



PRIMARY CLASS CONTENT OF MATERIALS ON IMPROVING THE STUDENTS' ECOLOGICAL CONCEPTS BASED ON THE INTEGRATION OF THE SCIENCES

Jurakul PANJIEV

Teacher of the Department of Primary Education Methodology of Termiz State Pedagogical Institute

Article history:	Abstract:
Received: 20 th August 2023 Accepted: 20 th September 2023 Published: 24 th October 2023	This article is elementary the content of materials related to the improvement of ecological concepts based on the integration of sciences is being discussed among students. Also, during the lesson, students' conscious interest activity, independent thinking ability develops, they develop a personal attitude towards the academic subject, a sense of creativity. Studying academic subjects in harmony as one of the important factors of strengthening students' knowledge requires the harmony of the educational process.

Keywords: class, learner, environmental, science, integration, lesson, activity.

INTRODUCTION. It is known that elementary school students perceive the world around them as a whole. For him, it is not the name of science, native language and reading literacy, natural sciences, mathematics, technology and other academic subjects, but the sounds and colors of the objects around him that are interesting. The teacher feels and knows that it is necessary to teach students to see the connection between nature and everything in everyday life. So, does educational integration meet today's demand? How should this issue be resolved, what is its essence?

The idea of integration of education began to be discussed in public education along with differentiation and individualization[1]. If the level of preparation for independent work with books, textbooks and other literature on the basis of the differentiation of junior school education requires the active formation of interests at the junior school age, the deepening of some common concepts that are the objects of teaching various subjects as the basis of integration, can be clarified and expanded.

ANALYSIS AND RESULTS. The goal of integrating education is to lay the foundations of a clear vision of nature and society in elementary school and to form their attitude to the laws of their development. Integrating education increases students' enthusiasm and interest in learning science. , increases the level of knowledge in academic subjects, develops their mental activity, ensures the coherence of educational materials[2].

intra- and inter- discipline relations in mastering the basic sciences and understanding the laws of existence in the world is the methodological basis of the approach to the integration of education. This requires returning to the concepts of various subjects

many times, deepening and enriching them, at this age can be achieved by identifying important signs that are comprehensible.

A well-formed structure and flow procedure can be used as a basis for any lesson integration. However, the results of the analysis of concepts related to other educational subjects are included in the integrated lesson[22]. The analysis of concepts is considered as an integration of the lessons that refer to the knowledge acquired in the lessons of other academic subjects[3].

The lesson is creative, free, and has a unique, logical, sequential, consistent method of transition. Many concepts in elementary school, which lay the foundation of general education, are natural science and other academic subjects. general for s i. Nowadays, when the establishment of connections between common concepts for a number of educational subjects becomes a pedagogical and psychological basis, it is necessary to develop and test an integrated system of lessons. At the same time, interdisciplinary relations should be taught at the level of the curriculum and provided with the necessary teaching tools[23].

Therefore, in elementary grades, the element of mathematics can be used in every subject. The purpose of using the element of integration in the mathematics lesson is to develop students' activity in the lesson and make the lessons interesting[4].

In elementary grades, knowledge of mathematics can be used in other academic subjects. Integrating math knowledge helps make the lesson fun and lively. For example, during literacy training in the 1st grade, students count the number of sounds, letters, and syllables in a word, determine the ordinal number of the stressed syllable, and the number of



words in a sentence. This makes it possible to apply the knowledge about the series of natural numbers and ordinal numbers in writing and reading lessons.

In reading classes, students often have assignments: reading the third part of the text, memorizing four lines of poetry, and hakazo. Also, to know the pages of books, date, names of exercises, and to say them, knowledge of mathematics is necessary[24]. It will also be interesting for students to find proverbs with numbers: "Measure seven, cut one", "Don't count, don't say eight", "One to a thousand, one to a thousand", etc[5].

Numerical information about different dates and amounts is also found. Dates and stages in the life of writers and poets require knowledge of mathematics. Numerical information is especially common in science classes. For example, the completion of the observation diary includes numerical data such as days, daily temperature.

