



## STEAM – PRESENTER NOTES

### OPTIONAL PRESENTER NOTES FOR HOME VISITORS



#### HV OPTIONAL SLIDE 1

If participants are exclusively home visitors, you can replace the title slide with this slide.

##### INTRODUCTIONS:

Begin the training by giving participants background information on yourself.

Provide an opportunity for participants to introduce themselves.

##### INTRODUCE THE TOPIC:

STEAM stands for Science, Technology, Engineering, Art, and Math.

Begin with an activity to get participants thinking about how they naturally use STEAM throughout the day.

##### **DISCUSSION: HAVE PARTICIPANTS SHARE WHAT STEAM SKILLS THEY USED THAT MORNING.**

This will give you an idea of what they think of when they hear the STEAM acronym.

Offer examples such as cooking breakfast, making coffee, parking your car, paying for lunch, checking the weather etc.

**\*EMPHASIZE:** YOU NATURALLY USE STEAM EVERY DAY!

## HSPPS Supports STEAM



### Subpart C - Education and Child Development Program Services

#### 1302.30 Purpose

All programs must provide high-quality early education and child development services, including for children with disabilities, that promote children's cognitive, social, and emotional growth for later success in school....



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### HV OPTIONAL SLIDE 2:

Programs must provide high-quality early education and child development services to all children, including for children with disabilities, that promote children's cognitive, social, and emotional growth for later success in school.



# HSPPS Supports STEAM



## Subpart C - Education and Child Development Program Services

### 1302.35 Education in Home-Based Programs

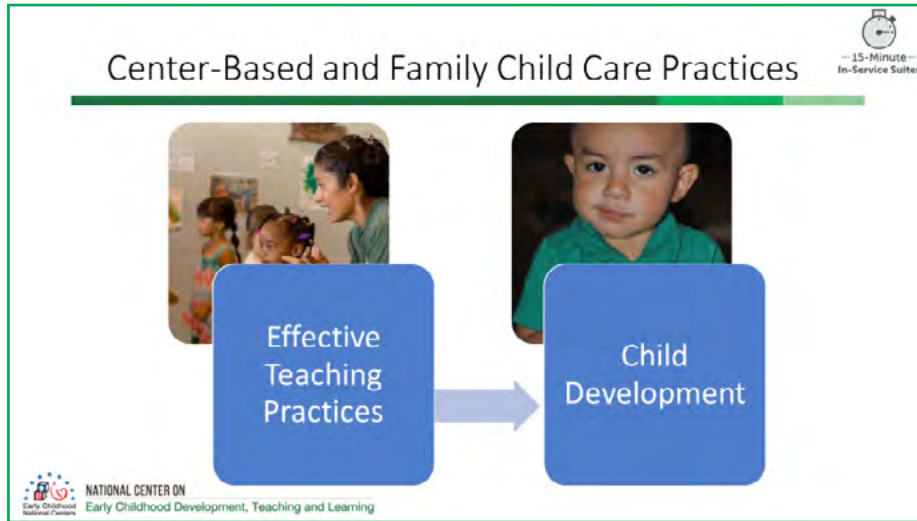
A home-based program must provide home visits and group socialization activities that promote secure parent-child relationships and help parents provide high-quality early learning experiences in language, literacy, mathematics, social and emotional functioning, approaches to learning, science, physical skills, and creative arts. A program must implement a research-based curriculum...



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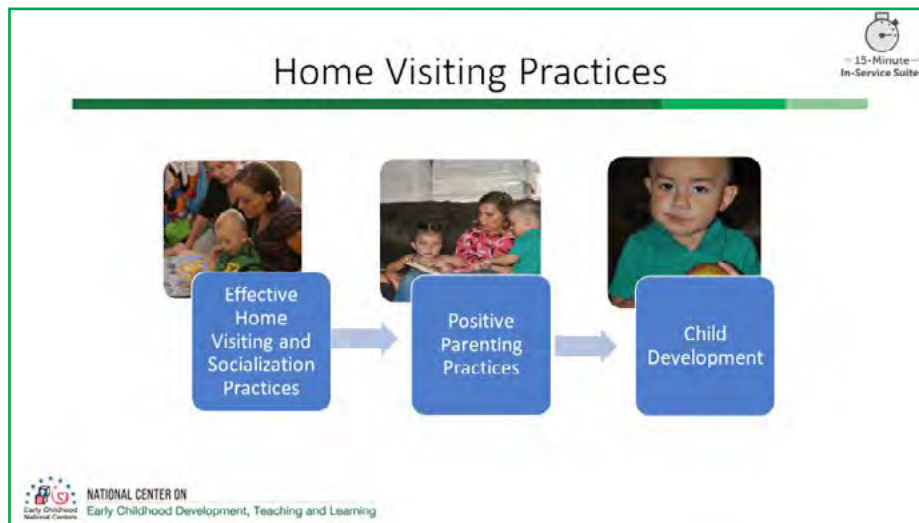
## HV OPTIONAL SLIDE 3

