

Inquiry is Found at Shepardson in...

- Citizen Science Projects
- Designated STEM Time for open and creative learning
- The use of leaning menus and other tools for arranging lessons to allow student choice
- Engineering is Elementary (EiE) program
- Center-based learning
- Research Projects
- Resource rich environments such as the media center, computer lab, and STEM room
- Teaching through questioning
- Classroom use of diverse instructional strategies
- Seizing "in the moment" opportunities for discovery
- Strong community connections
- Accessible classroom tools
- Support and assistance from professionals

Elementary school students learn science best when—

1. They are involved in first-hand exploration and investigation and inquiry/process skills are nurtured
2. Instruction builds directly on the student's conceptual framework
3. Content is organized on the basis of broad conceptual themes common to all science disciplines
4. Mathematics and communication skills are an integral part of science instruction

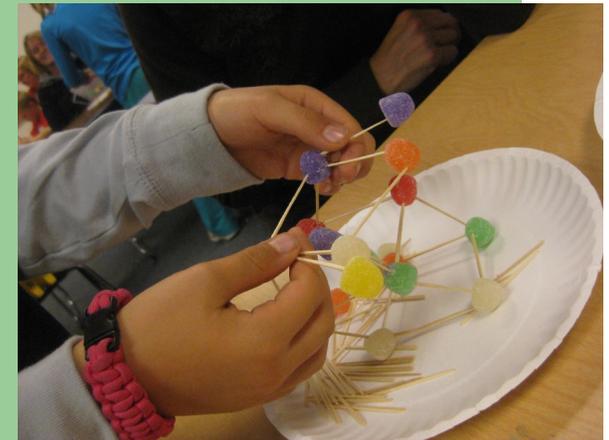
The National Science Teachers Association
Official Statement on Science Learning in
Elementary Schools: (2013)

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What is Inquiry Learning in STEM and Beyond?



Shepardson Elementary School

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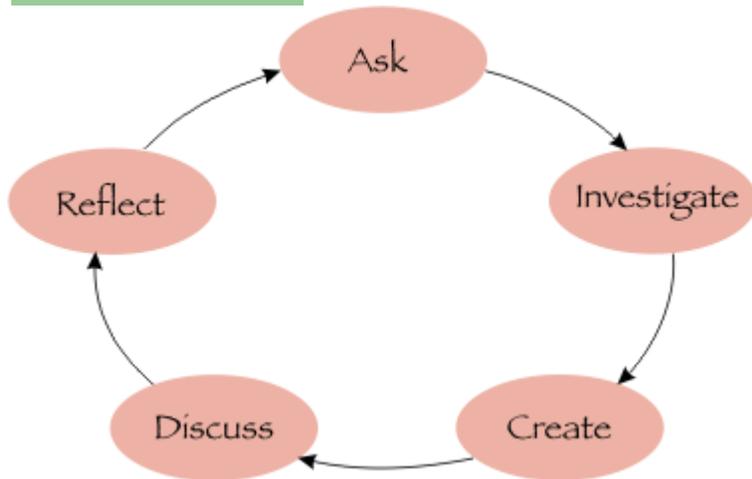
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“YOU CAN NEVER TEACH A MAN ANYTHING– YOU CAN ONLY HELP HIM DISCOVER IT WITHIN HIMSELF.”
-GALILEO

Teaching through inquiry is about creating environments and opportunity for discovery.

Who? When? Why? How?

Our brain is programmed to **learn by thinking about how new information fits with things we already know**. A young child fascinated by a bug or determined to make the tallest tower out of blocks is working hard to make sense of new information. Teachers know that to engage students and make this learning the most effective, we can **seize these moments of wonder** and turn them into **powerful learning and experiences of discovery**.



Inquiry Makes Meaning

Without meaning, information just slips by us. We are bombarded by information every day, and an important function of our brain is to discard information we don't need. **For our brain to hold on to information, it has to have meaning.** Inquiry starts with questioning, and questions are how we try to figure out how this new idea works...

Asking and answering questions and solving problems makes meaning!

Inquiry Develops Important Skills

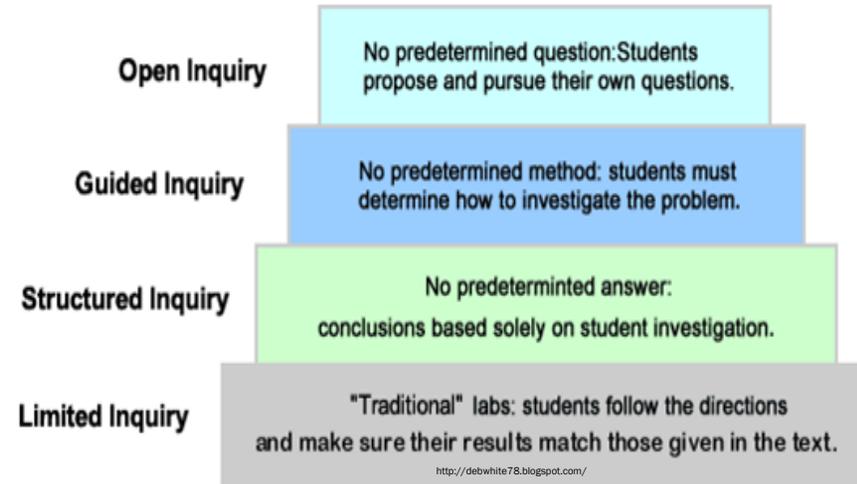
We want kids to be **critical thinkers**. In an age where we can find the capital of Nebraska and the square root of 1,298 on our phones in seconds, school is no longer about knowing facts– it is about **understanding how those facts are made, used, evaluated, and when to apply them**. Inquiry allows us to **evaluate, learn, unlearn, and re-learn**, giving students a framework that will help them inside schools and far beyond its walls.

Inquiry is hard. It requires **persistence, confronting misconceptions**, and asks teachers to **work hard** to arrange these experiences.

At Shepardson, we see challenges such as these as opportunities for growth as a community as we all **discover the best we can be**.

Inquiry is Inspired Teaching

We know that inquiry is at home in the STEM environment and is considered by organizations such as the **National Science Foundation** as fundamental to



exceptional instruction. At Shepardson, we seek to bring inquiry into **all content areas** as we know that **discovery** is important for all learning and makes learning **exciting, fun, and relevant**.

Levels of Inquiry

Not all inquiry is the same. Teachers **carefully chose** the level of inquiry in response to students' needs for learning.

Students at Shepardson Elementary take part in all levels of inquiry.