A special use of integration in science classes is to measure the volume of something. For example, in the 4th grade "Science" textbook, students are given the following task:

1. The student measures the width and height of the desk and draws its drawing on paper: 1 cm, 10 cm. How many times is the drawing of the desk on paper smaller than the original?
2. Draw a drawing of the room you live in (scale - 1cm: 2m). Show how many times you have reduced on paper relative to itself.

Also, mathematics can be studied in connection with "Technology", "Art", "Physical culture".

Integration of educational subjects in the educational process is a requirement of the present time. After all, the integration of academic subjects is important for the integration of education and upbringing, for the development of students as humane, patriotic, well-rounded individuals who embody spiritual and moral qualities.

In studying and researching the problem of integrating sciences, it became clear that the basis of the process of integrating science and scientific knowledge is the unity of the material world, that is, nature, society and its mutual understanding. As a result of the development of coherence and interdependence between sciences, the importance of information media in this field, the achievements achieved in the process of education and training are also manifested in nature, society, the field of technology - the material world. This interaction is a necessary factor for the internal natural development of each science[6].

Improvement of educational content, scientific, vital, interesting materials can be done on the basis of modern educational technologies[25]. One such

material is integrative knowledge.

The balance of the environment and the harmony in the state of nature determine the rhythm of human life. The morality of a person's life is determined by his spirituality. Ecological concept, ecological thinking and ecological safety culture will be formed only in a person with high spirituality. The use of folklore in providing ecological education to growing youth gives good results.

Man and nature are the oldest and most popular themes of the art of words. Mother nature has always delighted man with her beauty, freshness, grace, and generosity.

Uzbek people's interaction between nature and human relationship, nature's generosity, and man's love for nature are deeply reflected in folklore works. Because our people understood that they cannot live separately from nature, that every plant, tree, flower, insect, bird, and animal plays an important role in their health. Therefore, they strive to increase the benefits and reduce the harms[7].

In their faith, the people paid great attention to considering the soil as sacred, caring for grass and water, taking care of the mountains and stones, not harming birds and animals, and not destroying the gardens. instilled in the soul and heart. Uzbek people have incomparable examples of oral creativity that reflect the educational and educational significance of nature and human relations in human development[26]. These include epics, fairy tales, songs, proverbs, and riddles. Working intelligently with the support of oral creations that reflect the role of nature in human destiny. Every tree, every plant, every stone in nature has its role and function. waits for his arrival[8].

The following ceremonies and holidays related to nature can be used to inculcate ecological concepts in growing students:

1. Related to the spring season: Navruz, Ish boshi, Urug kadash, Lola sali, Kizil gul, Boychechak, etc.

2. For the summer season: Mulberry harvest, Shiny harvest, Strawberry harvest, Water harvest, Green harvest, Sust xotin ceremonies are included.

3. Associated with the autumn season are Mehrjan, Melon sali, Samol calling, Rain calling rituals and other harvest festivals.

4. Winter season includes holidays such as First Snow, Snow Letter, Stork Snow and Humor.

By holding the above-mentioned holidays and ceremonies in the bosom of nature, the knowledge of protecting nature and having the right attitude towards it is instilled in the minds of young people[9].

The following ideas are put forward in examples of folklore and values related to nature.



1. To respect, preserve, protect nature, not to interfere with it.

2. Honoring the beauty, freshness and generosity of nature.

3. Maintaining the balance of nature and man.

4. Using nature's bounty, not abusing it

5. The beauty of nature and pass it on to the next generation as it was before without destroying its naturalness.

6. The fact that all living and non-living things in nature were created only for man, and that they serve for his prosperity, is to show that these things are humiliated.

and pedagogues to properly organize educational and educational processes and increase the efficiency of the process of environmental education in order to inculcate such popular and humanitarian ideas into the minds of young students.

