

While you are waiting for Teacher Time to begin, please **download the Viewer's Guide** found in the "Resources" icon.

Use your Viewer's Guide to follow along with us during the webinar.

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**TEACHER TIME**

Little Scientists: Exploring **SCIENCE** with Preschoolers

November 5, 2019

**Hosts:** Judi Stevenson-Garcia & Treshawn Anderson

**Guest Expert:** Gail Joseph




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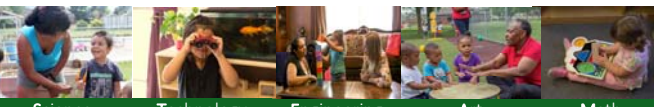
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STEAM for Infants, Toddlers & Preschoolers



Science    Technology    Engineering    Art    Math

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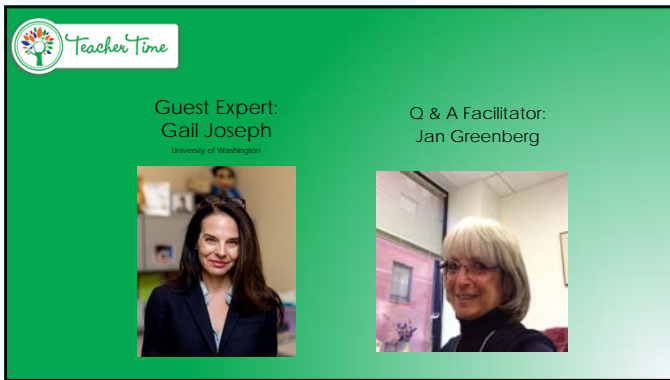
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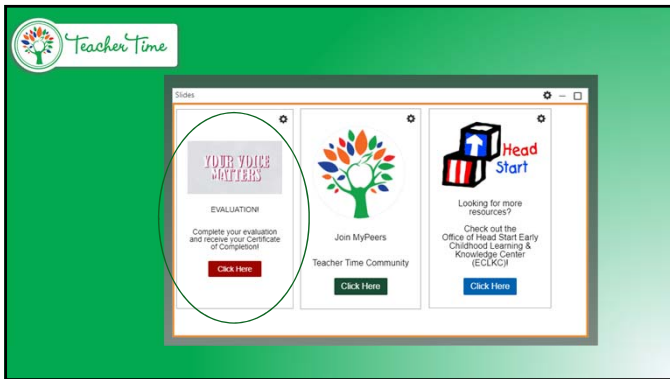
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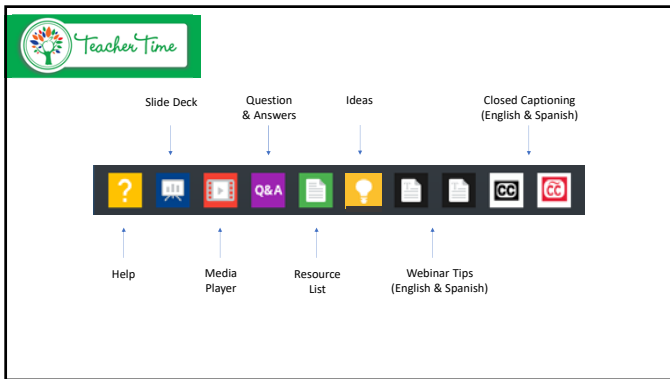
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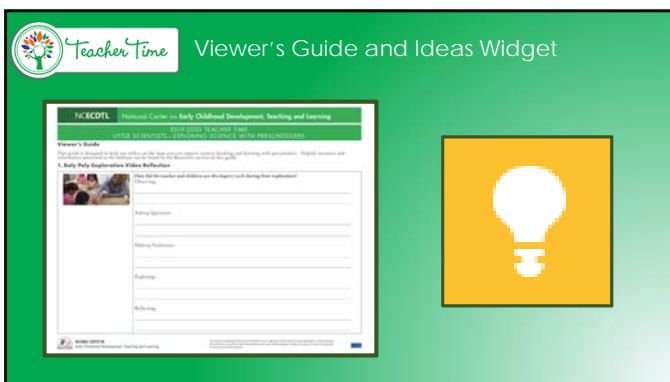
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### Early Learning Outcomes Framework (ELOF)

