

*Garyagdyev G.Ch.*

*Lecturer, Department of Ecology*

*Magtymguly Turkmen State University,*

*Ashgabat, Turkmenistan.*

## **USING MODERN TEACHING METHODS IN ENVIRONMENTAL LESSONS**

*Abstract. The article describes the role of using modern teaching methods in improving the quality of education, especially in enhancing students' attention span. The modern education system is becoming increasingly complex and the introduction of modern technology into its structure requires the teacher to adapt to the appropriate standards. The basic methodology of an interactive lesson is described and comparisons with the global standard are made.*

*Keywords: Interactive teaching method, 3D technology, general ecology*

### **Introduction**

The role of the teacher in the modern school is changing dramatically. In the limitless possibilities of access to any information, the teacher must not only teach, but must also be able to use new technologies. This, in turn, requires the teacher to master modern teaching methods. In the education systems of Europe, the USA, and East Asian countries such as China, Japan, and South Korea, active and interactive teaching methods and various forms of self-governance in learning have come to the fore. It is important to note that while the traditional teaching model focuses on the content of the subject matter, the interactive teaching method focuses on the individuality of the learner. But this does not mean that we should abandon the old traditional methods. Its purpose is to enrich the teacher's arsenal of methods.

## **Materials and methods**

The modern teacher should be able to switch between interactive and non-interactive methods as needed, even within a lesson. In other words, for the teacher, the use of different methods should serve as a tool for different tasks. Then learning can be organised according to each student's strengths, wishes and abilities. This is not an easy task for the teacher, but it must be done. It requires great skill on the part of the teacher to come up with questions, examples, tasks that are able to interest and engage students in the learning process [1].

A successful lesson has a lot to do with the introduction of modern teaching methods and tools. When teaching an ecological lesson, the teacher should focus on the objects, subjects and objectives. Depending on the topic, these vary. For example, in the topic: "Water as a basic condition of life processes in the biosphere", our object of study is the biosphere, the subject is the small and large water cycle, the aim of the lesson in this topic is to study the role of water in ensuring life on earth. Here the question of the importance of mastering knowledge arises. And it is inextricably linked to the psychological aspect. The teacher should stimulate and enhance mastery of knowledge through imagination and perception [4].

To this end, new learning tools are being introduced. Interactive whiteboard, 3D technology and pedagogical design make the learning process more engaging and effective in terms of enhancing student performance. The use of multimedia technology in the explanation of natural phenomena is necessary to fully understand the structure and origin of objects and objects in the lesson. Such technologies can be used in lessons devoted to changes in the earth's ecosystems (e.g. dynamics of water regime of the Caspian Sea and the Aral Sea). In turn, 3D technologies and models are more effective in the study of natural objects, such as the shape of different landforms and the structure of

organisms. Multimedia and 3D technologies help pupils to easily perceive knowledge in the field of ecology [8].

### **Result and discussion**

In this way, the interactive method using modern techniques shows the best results. The interactive method is based on organizing the learning process in such a way that almost all students are involved in the learning process. They gain the ability to understand and reason based on what they know and think. As a result of students working together to master the learning material, each student contributes to sharing knowledge, ideas, and active methods with each other. And these things happen in a situation of mutual support and mutual kindness. This not only provides the opportunity for education, but also creates the conditions for the development of learning and cognitive activity and its high level. Interactive activities in the classroom require communication and organisation in the form of dialogue, which leads to mutual understanding, interaction, joint solution of a common but necessary problem for each participant in the class. The interactive approach allows one idea to dominate the others. In dialogical learning, students learn how to think critically, solve complex problems by analysing relevant information, compare conflicting (alternative) ideas, make informed decisions, engage in argumentative discussions, and communicate with others.

In environmental education, as in any other education, the organisation of learning activities and the assessment of students play an important role. In the course "Ecology and environmental protection", students of biology, psychology and mathematics can see different approaches to learning, as well as to the perception of the course. Our learning activities and type of assessment were based on three observations, they are:

1. daily assessment of learners, determining their ability to do independent tasks;

2. qualitative evaluation of the attendance of the students in the field of study, identification of their abilities and motivation;

3. holding a competition of ecological ideas.

