

THE EXCURSION METHOD IN TEACHING PHYSICS

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Abstract:

This article explores the use of excursions as an effective method for teaching physics in general secondary schools. Excursions, defined as organized visits to museums, exhibitions, historical sites, or other notable locations, serve as a dynamic tool for enhancing students' understanding of natural phenomena and scientific principles. The article highlights the importance of excursions in activating students' exploratory skills, connecting theoretical knowledge with real-world applications, and fostering a deeper appreciation for the role of physics in technology and everyday life. It also discusses the historical development of excursion methods in physics education, referencing the works of prominent educators and researchers. The article emphasizes the need to expand the use of excursions in the curriculum, despite current limitations, and underscores their potential to improve students' motivation, critical thinking, and engagement with the subject.

Keywords: Physics education, excursion method, active learning, extracurricular activities, scientific exploration, student motivation, real-world applications, pedagogical methods.

Introduction

Physics is one of the most fascinating yet challenging subjects in general secondary education. The variety of pedagogical methods and techniques used in teaching physics helps students understand the laws of nature. Taking into account the psychological characteristics of students and the class, as well as the material resources of the physics classroom, teachers select methods aimed at effectively mastering the educational material and consciously applying knowledge. This approach fosters an active attitude toward learning and develops critical thinking skills in students.

One of the most interesting methods in teaching physics is organizing various excursions. An excursion (from the Latin *excursio*—journey) is a collective visit to museums, exhibitions, historical monuments, or other notable places for scientific, educational, or cultural purposes. From the perspective of an activity-based approach, an excursion is a process of studying the environment, the peculiarities of nature, modern and historical events, and elements of everyday life, during which a person's spiritual, aesthetic, and informational needs are satisfied.

The functional diversity of excursions is used to activate students' exploratory activities and organize extracurricular work, enabling a broader and more precise study of physics. Although physics curricula in general secondary schools recommend conducting only one excursion per year, there is a growing need to expand the use of this method in the educational process. This method plays a crucial role in understanding natural phenomena and laws, as well as demonstrating their applications in technology and modern innovations.

In 20th-century methodological literature, significant attention was paid to various physics-related excursions and their implementation methods. For example, A.I. Bugaev presented excursions as part of the general system of studying physics and referred to them as the "excursion method." K.V. Al'bin, N.S. Belyy, S.U. Goncharenko, M.L. Rozenberg, A.N. Yavorskiy, and others studied methods for conducting excursions in industrial settings. A.I. Karavaev, I.Ya. Lanina, and others described excursion-lessons as a method that activates students' personal engagement with knowledge.

Educational excursions ensure the continuity of the learning process. Methodological literature emphasizes that excursions are a unique form of education, distinct from traditional lessons. This method not only broadens students' knowledge but also connects them to the historical development of human civilization and the technical and technological applications of scientific discoveries.

An excursion can serve not only as a continuation but also as a starting point for a lesson. For example, a teacher may assign students to conduct an excursion at home and explore questions like "Where is this used?" or "How does this work?"

The excursion method is unique and cannot be equated with traditional lessons. It teaches students to connect physics with their surroundings while providing opportunities to discover new laws on their own. A well-organized excursion



enhances students' motivation for self-education and elevates the teacher's authority.

Physics excursions allow students to feel like part of their community, nation, and global civilization. Through this method, students realize the importance of scientific knowledge in human life. Excursions help teachers achieve educational goals and activate students' learning processes through interactive communication. Developing the excursion method in modern education is both promising and relevant. This method enables students to understand not only the subject matter but also its connections with other disciplines, life, and the environment.

Even in cases where the material and technical resources of a physics classroom are insufficient, the proper use of the excursion method can help overcome these limitations.

References:

1. Bugaev, A.I. The Excursion Method in Physics Education.
2. Al'bin, K.V., Belyy, N.S., Goncharenko, S.U., Rozenberg, M.L., Yavorskiy, A.N. Methods for Conducting Excursions in Industrial Settings.
3. Karavaev, A.I., Lanina, I.Ya. Excursion-Lessons as a Tool for Activating Student Engagement.