Additionally, home-based programs must encourage parents as the child's first teacher and support parents as they provide high-quality STEAM experiences that build on children's individual pattern of development and learning.



#### HV OPTIONAL SLIDE 4:

Here is a very over-simplified representation of how positive child outcomes are achieved in center-based and family child care. The teacher is working directly with the child. The child is usually in the classroom 5 days a week for around 6 hours or more each day. This means that the teacher and child have approximately 30 hours together each week.



### HV OPTIONAL SLIDE 5:

When we look at what is different in home-based programs, the most striking difference is that the home visitor works to promote positive parenting which in turn impacts the child’s development.

First, the home visitor is in the home 90 minutes once a week. Home visits are planned jointly with home visitor and parent. Home visitors provide age and developmentally appropriate, structured, and child-focused learning experiences. However, they really work with the parent to provide strategies and activities that promote parent’s ability to support the child’s cognitive, social, emotional, language, literacy, and physical development. Home visitors encourage parents to promote the home as a learning environment that is safe, nurturing, responsive, and language—and communication-rich—emphasizing dual language learners and recognizing bilingualism and biliteracy as strengths.

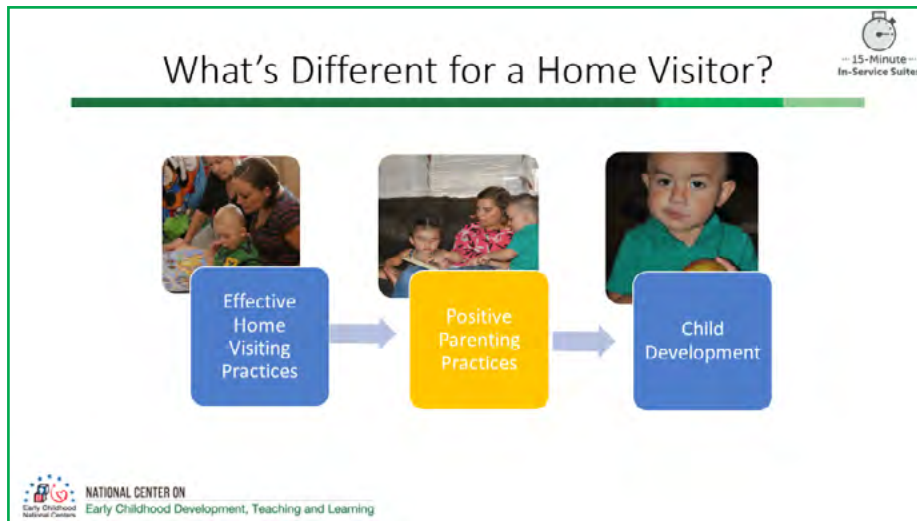
Home visitors also offer socializations two times per month. Socializations are planned jointly with families and conducted with both parent and child participation. They can be held in any convenient location including classrooms, a community facility, in the home of a parent, or a field trip-like setting. Group socializations provide age-appropriate activities that are aligned with school readiness goals. They encourage parents to share their child development experiences with other parents to strengthen parent-child relationships and promote parents’ understanding of child development.

The goal of home-based programs is to provide home visits and group socializations that promote secure parent-child relationships and help parents provide high-quality early learning experiences.

