Journal of Educational Methodology. – 2023. – T. 9. – №. 2. – C. 333-343.

10. Knyazeva T. N. Individual'nyj obrazovatel'nyj marshrut rebenka kak uslovie osushchestvleniya psihologopedagogicheskoj korrekcii mladshih shkol'nikov s ZPR. Korrekcionnaya pedagogika: teoriya i praktika. – 2005. –  $N_{2}$ . 1. – S. 62-66.

11. Bugingo J. B. et al. Improving teachers' and students' views on nature of science through active instructional approaches: A Review of the literature. Science & Education.  $-2024. - T. 33. - N_{\odot}. 1. - C. 29-71.$ 

12. Simon M., Budke A. Students' comparison competencies in geography: results from an explorative assessment study. Journal of Geography in Higher Education.  $-2024. - T. 48. - N_{\odot}. 1. - C. 94-114.$ 

13. Lewicka M. Place attachment, place identity, and place memory: Restoring the forgotten city past. Journal of environmental psychology.  $-2008. -T. 28. -N_{2}. 3. -C. 209-231.$ 

14. Chlachula J. et al. Territorial assessment of the East Kazakhstan geo/ecotourism: Sustainable travel prospects in the Southern Altai Area. Geosciences.  $-2021. -T. 11. -N_{\odot}. 4. -C. 156.$ 

15. Politsinskaya E. V., Lizunkov V. G. Organization of Student Project Based Activities through Individual Learning Routes. International Journal of Emerging Technologies in Learning (iJET).  $-2019. -T. 14. -N_{2}. 11. -C.$  186-193.

16. Taber, K. S. The cultures of science education across the world. Studies in Science Education, -2012,- 48(2), 229–235.

17. Abraham M. R. The learning cycle approach as a strategy for instruction in science. International handbook of science education. – 1998. –  $N_{2}$ . Part 1. – C. 349-362.

18. Catling S. Pre-service primary teachers' knowledge and understanding of geography and its teaching: A review of International Geographical Education Online. -2014. -T. 4. -N. 3. -C. 235-260.

19. Zhensikbayeva, N.Zh., Abiyeva, G., Sabyrbayeva, B.T., Avgusthanova, G.A., Kabdrakhmanova, N.K., Amangeldy, N. Studying the development potential of tourism industries in the South Altai by hydrological, climatic, geomorphological way and visualization using GIS. Geojournal of Tourism and Geosites.-2024.-53(2), 528–537.

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### ELECTIVE COURSE AS A MEANS OF ASSESSING THE MOTIVATION OF THE 9<sup>TH</sup> GRADE STUDENTS TO STUDY THE ENVIRONMENT

#### Abstract

In modern pedagogy, special attention is paid to environmental education and the education of students. But the key problem of working in this direction is the need for a qualitative impact on the interests and motivation of students, which requires other means and methods of teaching. Therefore, the purpose of the study was to analyze the effectiveness of using an elective course to increase the interest and motivation of 9<sup>th</sup> grade students to explore the environment. To achieve it, a number of methods of scientific cognition were used: they were the analysis and synthesis of scientific and methodological literature on the research topic. Within the framework of the article, it was determined that the issues of interest and motivation are one of the key ones in modern pedagogical practice, and many teachers pay attention to them. This is due to the fact that it depends on the level of interest, on the level of motivation, how effectively students will learn the material and, more importantly, how effectively students' independent activities in mastering certain subjects at school will proceed. In order to determine the effectiveness of elective courses, an experiment was conducted in which the level of interest and motivation was measured before and after the elective course. The results showed a positive effect of the elective course on the level of interest and motivation of 9<sup>th</sup> grade students to explore the environment both as part of the development of the school curriculum and as part of independent work.

Keywords: assessment, motivation, elective course, research, environment.