



iJERResearch

International Journal of Education and Research

Vol. 1, Number 1, March - 2026 | Peer-Reviewed Journal

ISSN 2764-9733 | ijerresearch.org

DOI: 10.5281/zenodo.21113203

THE USE OF RECYCLABLE MATERIALS IN CHEMISTRY TEACHING AND LEARNING: PROPOSAL OF AN ACTIVE METHODOLOGY

AUTHOR

Bruna Nunes Mont`mor: Doctorate in Educational Sciences from Universidad Columbia del Paraguay (2023). Position: Teacher at Santísima Trindade State Elementary and High School, Iúna, Espírito Santo.

Contact: brunamontmor@hotmail.com

ABSTRACT

This article aimed to analyze the contributions of recyclable materials to the chemistry teaching-learning process through the development of an active learning methodology. To this end, a scale was constructed with the research participants—an experiment using recyclable materials—providing them with the basis to respond to an interview using an open-ended questionnaire. Thus, the research sought to understand and develop the use of active methodologies in chemistry classes to support the teaching-learning process of a subject often considered difficult to grasp because students fail to see its connection to real life. Another factor addressed was the choice of teaching methodology, which is frequently rooted in conservative paradigms. Ultimately, the study demonstrated that new methodologies should guide the teaching-learning process and be integrated into the teacher's pedagogical practice to foster greater interest in the subject matter and increase class participation. This innovates the approach to chemistry content, showing that the use of recyclable materials can benefit learning through action and practice. This contributes to the development of cognitive and socio-emotional skills, which are crucial for shaping critical citizens.

Keywords: Innovative Education. Chemistry Teaching. Alternative Experiment. Sustainability.