### HSPPS: §1302.35 Education in home-based programs.

- (a) HSPPS: §1302.35 Education in home-based programs.
  - (a) Purpose. A home-based program must provide home visits and group socialization activities that promote secure parent-child relationships and help parents provide high-quality early learning experiences in language, literacy, mathematics, social and emotional functioning, approaches to learning, science, physical skills, and creative arts
  - (c) Home visit experiences. A program that operates the home-based option must ensure all home visits focus on promoting high-quality early learning experiences in the home and growth towards the goals described in the Head Start Early Learning Outcomes Framework: Ages Birth to Five and must use such goals and the curriculum to plan home visit activities that implement:
    - (1) Age and developmentally appropriate, structured child-focused learning experiences;

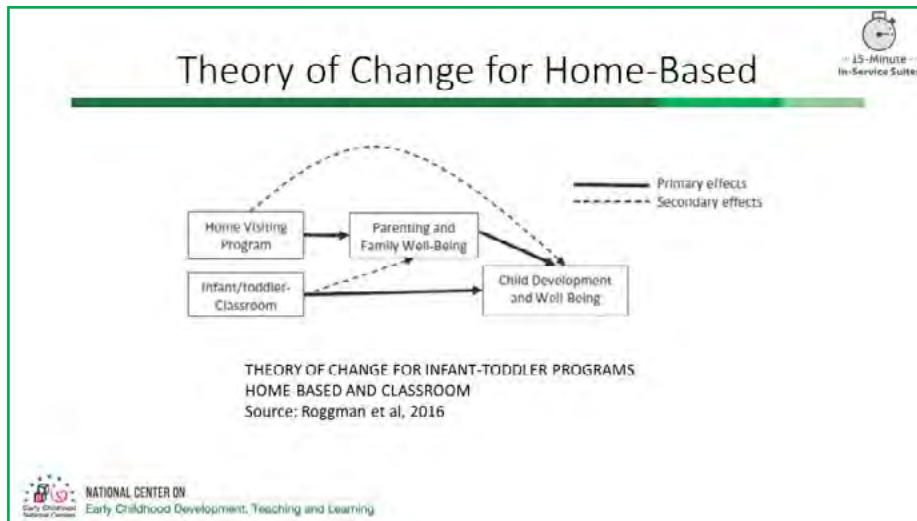
- (2) Strategies and activities that promote parents' ability to support the child's cognitive, social, emotional, language, literacy, and physical development;
- (3) Strategies and activities that promote the home as a learning environment that is safe, nurturing, responsive, and language- and communication- rich;
- (4) Research-based strategies and activities for children who are dual language learners that recognize bilingualism and biliteracy as strengths, and:
  - (i) For infants and toddlers, focus on the development of the home language, while providing experiences that expose both parents and children to English; and,
  - (ii) For preschoolers, focus on both English language acquisition and the continued development of the home language; and,
- (d) Home-based curriculum. A program that operates the home-based option must:
  - (1) Ensure home-visiting and group socializations implement a developmentally appropriate research-based early childhood home-based curriculum that:
    - (ii) Aligns with the Head Start Early Learning Outcomes Framework: Ages Birth to Five and, as appropriate, state early learning standards, and, is sufficiently content-rich within the Framework to promote measurable progress toward goals outlined in the Framework; and,
- e) Group socialization.
  - (2) Group socializations must be structured to:
    - (ii) Encourage parents to share experiences related to their children's development with other parents in order to strengthen parent-child relationships and to help promote parents understanding of child development;



## HV OPTIONAL SLIDE 6:

When we look at what is different for a home visitor, the most striking difference is that the home visitor works directly with parents to promote positive parenting. To be effective, home visitors in home-based programs must know adult learning principles and have the skills to work with parents to strengthen their parenting practices so they can support their child's healthy growth and development throughout the week, not just when the home visitor is present.





### HV OPTIONAL SLIDE 7:

Here's another graphic to describe home-based programs. This one is a theory of change from an article by Lori Roggman and colleagues in a 2016 issue of *Early Childhood Teacher Education*. Theory of change is simply a series of clear statements or a diagram, as we see on this slide, that portrays the changes a program is trying to make. So, we see from the solid lines that home visiting programs primarily and directly effect parenting and family well-being, which then leads to child development and well-being. This model shows us that through working with families we see change in child development and well-being. Keep this theory of change in mind as we talk about promoting STEAM development for children in home-based programs.

**Source:** Lori A. Roggman, Carla A. Peterson, Rachel Chazan-Cohen, Jean Ispa, Kallie B. Decker, Kere Hughes-Belding, Gina A. Cook & Claire D. Vallotton (2016) Preparing home visitors to partner with families of infants and toddlers, *Journal of Early Childhood Teacher Education*, 37:4, 301-313.