	CENTRAL DOMAINS				
	Approaches to Learning	SOCIAL AND EMOTIONAL DEVELOPMENT	LANGUAGE AND LITERACY	COGNITION	PERCEPTUAL, MOTOR, AND PHYSICAL DEVELOPMENT
INFANT/TODDLER DOMAINS	Approaches to Learning	Social and Emotional Development	Language and Communication	Cognition	Perceptual, Motor, and Physical Development
PRESCHOOLER DOMAINS	Approaches to Learning	Social and Emotional Development	Language and Communication Literacy	Mathematics Development Scientific Reasoning	Perceptual, Motor, and Physical Development

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### The Scientific Method

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    graph TD
      Observe --> Question
      Question --> Predict
      Predict --> Explore
      Explore --> Reflect
      Reflect --> Observe
    
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### Video Reflection

- What did you observe this teacher and children doing and saying, that was related to the inquiry cycle?
  - observe
  - question
  - predict
  - explore
  - and reflect!

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### Teacher Time Minute



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- **Observe**
  - Children used hands and magnifying glasses
  - Teacher was engaged, too!
- **Asking Questions & Making Predictions**
  - Asks "Does it tickle when you touch it?"
- **Exploring**
  - Materials spread out across the table for all children to access!
- **Reflecting**
  - Teacher reminded children about previous conversation

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 Supporting SCIENCE Learning



Engaging Environments      Nurturing, Responsive, and Effective Interactions      Learning Experiences and Opportunities

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Engaging Environments

- Open-ended materials
- Variety of materials
- Accessible to all children

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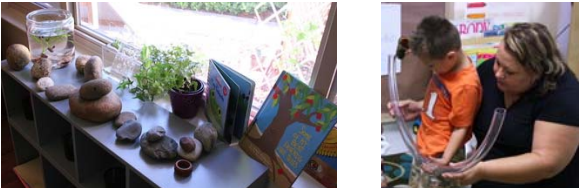
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Open-ended



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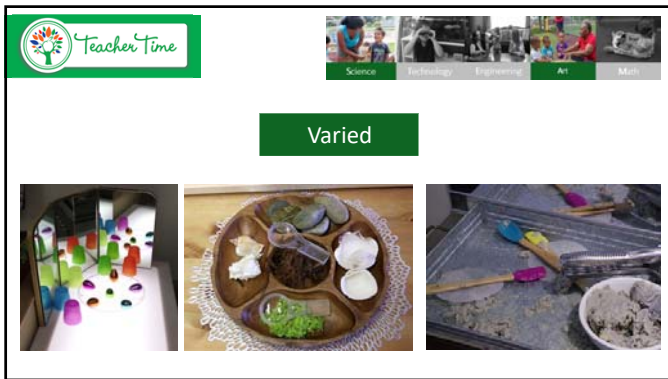
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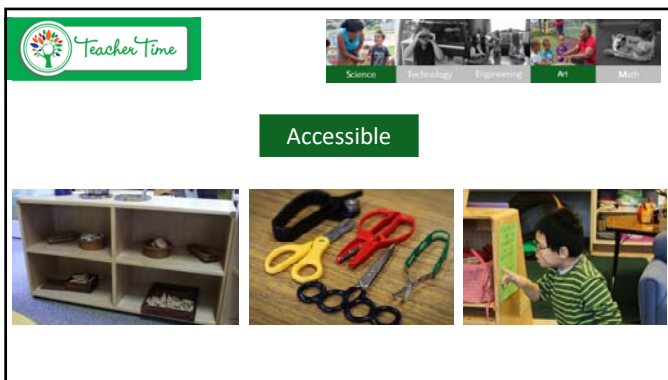
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 **Teacher Time**



  
Engaging Environments

Engaging environments include materials that are:

- Open-ended
- Varied
- Accessible

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 **Teacher Time**

Teacher Time Minute



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 **Teacher Time**

Share your ideas!



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Nurturing, Responsive, & Effective Interactions

- Nurturing
  - Show interest in and support children's curiosity
- Responsive
  - Use back-and-forth conversations in response to children's questions and ideas
- Effective
  - Support children's development and learning across ELOF domains

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Nurturing, Responsive, & Effective Interactions

- Use scaffolds
- Help children use inquiry cycle
- Speak science and encourage children to speak science
- Listen and model a questioning mind

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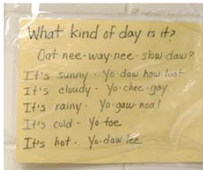

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Use scaffolds

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**Support children in using the inquiry cycle**



This dirt feels different when it's wet than when it's dry.



Which food do you think our class likes the most?



Can you guess which car will go fastest?

