

Discussion Guide

Discussion Guide for Module 20 Early Numeracy

Module run time: 20 minutes

Estimated time to complete the module with discussion guide: 45-60 minutes

Below are recommended stopping points and suggested questions to use in your group's discussion. Please feel free to follow your group's lead and discuss topics and questions that are of greatest value to the group!

Key points:

- Children have a natural interest in math. They are capable of learning numeracy concepts and practices from a young age.
- Understanding numbers is integral to children's daily play and interactions with the environment.
- Adults can promote learning of early numeracy as a part of children's daily activities and play.

Module synopsis:

Page 1: *Title Page – Early Numeracy*

Page 2: *Acknowledgments*

Page 3: *Early Numeracy*

Page 4: *Why Early Numeracy Skills Are Important*

☛ Recommended stopping point

- We asked you to begin by thinking about your day so far. What have you done today that involves numeracy?
- Do you currently integrate math into your everyday work with children? How? Why do you think this is important?
- Early math skills are the best predictor of later math and reading scores. Does this surprise you? Can you think of other examples of how children learn numeracy concepts while engaged with other learning domains?

Page 5: *Incorporating Math into Everyday Experiences*

Page 6: *Supporting Early Numeracy*

☛ Recommended stopping point

- How can we encourage early numeracy in the activities that are already part of a child's day?
- Scaffolding from an adult helps a child achieve more than she would be able to on her own. What scaffolding techniques have you tried that have been successful in building children's early numeracy skills? Are there any techniques that didn't work? If so, why?

Discussion Guide

Page 7: *Number and Operations*

Page 8: *Building One-to-One Correspondence Skills*

Page 9: *Addition and Subtraction*

☪ Recommended stopping point

- **Number and operations** is a term that covers a set of math concepts including counting and adding or removing objects from a group. What are some ways to support these skills during daily routines or activities with children?
- What strategies have you used to help children learn one-to-one correspondence? Have you noticed that anything that works particularly well? If you are a home visitor, can you share any tips to keep in mind when working with parents around this concept?
- Wynn (1992) found that infants as young as 5 months old have an early understanding of numeracy. Have you ever noticed something like this with any young children you work with? Is there anything that surprised you that you didn't know they could do in relation to numeracy skills?

Page 10: *Math and Me: Early Numeracy (video)*

☪ Recommended stopping point

- Now that you've watched how other people use math every day, think about your job or a hobby you have. Do you use any math skills that you hadn't thought of before? What are they? Use this as inspiration for thinking of other activities and routines you do with young children that involve math too.

Page 11: *Measurement*

Page 12: *Measurement*

Page 13: *Patterns*

☪ Recommended stopping point

- Why is it important to introduce young children to measurement and patterns from an early age?
- What are some ways you can incorporate measurement in children's daily activities?
- Think of two household items that you can use to teach infants and toddlers about patterns. Explain how you would use the items to create an activity. Next time you are with young children, try out one of your new activities!

Page 19: *Math Is All Around*

☪ Final discussion points

- Many adults are surprised to learn that infants are capable of learning about early numeracy concepts from infancy. What information would you share with a parent that you learned from the module? How can you encourage parents to include early numeracy concepts throughout the day?

Visit
outreach.ilabs.uw.edu
For more free resources
and information

INSTITUTE FOR
LEARNING
& BRAIN
SCIENCES

Discussion Guide

To learn more about early numeracy, take a look at these resources:

[High Five Mathematize | An Early Head Start and Head Start Math Resource Guide](#)

[Learning and Teaching with Learning Trajectories | Early Math - Birth to Grade 3](#)

[Mathematica | Developing Math Skills in Early Childhood](#)

[National Association for the Education of Young Children | Math](#)

[Too Small to Fail | Let's Talk About Math](#)

[Vroom | Math Activities](#)

[Zero to Three | Early Math and Science](#)

We are constantly working to improve our materials. Do you have suggestions about topics to add to this guide? Did your group discuss something we didn't suggest? We'd love to hear from you! Please email your thoughts to us at ilabsout@uw.edu.

Visit
outreach.ilabs.uw.edu
For more free resources
and information

INSTITUTE FOR
LEARNING
& BRAIN
SCIENCES