Currently, biochemistry and biotechnological sciences, which are new fields, are conducting consistent scientific research in order to preserve ecology, detoxify the environment, and provide Mother Nature, clear sky, clean air, and safe drinking water for future generations. Water consumption is increasing year by year with population growth. Water consumption is exceeding its return to nature, and if this situation continues, the shortage of drinking water will increase. In order to prevent such a situation from occurring, educating the young generation, who is our future, in the spirit of preserving ecology, is one of the urgent issues before us pedagogues[10].

At a time when the process of building a legal and democratic society is being successfully implemented in our country, it is important to bring up a morally mature young generation and teach them to love the motherland and ensure the cleanliness of the environment.

In recent years, the population of our country has faced a great environmental threat. Nature and man interact on the basis of certain laws. Violation of these laws causes irreparable environmental problems. Life requires people to protect the environment not only for today, but also for future generations. In order to effectively use natural resources, to consciously solve the issues of nature protection, it is necessary to educate the young generation about nature and its protection in preschool education, schools, secondary special and higher educational institutions.

In fact, the ecological concept is a very comprehensive resource[11]. Culture - ecology and vice versa, ecology - culture affects various areas. The sources common to these concepts are also diverse. Only a civilized person tries to rationally manage the interaction of nature and society. His work in this

regard defines his culture. Culture serves to make people educated, to teach them the rules of work, besides, to ecologize production, technology and science.

The concept of ecology includes: protection of nature, use of natural resources, culture, culture of changing the ecological system. A person who has formed a culture of environmental safety deeply understands that care for nature protection on the scale of a district can have an effective impact on the ecological situation far away[12].

It is not possible to educate students in ecological culture only by teaching them the basics of rational use of natural resources. Teaching young people to use nature rationally to create spiritual and cultural wealth, as well as to explain to them that nature is changed not only for profit, but according to the laws of beauty, is in line with moral requirements[13]. It is advisable to follow the following procedures in the process of forming ecological concepts in primary school students of general education schools:

First of all, it is necessary to influence the feelings of students, to instill in them a love for nature from a young age. The earlier this education is started and consistently developed, the more positive it will be.

Secondly, to form an active life perspective in the minds of students on the issues of nature protection and rational interaction with it. It can be described as the moral level of a person. Every member of society needs to realize that nowadays its dependence on the state of the natural environment is increasing instead of decreasing.

Therefore, each of us should protect nature. There are objective requirements for the development of science and technology, especially for those responsible for using its achievements for practical purposes. They should take into account the nuances of nature, not allow it to exceed the limits of stability, understand more deeply the nature of complex and interrelated phenomena, and not act contrary to the laws of nature in order not to cause irreversible processes[14].

Thirdly, promotion of environmental safety culture requires continuous continuation of environmental education. They should study socio-natural and technical sciences in the course of professional activity in general education schools. Further enrichment and development of acquired knowledge requires independent work. In addition, educational activities carried out in the ecological direction in enterprises and organizations help a lot. In particular, when elementary school students take an independent step in life, it is necessary to become



nature's defenders, not its subjugators. Undoubtedly, they are helped by their teachers, coaches and educators.

Love of country, patriotism starts with love of nature. Therefore, it is impossible to educate children in the spirit of patriotism without creating a true love for nature. A person's being in the lap of nature refreshes him spiritually and develops his creative activity[15].

Love for nature is a very broad and complex emotion. It forms a complex whole that includes high spiritual and mental layers. Cultivating this feeling - starting from early childhood has an important pedagogical value. Each child grows a desire to look at the local land and nature in which he lives, to put his heart into it.

He teaches not only to accept the beauty of nature, but also to protect it, to take care of its resources and use them wisely, not only to protect them, but also to increase them, and educates in this spirit. The call to harmony between man and nature is found in many chapters of the Holy Qur'an. This includes the wisdom in Surah "Nakhl"- "Asalari", the description of paradise in Surah "Rakhman" such as "The reward of the one who passed his life with faith and good deeds is paradise", Surah "Shuaro" with people in the ark of Prophet Noah together it can be shown that animals and birds are described as saving lives[16].

