



THE NATIONAL CENTER ON  
Quality Teaching  
and Learning



Teacher Time  
Webinars for Head Start Preschool Teachers

FOLLOW-UP

# CLICK, ZOOM, BUZZ

## Adding STEAM to Everyday Activities

**FRIDAY, SEPT. 12, 2014**

### Thank You!

We're so glad you were able to join us for the first Teacher Time of the 2014–15 season. So many of you shared ideas and strategies during the show. Let's continue to learn from each other! Send your ideas, questions, and strategies to [ncqtl@uw.edu](mailto:ncqtl@uw.edu) and we'll include them on Teacher Time.

### Looking Ahead

Don't miss the next Teacher Time, **Friday, October 10, 3 p.m. EDT (12 p.m. PDT)**. Daren Chamberlain, a Head Start teacher, will join us to talk about how he makes inquiry come alive for the children in his classroom.

#### Presentation Summary

This month we introduced STEAM and discussed how preschool children benefit from an integrated approach to science, technology, engineering, art, and math.

- ✓ When children learn early math skills, it strongly predicts their later success in math **as well as later reading** achievement.
- ✓ It's estimated that **only 2 hours and 4 minutes** per year is spent on math instruction in preschool classrooms.
- ✓ The achievement gap in math between low and middle income students starts in preschool. This achievement gap turns into an opportunity gap because, as time goes by, the gap widens.
- ✓ The good news is that by taking a STEAM approach, you can help to prepare children now for the skills they'll need for future academic achievement.

## Try It Out

This month, former Head Start teacher Terri Wardrop told us how her students got her to try out STEAM in the classroom, and how that led to integrating other subject areas. The children challenged Terri to look at her own view of how to teach different topics because they wanted to go further with classroom activities.

One way to prepare to teach STEAM is to do some self-reflection. What is your STEAM strength? Questions to ask yourself to prepare for STEAM:

- ✓ What resources do I have?
- ✓ What resources do I need?
- ✓ What area in STEAM am I excited to learn more about?
- ✓ What area in STEAM do I already feel confident in?
- ✓ What's my plan for talking to families about STEAM?

## Resources

### Beginning Teacher Series

Instructional Interactions Unit (Supervisors can order up to five DVDs of the series from their ECE Specialist.)

### ECLKC

15-minute In-service Suite: Fostering Children's Thinking Skills <http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/practice/ISS/foster-t.html>

15-minute In-service Suite: Scientific Method <http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/practice/ISS/scientific-method-t.html>

Get familiar with the Next Generation Science Standards for K-12 to learn the current research on what the children in your classroom will need to know in the future. <http://www.nextgenscience.org>

Learn about Dr. Bob Moses and the Algebra Project. Mathematics is a civil right! <http://www.algebra.org/history.php>

## Resiliency & Wellness

### Thought Changers!

Given the stressors of being a preschool teacher, it's easy to have a negative thought or two from time to time. When it happens, try challenging your thoughts with the following exercise:

1. Acknowledge the negative, unhelpful thought.
2. Consider how the thought makes you feel.
3. Use a Thought Changer.
  - Is this really true?
  - Will I let this thought control my life?
  - Will I let this thought control the way I feel about myself and others?
  - Is this thought helping me? What thought would be more helpful right now?
  - What other explanations could there be?
  - Have I missed something?
4. Choose a more positive thought and course of action.
5. Consider how this makes you feel.



For more information, contact us at: [NCQTL@UW.EDU](mailto:NCQTL@UW.EDU) or 877-731-0764

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# Using the Scientific Method

Sets of procedures that help  
learners investigate their world and  
acquire new knowledge

## Steps:

## Suggestions:

### QUESTION

Help children form their own questions related to their world.

- Wow! This is very interesting.
- You look curious about ...
- I saw you watching ...
- You seem to be fascinated with ...

### OBSERVE

Ask children to use their senses and closely observe the world around them.

- What do you notice?
- How does that feel/taste/sound?
- Look at these different parts of ...
- Let's take a picture so we can look at it again.

### PREDICT

Encourage children to make an educated guess about what will happen in the future.

- What's your guess?
- What do you imagine ... ?
- I wonder what might happen if ... ?
- How do you think this will turn out?

### EXPERIMENT

Provide opportunities for children to experiment and test their predictions.

- Let's try this out.
- We can check out ...
- What could we do to see if this is true?
- How could we keep track of how things change?

### DISCUSS

Allow children to discuss the results of their experiment.

- What did we learn about ... ?
- How is this different/same from when we started?
- Which grew the fastest/longest/heaviest? Why?
- Was your prediction correct? How do you know?