

## RESTRUCTURING STUDENT'S LEARNING THROUGH SCIENCE BASED-INQUIRY APPROACH

*by:*

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The scientific inquiry process is a cornerstone of modern scientific practice, helping students to understand the world through rigorous observation, experimentation, and analysis. At the heart of this process is the science-based inquiry approach, a framework for exploring and investigating the natural world that emphasizes evidence-based reasoning and critical thinking. In science, inquiry is used to develop explanations of how the world works, and to test those explanations through experiments and other types of investigations.

Science-based inquiry is an approach to learning and investigation that relies on the scientific method, a systematic approach to acquiring knowledge and skills. This approach involves asking questions, gathering data through observation and experimentation, and analyzing that data to draw evidence-based conclusions. By using this approach, students can evaluate competing ideas and develop a deeper understanding of the natural world.

The inquiry-based approach rooted in science aids students in honing their critical thinking abilities. By asking questions and conducting investigations, students learn to think critically about scientific concepts and how they relate to the world around them. Moreover, it helps students develop a deeper understanding of scientific ideas. Rather than simply memorizing information, students actively engage with scientific inquiries and develop a more meaningful understanding of how they work. It also supports students to develop their scientific skills. By conducting investigations and experiments, students learn important skills such as data analysis, experimental design, and scientific

communication. By engaging in hands-on exploration and investigation, students develop an appreciation for the complexity and beauty of the natural world.

Additionally, this method fosters active learning that motivates students to engage actively in the learning experience. This type of active learning can be highly engaging and can help to foster a deeper understanding of scientific works and development. This skill is valuable not only in science, but also in many other areas of life. Further, creativity and collaboration are being developed to explore and investigate scientific studies in a unique and open-ended way, thinking outside the box when approaching problems.

The science inquiry approach is a powerful method for teaching and learning. By emphasizing real-life exploration and investigation, it helps students develop critical thinking skills, a deeper understanding of scientific concepts, and important scientific skills. By following the steps of science inquiry, students can develop a sense of curiosity and wonder about the natural world, and become better equipped to understand and solve the complex problems facing our world today.

The Official Website of DepED Division of Bataan

#### *References:*

Brunsell, Eric (September 29, 2010). The Five Features of Science Inquiry: How do you know? Retrieved from <https://www.edutopia.org/blog/teaching-science-inquiry-based>