Currently, attention to environmental education is increasing in our country. The recognition of "Citizens are obliged to treat the environment with care" in Chapter XII, Article 50 of the Constitution of the Republic of Uzbekistan preserves and determines the law of environmental education.

The future of Uzbekistan is in the hands of the youth. Therefore, the living environment of a person depends on keeping the environment clean in its natural state, effectively using natural resources, leaving them to the next generation, perfectly mastering techniques, technology and economic knowledge adapted to the market economy. In this field, the UNESCO and UNICEF departments of the UN, the Nature Protection Committee of Uzbekistan, and the non-governmental "E kosan" society are carrying out a number of works[17].

Nowadays, the attention to the use of interactive methods, innovative technologies, pedagogical and information technologies in the implementation of environmental education in the educational process is increasing day by day. One of the reasons for this is that, until now, in traditional education, students were only taught to acquire ready-made knowledge, but now modern technologies allow them to deeply master the acquired knowledge,

independently study and analyze it, and even draw creative conclusions. teaches. In this process, the teacher creates conditions for the development, formation, learning and education of the individual, and also performs the functions of management and guidance.

The use of interactive methods is of great importance in the implementation of modern education. If the teaching process continues in the same way, the student's hearing will weaken and become tired. This situation turns the student into an apathetic listener, as a result of which the efficiency decreases and the quality of training decreases. Therefore, the organization of classes on the basis of innovative pedagogical technologies creates comfort for students, turns them from passive listeners to active participants[18].

Environmental education is one of today's urgent issues. Protecting the house, street, neighborhood, village and city in which he lives from pollution, beautifying it, greening it, preserving natural habitats in their original state and using them effectively, forming qualities such as protecting the nature of our country is an integral part of ecological education..

In our country, special attention is being paid to the issue of ecological and legal education of young people. More than 30 ecologically oriented laws and more than 1000 normative legal documents have been adopted with the aim of environmental protection, development of ecological science, widespread promotion of ecological knowledge, natural systems, their biological diversity, and the introduction of an effective economic mechanism for managing the use of nature, ensuring environmental safety, and improving the legal mechanism for reducing the level of environmental pollution[19].

1992, the Law of the Republic of Uzbekistan "On Nature Protection" defined measures aimed at the protection of every karachi land. This law consists of 11 sections and 53 articles. It defines the legal, economic and organizational basis of preservation of natural environment conditions, use of natural resources.

The purpose of the law is to ensure that the relationship between man and nature develops in a harmonious balance, to ensure the protection of ecological systems, natural complexes and certain objects, and to guarantee the right of citizens to have a comfortable environment. The structure of the environment, the events taking place in it, environmental changes, nature conservation, avoiding wastage in the use of natural resources, environmental protection at a high level in students who have received ecological education must have the ability to



attract the population while going.

Also, in the implementation of ecological education, courses of retraining of various population groups to solve environmental problems, in particular, "Fundamentals of ecological education", "Environment", "Actual problems of the environment", Short-term courses such as "Environmental cleanliness and human health", "Economic use of nature and natural resources", "Ecology and youth education" are held on the basis of certain educational programs. In addition to this, by organizing tours to various farms and enterprises and meetings with experienced farmers, workers, technicians, engineers, connecting theoretical knowledge with practice, instilling interest in different groups in studying the environment and correcting negative environmental conditions in it. can shoot[20].

Mass media play a big role in environmental education. When conducting environmental education and training related to the environment and its protection, different regions, valleys, Ways to provide information about the ecological situation in mountain slopes, meadows, forests, forests, water stoppage to representatives of internal affairs from the place of ecological change in nature, to the organizations of nature protection. Mass media plays a big role in reporting to quarantine centers and quarantine stations[21].

