Science Inquiry Based Learning

Science Inquiry based learning is an approach to teaching that involves a process of exploring the natural world that leads to asking questions and making discoveries in the search of new understandings.

The inquiry process is driven by a child's curiosity, wonder, interest, or passion to understand an observation or solve a problem.

The role of the educator, or volunteer, is to act as the facilitator, providing encouragement and support. He or she guides the student to ask questions about the subject.

Through experimentation and self-analysis, the student determines what is needed in order to find answers. The educator, or volunteer, then facilitates the next steps, by providing hands-on experiences that engage the student's mind, helping him or her to examine the concepts from several angles.

Science Inquiry Learning Process

1. **Ask (I wonder …):** The student notices something that sparks a question.
2. **Investigate (I think …):** The student then continues to observe, raises more questions, makes predictions, tests their hypotheses or ideas, and creates their own theories and answers to their questions.
3. **Create (I try …):** As the process unfolds, more observations and questions emerge, leading to a greater understanding of what they are observing.
4. **Discuss (I record …):** Along the way, the student collects and records information (data).
5. **Reflect (I discover …):** The student reflects, explains results, and forms conclusions.

You can help students, as an educator or volunteer, by encouraging questions and helping students to find their own answers to questions through observation, inference, sharing and wonder.