## Support Parents in Learning About STEAM



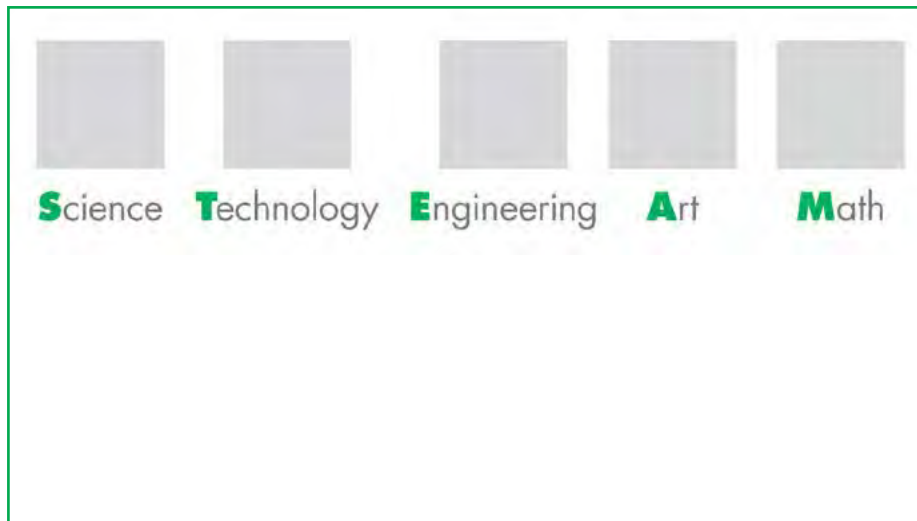
Help parents understand that STEAM is about *how* children and adults explore the world, not which facts you know.



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### HV OPTIONAL SLIDE 8:

Each parent will have a different comfort level with STEAM concepts. However, STEAM is about *how* children and adults explore the world—*not* which facts you know. Start with activities each individual family is already doing with their child and build from there. Help families feel comfortable with STEAM by helping them to identify open-ended, everyday materials such as empty jars & lids or leaves from their backyard—these materials allow for boundless exploration (and can grow with the child).



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## HV OPTIONAL SLIDE 9:

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### LEARNING ACTIVITY

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STEAM-related objects and materials can be found anywhere—both inside and outside of the home. We must support families as they find useful items and discover how they can be used to promote STEAM learning.

For this activity, use your worksheet to brainstorm objects that you may find in a child’s home that promote STEAM learning!

**Activity for families:** Share the handout “Steam is All Around” with families. Do one of the following activities with families during a home visit of your choice:

1. Brainstorm all the opportunities for STEAM learning that are found around the home or can take place during everyday routines; or
2. Have families fill in the handout as they go through their week and check back with them on what they discovered at the next home visit.

## Home Visitors Can Support Families in Building STEAM



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### HV OPTIONAL SLIDE 10:

Home visitors have a great opportunity to support parents as they discover the rich opportunity that exists in everyday routines and find family activities that promote their children's STEAM skills. All parents want their children to learn critical skills and concepts to prepare them for school and life. What better way to help parents meet that goal for their children than by supporting parents as they identify and take advantage of the countless STEAM learning opportunities that occur every day in the home and community.

## Show Parents How to Speak the Language of STEAM



- Encourage parents to introduce STEAM vocabulary as children are exploring inside and outside the home.
- Share the benefits of using STEAM language with children.



### HV OPTIONAL SLIDE 11:

Encourage parents to introduce STEAM language as children are exploring inside and outside the home. Share the benefits of using STEAM language with their child.

## Learning Activity/Experiences



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### HV OPTIONAL SLIDE 12

#### LEARNING ACTIVITY

An important way to support STEAM learning and skills is through the experiences and activities you encourage families to do at home.

In this video, a parent reads through “The Very Hungry Caterpillar” with his children. As you watch, think about all the ways the parent supports STEAM learning through this activity. Play video.

#### DISCUSSION: ASK PARTICIPANTS TO SHARE WHAT THEY OBSERVED.

Highlight these STEAM skills and supports.

- The parent read a book about insects that we often see in nature (caterpillars and butterflies).
- This was a hands-on activity where the children were able to find and hold the pictures that matched the book.
- The parent used scientific vocabulary such as “cocoon.”
- The parent encouraged the child to count objects shown in the picture.
- The parent followed the child’s natural exploration and curiosity by allowing her to hold up a different picture than what he asked for—perhaps a picture of interest to the child.
- The parent didn’t always act like the expert—he made it an activity to explore together with the children.