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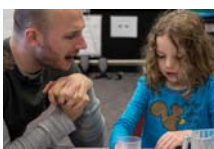
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**Speak science**



I notice that roller made an interesting pattern.



The milk in your cup and the cottage cheese on your plate are both white!



The pole was cold this morning. I wonder how it got warm?

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**Encourage children to speak science**



What will happen to the marbles when you pour them into the tube?



How do fruits and vegetables get from the farm to the grocery store?



What do you think will happen next?

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**Listen to questions & model a questioning mind**

“As a teacher, I am the expert and I need to have answers to all the questions they ask.”

“I am going to teach children lots of information about this topic.”

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**Listen to questions & model a questioning mind**

“I can say: I don’t know. Let’s find out together.”

“I listen to children’s questions and model a questioning mind. We explore together.”

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 **Video Reflection**

How did this teacher support scientific thinking?

- Scaffolding
- Supporting inquiry
- Speaking science
- Encouraging children to communicate

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Teacher Time Minute



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- **Use scaffolds**
  - Children explained their thinking in their home language.
  - Scaffolded language by translating in English
- **Support use of the inquiry cycle**
  - Repeated the children's questions to the whole group to think about
- **Speak science and encourage children to speak science**
  - Invited all children to communicate by supporting the use of home language as well as repeated the question in English to give all children the opportunity to communicate

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Learning Experiences and Opportunities



Guest Expert:  
Gail Joseph  
University of Washington

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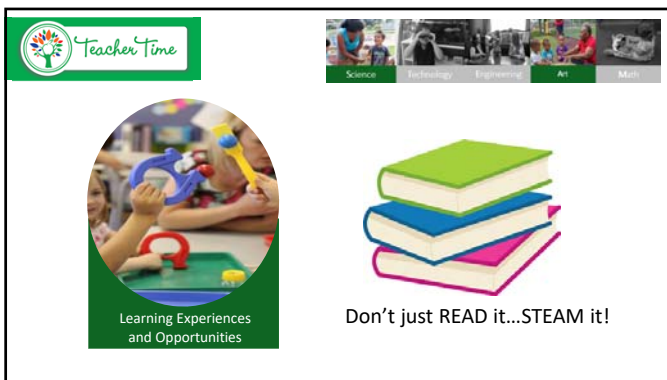
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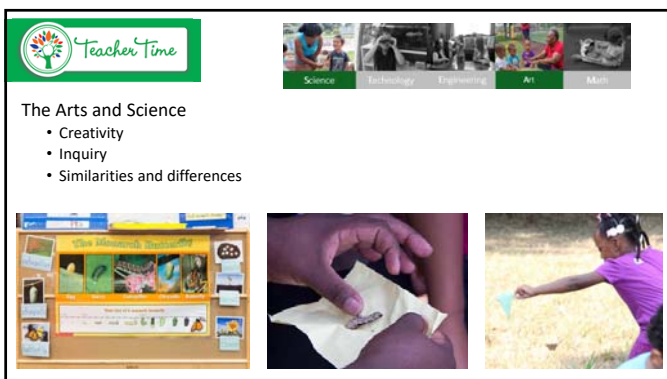
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 Teacher Time

Dramatic Play Supports:

- Reasoning
- Problem-solving
- Creativity



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 Teacher Time

Art experiences support the inquiry cycle



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 Teacher Time

Teacher Time Minute



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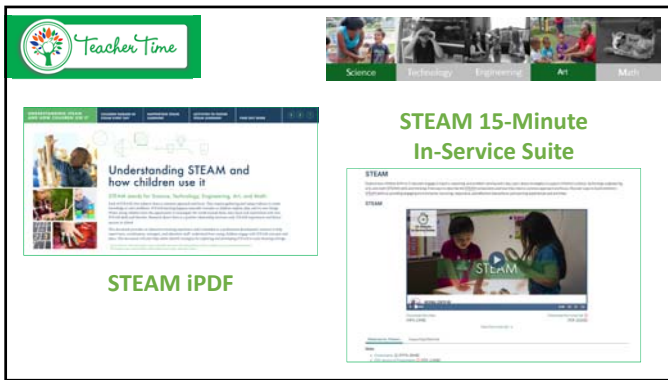
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 **Helpful Resources**

**Resources:**

- T4T
- ELOF2GO

**Upcoming Teacher Time Episodes:**

Dec- Little Scientists—Exploring **TECHNOLOGY** with Infants and Toddlers

Jan- Little Scientists—Exploring **TECHNOLOGY** with Preschoolers

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