

## VIRTUAL SCIENCE LABORATORY: AN INNOVATION IN SCIENCE EDUCATION

*by:*

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With the rapid transition of our educational system from face-to-face to online learning due to pandemic, the use of Virtual Science Laboratories has emerged as one of the many innovations in science education to continue the teaching-learning process.

Virtual Science Laboratories are learning environments that are simulated allowing learners to do laboratory activities and experiments online and offline. These also allow learners to explore science concepts and develop scientific learning competencies without going into the physical science laboratories.

What are the benefits of Virtual Science Laboratory?

1. Simplifies complex Science concepts.

Virtual Science Laboratories help the learners to understand complex Science concepts and theories. A visual representation of a concept provides an immersive experience to learners making them understand abstract or complex Science topics.

2. Prepares learners to Physical Laboratories.

Virtual Science Laboratories prepare the learners to do scientific activities and experiments in Physical Laboratories. These give learners a visual and hands-on idea to let them understand the safety measures, procedures, and other processes before entering the physical laboratory.

3. Provides Safety.

With the unprepared learners engaging in laboratory experiments, something might go wrong, and cause them harm. Therefore, it is safer for the learners to practice their scientific skills in virtual Science laboratories than in physical laboratories. After all, safety is of the utmost priority when working in a lab.

#### 4. Facilitates continuity of learning.

Since the pandemic started, Science teachers find ways to continue the teaching and learning process using virtual science laboratories. Teachers use these as supplemental teaching tools in educating the learners about science concepts and theories online and offline.

#### *References:*

<https://www.theedadvocate.org/4-benefits-of-virtual-labs/>