



## The vital importance of field trips in the further development of biology education

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### ABSTRACT

Field trips play an important role in biology education, providing students with opportunities to interact with the natural world in a hands-on and immersive manner. In this article, we explore the importance of field trips in the study of biology, highlighting the various benefits they bring to the learning experience.

### Keywords:

Excursion, Pupil ecosystems, studied concept, environment

### Real world application:

One of the primary benefits of field trips in biology classes is the ability to see first-hand the concepts and teachings learned in class being applied in real-world contexts. Students will have the opportunity to observe the complex connections between ecosystems, biodiversity and the life sciences, helping to strengthen their understanding of biological concepts.

#### 2. Active learning:

Excursion lessons promote active learning by allowing students to actively participate and interact with their environment. Through field observations, data collection, and hands-on experiments, students become active participants in the learning process. It engages their senses and allows them to develop critical thinking skills in analyzing and interpreting the information they collect.

#### 3. Appreciation of Biodiversity:

Experiencing different ecosystems and the many species within them builds a deep appreciation for biodiversity. Field trips allow students to explore different habitats, observe unique flora and fauna, and recognize the interdependence of different species. This first-hand encounter with biodiversity inspires awe and respect for the natural world.

#### 4. Protection and protection of the environment:

Biology field trips provide an opportunity to increase students' environmental awareness and encourage responsible stewardship of our planet. By exposing them to environmental issues, habitat destruction, and human impacts on ecosystems, students develop a greater understanding of the importance of biodiversity conservation, leading to increased tolerance for environmental sustainability.

#### 5. Personal communication and motivation:

Field trips create a personal connection between students and the subject matter. Immersing in nature and witnessing the wonders of biology with one's own eyes arouses interest, arouses interest, instills love for the subject. This personal connection increases motivation and encourages students to pursue further studies or careers in biology-related fields.

#### 6. Teamwork and social skills:

Field trips provide opportunities for cooperative learning, teamwork, and social skills development. Students work together in groups, share observations, conduct experiments, and solve problems in real-world situations. This collaborative environment fosters communication skills and the ability to work effectively with peers, reflecting the collaborative nature of scientific research.

Teaching biology is impossible without excursions. Methodologically organized and competently conducted excursions allow students to significantly expand, learn and deepen the knowledge they have acquired in classes, turning them into permanent shelters. Nature field trips are a great form of classroom work. On excursions, schoolchildren learn to see new objects, observe, compare, find primers for the relationship of organisms with others and with environmental conditions. Purpose: to develop a teaching-methodical course and create an interactive multimedia guide "Virtual tour". Duties:

- formation of skills and competencies necessary for studying and evaluating the ecological state of the environment;
  - to develop students' desire to learn about the diversity of wildlife;
  - development of scientific bases for rational use and increase of natural resources;
  - to create ideas about the positive and negative impact of man on nature;
  - education of respect for nature;
  - to develop self-study skills of students using computers, to provide them with additional information on the subject being studied, to develop skills of data selection and analysis, using computer technologies improving the quality of education;
    - development of students' knowledge, creative, intellectual abilities [1;2;3].
- Excursion on the topic: "Seasonal (spring, autumn) changes in nature. The goal:
- Getting to know the methods of studying biological objects in different environments;
  - to develop ideas about general seasonal changes: spring and autumn changes in nature, specific features of water and soil habitats;
  - to educate a careful and loving attitude towards nature and addiction to others;
  - self-esteem;
  - to strengthen knowledge about norms and rules of behavior in nature;
  - development of ecological knowledge;
  - development of creativity and creativity;
  - expanding the student's outlook;
  - improving the student's health;
- Equipment: photo or video camera, pen, notebook.

Task:

1. Signs of biogeocenosis (general impressions: shapes, colors, smells, sounds). Signs of the season.

2. Forest layers. General observation and definition.

3. Problem: what is interesting to study in biogeocenosis? Independent work of groups in test areas. 4. Gathering all students and bypassing independent observation points with demonstrations and student messages.

Development:

Organizational moment II.

Theme and goals of the excursion: Our goal is to determine if there are seasonal changes in nature?

What should I do?

III. Formation of knowledge, abilities, skills. Watching, filming or filming. Content of the report: Protection of projects.

A Microsoft Office Power Point presentation from a group of 3-4 people on the topic "Varieties of cultivated plants and breeds of domestic animals, methods of disposal" Nature excursion.

Purpose of work:

- Learn about modern achievements of Uzbek and foreign breeders;
- deepening of knowledge about breeding methods;
- formation of knowledge about breeding tasks, characteristics of animal breeds and plant varieties;
- continue to develop the ability to apply knowledge of genetic patterns to explain breeding methods.

Equipment: notebook, pen, video camera or camera. Development: Briefly review the main material of the guide while traveling to the exhibition and take photos with the permission of the exhibition administration. Content of the report: Microsoft Office Power Point presentation from a group of 3-4 people [1;2]

### Summary:

Excursion lessons are unique and vital in the further development of biology education. By exposing students to the wonders of the natural world, facilitating active learning, building environmental awareness, and fostering a personal connection to biology, field trips

contribute to a holistic and enriching educational experience. These hands-on and immersive experiences are invaluable in fostering a deeper understanding of biological concepts, fostering a love of the subject, and inspiring the next generation of biologists, conservationists, and science-literate citizens.

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