



**KERALA UNIVERSITY COLLEGE OF TEACHER EDUCATION
KARIAVATTOM**

B.Ed. COURSE 2023-2025

SEMESTER – 3

**EDU 13.8: EMERGING TRENDS AND PRACTICES IN PHYSICAL
SCIENCE EDUCATION**

INNOVATIVE WORK

NAME OF TRAINEE : B.S SHILPA NAIR

OPTIONAL SUBJECT : physical Science

REGISTER NUMBER : 182239-12005

PRINCIPAL

PRINCIPAL
Kerala University
College of Teacher Education
Karriavattom.



ASSISTANT PROFESSOR

[Signature]
19/11/24

Innovative
Work

Expllosion

Box



INDEX

Introduction

Procedure

Conclusion

Reflection

Glimpses

Introduction

Innovation can be defined simply as a new idea or device or method. Innovative work helps a teacher to teach a lesson easily and makes the class interesting. For the partial fulfillment of our B.Ed course, I have to do an innovative work during teaching practice period at St. Mary's HSS pattern. I prepared a "Explosion Box" for 8th stand students.

In this concept of Innovation ie, Explosion box, students will embark on a thrilling adventure solving questions and unlocking secrets of Metals. They will learn to apply their knowledge, thinking critically and work collaboratively to achieve their goal. This teaching aid promises to make complex concept more accessible and stimulate curiosity.

Procedure

Students were grouped into 2 groups. Each group tried to solve set of questions based on previous knowledge. It consists of 3 rounds:

- * Round 1: Both teams will receive a set of 4 questions each

The first team to solve the 4 questions will get the opportunity open the First Box. The Box contains First 2 general characteristics of Metal

- * Round 2: The winning team from Round 1 receives 2 questions, testing their understanding and knowledge

Thus Next Box of Explosion box is opened

- * Round 3: The team that successfully solved the above question will proceed to the round 3 otherwise this will be passed to the next team.

After proceeding to the Round 3. Team will unlock the 3rd box and they will get a Surprise gift.

Round 1

- (1) Metals like copper and aluminum are good conductors of electricity. why do you think metals
- (2) why metals like iron and steel preferred for constructing purpose
- (3) why metals used for making utensils
- (4) How does malleability make metal useful in industries

Round 2:

- (1) what property of metals allow them to be drawn into wire?
- (2) How does the ductility of metals benefit electrical wiring.

Round 3

- (1) which property of metal helps them produce a singing sound
- (2) why are metals like sodium stored in oil.

Conclusion

Innovative ideas helped for gaining new knowledge in an interesting way which makes the teaching-learning process fun and effective. Throughout this Explosion box, we have seen team work together, think creatively and demonstrate their understanding of the ~~physical~~ characteristics of Metals.

This innovative learning activity has shown us that learning can be fun, engaging and challenging all at once. By embracing the concept of innovative work - Explosion box. Students have not only learned about the characteristics of metals but also developed essential skills like critical thinking, problem solving and collaboration.

Reflection

The explosive box activity, designed to teach the general characteristics of metals was a highly engaging and innovative approach that captivated students' attention and made learning enjoyable. Structured in three rounds, each round involved tasks or questions on properties of metals, such as luster, malleability, ductility and reaction with acid. Students who successfully completed a round were allowed to open a lid of the box, building suspense and excitement. The final lid revealed a surprise gift. Creating a sense of achievement. This gamified method not only encouraged active participation but also fostered teamwork and critical thinking as students collaborated. The hands-on nature of the activity bridged the gap between theoretical

Concepts and practical understanding, making it more memorable than traditional teaching methods. The students enthusiastic response and enjoyment highlighted the success of this innovative strategy, with many expressing how it helped them better retain the topic.

Overall the Activity was an effective blend of Education and Entertainment, inspiring me to explore similar creative methods for future lessons.



Glimpses

John
5/9/11/21 ✓