Concepts in elementary school students to improve life knowledge, skills and abilities. Based on this goal, the following tasks are assigned to this subject:

- clarification of the place of young people in finding environmental problems and their solutions;
- to reveal the purpose, tasks, object, subject, concepts and principles of the training course;
- clarifying the place of ecological education and upbringing in the ecology science;
- introduction to ecological education and upbringing methodology;
- explaining the content and essence of the training course;
- revealing the continuity and coherence of ecological education and upbringing;
- provide understanding of universal fundamental and national ecological values;
- educating a highly spiritual and ecologically cultured person who can think on the basis of the rules of sustainable development in harmony with society and nature;
- instilling love for nature in the young generation, etc.

In fact, environmental protection, the ability to convey environmental knowledge, skills and abilities among the community, leadership in environmental

spirituality and enlightenment, promotion of advanced ideas related to environmental protection and Must have advocacy skills.

CONCLUSION. Also, development of a new concept of continuous environmental education and education for sustainable development in primary school students on the basis of the integration of sciences, ecology, sustainable development education for all levels of the educational system creating a program covering environmental problems and corresponding textbooks and manuals, ensuring that ecology is taught as a separate subject in pre-school and general education institutions, special schools specializing in in-depth environmental education - education, schools organization of boarding schools, creation of teaching-methodical manuals, textbooks for educators of pre-school educational institutions, development of demonstration and didactic materials, information-analytical guide about the current state and development prospects of ecological education - education system special attention is paid to the large-scale reforms implemented in the preparation of applications, educational institutions, family, citizens' self-governance bodies in the field of continuous environmental education and training of young people.

REFERENCES:

1. Норбутаев, Х. Б. (2018). Технологии Развивающего Обучения В Системе Образования. *Гуманитарный трактат*, (29), 33-35.
2. Норбутаев, Х. Б. (2017). Формирования Экологического Знания У Школьников Изучение Учебных Материалов По Физики. *Апробация*, (2), 95-96.
3. Narbutaev, H. B. (2021). Improving the knowledge of ecological content in pupils in interdiscipline for teaching biology. *Current Research Journal Of Pedagogics*, 2(10), 12-16.
4. Норбутаев, Х. (2012). Мактаб укувчиларида экологик тафаккурни фанлараро шакллантириш (биология ва физика фанлари мисолида). *Педагогика фанлари номзоди илмий даражасини олиш учун диссертация автореферати*.
5. Narbutaev, K. B. (2020). RAISING THE ECOLOGICAL CULTURE OF THE STUDENT IN TEACHING BIOLOGY IN CONNECTION WITH OTHER DISCIPLINES. *Theoretical & Applied Science*, (6), 714-717.
6. Narbutaev, H. B. (2021). Natural inter subjects formation of ecological thinking in school pupils. *Asian Journal of Multidimensional Research*, 10(9), 419-426.



