ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 09,2025

Journal: https://www.academicpublishers.org/journals/index.php/ijai

PROMOTING STUDENTS' MOTIVATION WITH CREATIVE APPROACHES IN TEACHING REPRESENTATIVES OF THE AMPHIBIANS CLASS

Avazbek Barotov
Bukhara State Pedagogical Institute, PhD, Associate Professor
Mekhriniso Sharipova
Bukhara State Pedagogical Institute, 2nd stage master's student
Anisa.sharipova0804@gmail.com

INTRODUCTION

The amphibian class is an important group of animals in the study of biodiversity. Biodiversity is life on earth. This is all the diversity of nature: from genes to complex organisms, from individual species to ecosystems, which are the basis of the existence of both the individual and the entire society.

A creative approach is necessary to increase students' interest in biology. Motivation can be strengthened by activating the educational process.

MAIN PART

Creativity is the ability to think in new ways, develop new ideas and solve problems in unconventional ways.

A) Creative pedagogy is a pedagogy that can be applied to any subject. To a certain extent, it can be said that its methodology changes the teaching and learning process.

B) Creative approaches in biology lessons are manifested in the following.

C) – Virtual laboratories and AR/VR technologies

D) A) Showing frog anatomy and metamorphosis process through 3D models

- Virtually demonstrate aquatic life through VR. For example, see underwater adventures through the eyes of a frog
- – Role play. Students play the roles of a biologist, frog, ecologist, or conservationist, and discuss the problems that would arise if frogs disappeared and their role in nature.
- – Tasks with elements of independent research encourage creative thinking.

– STEAM approach:

- ART: make the lesson more interesting by drawing or making a collage of the life cycle of amphibians
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- SCIENCE: the effect of temperature and humidity changes on metamorphosis. How can we reduce their mortality?[1]
- Now let's talk about how to increase motivation in this lesson. In order to develop intrinsic motivation, students should be allowed to freely choose a project that suits their interests. To support extrinsic motivation, it is advisable to use methods such as competitions, prize-winning quizzes, and announcements of the best projects.
- – Natural observations and experiments:
- - Observation of amphibians in the schoolyard or nearby water bodies (if conditions are available
- - Mini-laboratory experiment on frog metamorphosis.[2]

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Approaches based on pedagogical methods

Formulate questions based on BLOOM's taxonomy:
1. Know: list the types of amphibians
2. Understand: why are amphibians called bicellular?
3. Apply: show the frog life cycle in a table
4. Analyze: list the differences between a frog and a lizard
5. Synthesize: create your own imaginary amphibian and describe it
6. Evaluate: what do you think is the most effective way to protect amphibians?[3]

Mechanisms for increasing motivation:
• Intrinsic motivation - the opportunity to express oneself, freely express one's opinion.
• Extrinsic motivation: grades, prizes, competitions.
• Social motivation: work in a group, present the results to the class.

- When teaching with visual materials, knowledge acquisition increases by 60%: when animations, 3D models, microscopic videos are used in biology lessons, in particular, when teaching the amphibian class, the level of student memorization increases by 60-70%. (source: Mayer R., 2021. Multimedia Learning Theory)
- Gamification makes the student twice as active: students who participate in biology lessons through game elements - quests, quizzes, role-playing games, which are one of the creative approaches, participate 2 times more actively than in traditional lessons. (source: Kiryakova G., 2022, Gamification in Science Education)
- Lessons based on real practice attract students: when active methods such as nature excursions and aquarium observations are used to study frogs, creative thinking, analysis, and interest in students are significantly increased. 78% of students rated such lessons as "the most memorable and useful." (Source: National University of Uzbekistan, Faculty of Biology, 2022 survey)

Suggestions

The above methods are widely used in the world education system, and they should be gradually introduced into the teaching process in accordance with our mentality. First of all, it is advisable to adapt students through simplified textbooks and organize advanced training classes for teachers.

CONCLUSION

Teaching the topic of amphibians through creative methods not only increases the activity of students, but also strengthens their independent thinking, love for nature, and inspires them to take more responsible care of the environment. These approaches will strengthen interest in biology in the long term. My suggestion is that although representatives of this class are not currently included in the Red Book of the Republic of Uzbekistan, we should all learn to protect them now, not to destroy the habitats suitable for amphibians. After all, every living creature is of great importance in ensuring biodiversity.

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