It is advisable to establish assessment of groups of students in daily lessons to determine their performance, as this leads to the formation of daily motivation, responsibility as well as skills in students. In this way, the student gradually develops the acquired qualities.

Indicators also change according to the profile of study. The group of students who have a specific major in their field of study has strong motivation and high quality indicators. This is evidenced by the study sessions conducted among more than 453 students in 18 groups and the results obtained in the course [4]. Therefore, studying students' motives as well as paying attention to their abilities is considered one of the important areas of modern pedagogy. In some cases, it is useful to create groups and circles based on students' motives. Motive is the driving force behind every human being. The main motives for conscious learning, associated with awareness of its tasks, are natural aspirations to prepare for a future profession. For children and people in general to study any diligently and effectively, they must have some interest in learning or interest in it. [12, p. 499-500]. Therefore, environmental educators should strive to create this interest and build sustainable motives for students. Interest arises when the student knows that the given information is valuable for his/her future profession and life. In this context, making connections between subjects in the explanation of a new lesson and in the reinforcement of a past lesson is fundamentally important. For this, the teacher needs a well-designed and corrected curriculum that contains the basics of science.

Extracurricular activities also play an important role in learning activities. In order to increase students' enthusiasm for learning and education, at the same time to identify the characteristics of each member's worldview and thinking, and to analyse their proposals from a scientific point of view, an idea generation

competition was held among students. As a result, students' good ideas for protecting the environment and achieving sustainable development goals were collected. They include each member's attitude towards the natural environment and making decisions related to it, which is the first step in discovering the motive in the younger generations. They are given in Table 1.

**Table 1**

**Feedback and suggestions from students**

<b>Directions</b>	<b>Proposed solutions</b>	<b>Evaluation</b>
<b>Recommendations for knowledge development</b>	1. If possible, some activities should be carried out in a natural environment. For example: in the forests.	<i>In order to improve the quality of lessons, the use of student suggestions in the classroom contributes to raising the environmental awareness of young people and unlocking their abilities.</i>
	2. Introduction of environmental culture in the primary grades.	
	3. The lessons should make connections between the subjects. The basic laws of physics and chemistry should be explained in ecology lessons. At the same time, ecology issues should be discussed in physics lessons.	
<b>Proposals for</b>	1. We need to create buses and bus stops that are plant-rich.	<i>The main recommendations in this area relate to the introduction of building structures that consume less raw materials and energy.</i>
	2. Planting gardens on roofs and terraces during the construction of buildings.	

<b>architecture and design</b>	3. A cylindrical house design that uses natural light and solar energy.	<i>All these ideas are unique and appealing from an environmental point of view.</i>
<b>3. Guidelines for parenting pre-school children</b>	1. Creating cartoons with the best animation that teaches good skills and education.	<i>This raises the following important question. The role of the family in the development of an environmental outlook? Most of the students stressed the necessity of building environmental skills in the family in order to receive a primary environmental education.</i>
	2. Developing environmental skills in children and adults.	
	3. Creating special computer games for children and young people.	
	4. Setting up eco-psychologists	

The main result that an environmental educator should strive for is an increase in students' learning motivation, through an increase in internal cognitive and professional motives, an increase in the value and significance of learning, the desire for self-improvement, an increase in achievement motives [14]

### **Conclusion**

Thus, when the interactive teaching method is introduced in the learning process, students' personal reflexes are developed, their activity is increased, learning encourages them to find their place in creativity, and there is an opportunity for each student's work to be assessed by the teacher or another person. Students develop a purposeful group association, co-operation and norms of behaviour, curiosity increases in the active classroom, group analysis and self-reflection skills are developed, non-standard relationships in the organisation of the learning process are formed, a variety of methods for

learning material appears, interpersonal interaction gradually develops not only in learning, but also in the habit of adapting to other situations that arise.

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