7. Mukhtarova Lobar Abdimannabovna. (2021). POSSIBILITIES OF AN INTEGRATIVE APPROACH TO THE FORMATION OF A CULTURE OF ENVIRONMENTAL SAFETY. *European Scholar Journal*, 2(11), 43-44.
8. Abdimannabovna, M. L. (2021). Formation of the Ecological Culture of Schoolchildren in the Study of Natural Science. *International Journal of Innovative Analyses and Emerging Technology*, 1(6), 73-76.
9. Muxtarova, L. A. (2021). Ways of formation of ecological culture in children of primary age. *Asian Journal Of Multidimensional Research*, 10(4), 648-652.
10. Muxtarova, L. A. (2021). Use of multimedia technologies in the educational process. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(4), 1781-1785.
11. Haydarova, M. (2019). MODEL AND PSYCHOLOGICAL AND PEDAGOGICAL CONDITIONS CONDUCIVE TO THE FORMATION OF MANAGERIAL COMPETENCE OF FUTURE PRIMARY SCHOOL TEACHERS. *European Journal of Research and Reflection in Educational Sciences Vol*, 7(11), 90-93.
12. XABIBULLAYEVNA, X. M. (2022, June). THE NEED TO TEACH THE SUBJECT OF EDUCATION IN PRIMARY SCHOOL. In *Conference Zone* (pp. 97-98).
13. XABIBULLAYEVNA, X. M. (2022, June). THEORETICAL BASES OF PREPARATION OF FUTURE PRIMARY SCHOOL TEACHERS FOR TEACHING THE SUBJECT OF EDUCATION. In *Conference Zone* (pp. 95-96).
14. Mengaliyevna, N. S., & Qizi, X. S. M. (2022). CHARACTERISTICS AND STEPS OF USING TECHNOLOGY FOR THE DEVELOPMENT OF CRITICAL THINKING IN STUDENTS. *European International Journal of Multidisciplinary Research and Management Studies*, 2(03), 60-70.
15. Mengaliyevna, N. S., & Qambardinovna, U. G. (2022). Scientific and theoretical foundations for the formation of social intelligence at school age. *Asian Journal of Research in Social Sciences and Humanities*, 12(5), 245-248.
16. Xaydarova, S. (2023). THE INTRODUCTION OF PSYCHOLOGICAL CHARACTERISTICS OF OVERCOMING THE AGGRESSIVENESS OF THE INDIVIDUAL. *EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION*, 3(5), 148-156.
17. Хайдарова, С. С., & Очилова, Ш. (2023). ПСИХОЛОГИЧЕСКИЕ ОСОБЕННОСТИ ПРЕОДОЛЕНИЯ ЛИЧНОСТНОЙ АГРЕССИИ. *PEDAGOGIK ISLOHOTLAR VA ULARNING YECHIMLARI*, 2(2), 73-75.
18. Nurkulova, G. (2022). THE PSYCHOLOGY OF SUBORDINATE BEHAVIOR. *Emergent: Journal of Educational Discoveries and Lifelong Learning (EJEDL)*, 3(12), 204-207.
19. Холмуротова, Ш. М. (2022). АЁЛЛАР ДЕВИАНТ ХУЛҚ-АТВОРИНИНГ ПСИХОЛОГИК ХУСУСИЯТЛАРИ ДИАГНОСТИКАСИ. *Science and innovation*, 1(В3), 129-133.
20. Xolmurotova, S., & Adilova, S. (2023). SHAXS IJTIMOIYLASHUVIDA RATSIONAL-EMOTIV PSIXOTERAPIYANING SAMARADORLIGI. *Interpretation and researches*, 2(3).
21. Mamaradjabova, B. (2020). Self-awareness strategy. *Результаты научных исследований в условиях пандемии (COVID-19)*, 1(03), 145-147.
22. Allaberdievna, N. Z. (2023). О 'QITUVCHILARDA KREATIV SIFATLARNI RIVOJLANTIRISHNING INTEGRATSION YONDASHUVI. *IJODKOR O'QITUVCHI*, 3(30), 31-34.
23. Allaberdievna, N. Z. (2021). TECHNOLOGY for Improving the Innovative Mechanisms of Formation of A Creative Teacher. *European Scholar Journal*, 2(4), 194-195.
24. Назарова, З. А. (2019). МОТИВАЦИЯ ОДИН ИЗ ФАКТОРОВ УСПЕШНОГО ОБУЧЕНИЯ. *Мировая наука*, (5 (26)), 511-514.
25. Nazarova, Z. (2019). TECHNOLOGY OF IMPROVING THE PERSONALITY OF CREATIVE TEACHERS. *Theoretical & Applied Science*, (12), 318-321.
26. Nazarova, Z. A. (2014). Innovative modelling in learning activities. In *Lifelong learning: Continuous education for sustainable development: pro-ceedings of the 12th International Conf.: in 2 pts./arr. NA Lobanov; sci. ed. NA Lobanov, VN Skvortsov; Pushkin LSU, Res. Inst. soc.-econ. and ped. probl. of contin. educ.-Vol. 12.-SPb.: Pushkin LSU, 2014.-Pt. II.-330 p. (p. 42).*