

Discussion Guide for Module 4 – The Power of Learning Through Imitation

Module run time: 20 min

Estimated time to complete the module with discussion guide: 35-50 min

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! If you're working with a larger group, you may find it useful to discuss these questions in smaller groups and then reunite to summarize.

Key points:

- From the first day of life, children watch others and imitate their actions to learn about the physical world and their culture.
- As they grow older, they can remember actions for longer (**deferred imitation**), and use them to navigate new situations (**generalization**).
- Children's brains seem ready to imitate – studies have found similar changes in infants' brain activity whether they are doing an action or just watching it.

Module synopsis:

Page 1: *The Power of Learning Through Imitation*

Page 2: *Acknowledgements*

Page 3: *Imitation from Birth*

Page 4: *The Role of Early Social Experiences*

Page 5: *The Value of Imitation*

⦿ Recommended stopping point

- Children also learn through their own experiences, like trying different actions until they perform the right one. This is called **trial and error learning**. Can you think of an example of this you've seen in real life?
- Both trial and error learning and imitation are important components of children's early learning experiences. What are the pros and cons of both types of learning? How might they complement one another?

Page 6: *Types of Imitation*

Page 7: *Imitating Actions on Objects: Video*

Page 8: *Imitating Actions on Objects (continued)*

⦿ Recommended stopping point

- You may be familiar with the idea of a control group: a group of participants who have similar demographic characteristics as experiment participants, but who do not receive experimental treatment. For instance, in the imitation study, the control group did not see a demonstration of the action, whereas the experimental group did. Why are control groups important to researchers? What can researchers tell by comparing results from a control group to those of an experimental group?
- On Page 6, the narrator suggested you write down observations from the children in the Alan Alda video. What did you notice about children's imitation? About the adults as they're demonstrating actions?

Page 9: *How Long Do Young Children Remember?*

Page 10: *Generalization*

☉ **Recommended stopping point**

- **Deferred imitation** is when a delay exists between the time a model demonstrates a behavior and when the child has an opportunity to imitate the action. **Generalization** is when a child extends what he or she learns in one context, under a specific set of conditions, to a new context under different conditions. How do you think these two skills work together to support learning?
- Children use these sophisticated skills quite naturally, without explicit prompting from adults in their lives. Though imitation doesn't need to be forced, do you think there are activities you could try to encourage or invite children to learn through doing or imitating? What would those activities be?

Page 11: *Does the Model Matter?*

Page 12: *Understanding Intentions and Goals*

☉ **Recommended stopping point**

- Research suggests children will learn from both adults and their peers. Think back to your experiences as a child. How did you learn about social conventions and norms, like how close to stand from someone you're talking to, or how to use eating utensils?
- **Theory of mind** is the understanding that other people may have different beliefs and knowledge than you. Can you think of a time that you used theory of mind in your everyday life? What was the situation, and how did theory of mind help you? Now, think about this from the perspective of a child – how might theory of mind be useful in early learning?
- Theory of mind develops over the course of several years. What might you *not* know about other people if you lacked theory of mind? How would that influence your behavior towards others?

Page 13: *Brain Science and Imitation*

Page 14: *Infant Brains Respond to Other People's Actions*

☉ **Recommended stopping point**

- Electroencephalography (EEG) research has found that when children watch an adult play with a toy with their hand, the child's hand brain area is active. This is an example of how neuronal activation "mirrors" what the child is watching, even if the child is not doing it at that time. Knowing this about early development, what might you try with children to support their learning?

Page 15: *Imitation and School Readiness*

Page 16: *Recap: Understanding Each Other Through Imitation*

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

Parent Map | Latest findings in baby brain science

<https://www.parentmap.com/article/earliest-learning-latest-findings-in-baby-brain-science>

Parenting Counts | Copycats: How children learn from the actions of others

<http://www.parentingcounts.org/information/timeline/copycats-how-children-learn-from-the-actions-of-others>

ZERO TO THREE | Social and emotional development

<https://www.zerotothree.org/early-development/social-and-emotional-development>

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.