

# CURIOSITY

**EFFECT SIZE: 0.74**

## High-Quality Instruction Cycle Connection:

Step 2: Planning Instruction  
Step 3: Instruction

## Utah Effective Teaching Standards Alignment:

- Standard 1, Elements 1, 4
- Standard 2, Element 4
- Standard 3, Element 3
- Standard 4, Element 4

## Personalized, Competency Based Learning Framework Essential Component:

Culture of Learning  
Learner Agency

## WHAT?

**Curiosity** is the urge to explain the unexpected, to resolve uncertainty, or the urge to know more (Meta X Learning). Cognitive scientist Elizabeth Bonawitz suggests it “acts as a kind of filter you put over the world to help the mind decide what information to attend to. It’s a physiological response that helps drive action and decision-making to support learning.”

## WHY?

The effect size of curiosity is 0.74 which is almost two years of growth for one year of learning. All children are curious. Some conventional models of rote education are not effective at providing students the opportunity to engage their curiosity. When children are placed in environments where they feel empowered to ask questions and make mistakes, while being given the necessary supports to explore where their curiosity leads, they start to see that this process has a payoff — including how to learn from one’s mistakes and the joys of exploring an idea one has thought of personally. This process should also balance time students spend exploring ideas with time spent making a choice about one of those ideas and pursuing it.

(Continued)

## HOW?

Teachers can create classrooms where students are comfortable engaging their curiosity by making it safe to be unsure and even wrong. At the foundation of this approach to teaching is empowering students to decide on answers for themselves. To get to this point, the teacher must move away from only being an “answer giver” and more frequently being a “question asker.”

## PREPARATION:

Prompt curiosity provoking discussions by planning some questions that you can use to respond to students when they ask questions related to the lesson objectives. Consider how prediction can play a role in helping students become invested in testing whether they were accurate in what they think is going to happen.

## IMPLEMENTATION:

### Teacher Actions

- Model what engaging your curiosity looks like by explicitly talking about ideas you have and how you could go about exploring those ideas.
- Provide the class with time to consider the answer to questions you or other students pose before giving them the “correct” answer.
- Highlight ambiguity among different student responses, in data published in media sources, and/or when students make observations.

### Student Look-Fors

- Make predictions about what they expect to happen and then test their hypothesis.
- Identify what they want to learn more about.
- Have agency in the questions they get to investigate.

## REFLECTION

- Am I asking my students to make predictions consistently?
- Am I giving students a chance to think before telling them answers?
- Am I using tasks that offer students opportunities to have agency in thinking and problem solving methods?

### Go Deeper—Resources to learn more

[A Curious Mind](https://www.gse.harvard.edu/news/uk/20/11/curious-mind): <https://www.gse.harvard.edu/news/uk/20/11/curious-mind>



## HOME CONNECTIONS

- Encourage parents to ask their child about what interests them in mathematics, language arts, history, and other subjects.

- Invite parents to ask their child what questions they have about their interests.
- Encourage parents to engage their child in conversations concerning current events and what might happen in the future and why.

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