

## LOW-COST LEARNING, BIG IMPACT

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Science does not have to be costly or complex to be impactful. Teachers can spark students' interest and bring concepts to life in the classroom by involving them in easy, hands-on experiments with inexpensive materials (such as soil, recycled bottles, or kitchen ingredients). By observing cause and effect, testing hypotheses, and drawing conclusions, these kinds of exercises assist students in transforming abstract concepts into practical knowledge.

Because it actively involves students in the learning process as opposed to having them passively listen to lectures, hands-on learning is particularly successful. According to research, kids who are taught using experiential or inquiry-based learning strategies do better academically and retain information longer than those who are simply given traditional education. In actuality, even simple activities can arouse intense curiosity and comprehension, such as cultivating plants in various environments, constructing rudimentary circuits out of home wires, or testing water filtration.

Simple science projects give children important life skills in addition to helping them understand scientific principles. Working together in small groups improves teamwork, organization, and communication. In the Philippines, for instance, a study of fifth-grade children revealed that outdoor learning inquiry-based activities greatly enhanced their scientific performance when compared to a control group that received standard instruction.

Additionally, these activities increase confidence. When given immediate access to materials, students who would find it difficult to follow written or lecture-based

instructions frequently perform exceptionally well. Presenting their research, whether via group explanations, posters, or demonstrations, fosters their public speaking and presentation abilities while boosting their sense of accomplishment and drive to learn.

Most importantly, low-cost research initiatives are sustainable and inclusive. Even in schools with limited resources, teachers can design interesting experiments using discarded and local materials. This indicates that practical science can be accessible to all students and inspires children to think innovatively, sustainably, and in a socially responsible manner.

In summary, simple, practical science projects provide significant instructional value. Through cost-effective teaching strategies, they promote confidence, teamwork, curiosity, and critical thinking. These small-scale experiments have the potential to inspire future innovators and have a lasting effect on student learning with the help of encouraging educators and innovative preparation.

The Official Website of DepED Division of Bataan

#### *References:*

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