

Module 5

Recognizing Expectations and Shared Understandings

Module Overview

Objective

Participants will learn another way to look at family interactions at exhibits and reflect on previous videos through the lens of activity frames. Activity frames are a kind of shared understanding that emerges within families about what they should be doing, how they should be doing it and what sorts of behaviors and talk are acceptable.

Materials needed



- Module 2 Video 1 (<https://youtu.be/pDclHllarSQ>)
- Bonus Video 1 (*please note that this video does not have subtitles*) (<https://youtu.be/Vk9ufHIS3CI>)
- Handouts (one per participant)
 - Introducing Module 5: Recognizing Expectations and Shared Understandings (a few copies in case participants need them)
 - Module 5 Video Discussion Sheets
- Chart paper or whiteboard and markers

Plan for session (80-90 minutes)



- 1) Warm-up activity, 10 minutes (optional)
- 2) Introducing the module, 10 minutes
- 3) Video discussion, 60 minutes
- 4) Homework, 10 minutes

Warm-Up Activity

10 MIN



If you opt to do a warm-up activity, start the session with it. We recommend the improv activity, “What Are You Doing?” (<http://www.nisenet.org/catalog/improv-exercises>). In general, an effective warm-up activity for this module will focus on different roles people take at exhibits, how different approaches families take can affect changes the outcome, and how different people respond to conflicting or shared goals within their group.

Introducing the Module

10 MIN



Introduce this module’s topic, paraphrasing what is written below. Participants should have read “Introducing Module 5: Recognizing Expectations and Shared Understandings” prior to this session.

Introducing the topic



In this module, you will learn about six activity frames that can have a significant effect on how families interact with exhibits. You will learn how to identify specific frames and start thinking about ideas for facilitating families through an activity frame lens. You will reflect on earlier modules and begin thinking about how, as a facilitator, you can use the lens of activity frames to better understand a family’s motivation and approach, and potentially guide them toward a richer exhibit experience.

Connecting to previous experiences

In small groups, participants discuss their responses to the questions at the end of the handout “Recognizing Expectations and Shared Understandings.” After a few minutes, continue the discussion in the larger group.



- 1) When have you participated collaboratively or competitively with a group at an exhibit? What were your goals? What did you think were the goals of the other members? How did your group interact with each other?
- 2) What factors might influence how a family approaches a challenge at an exhibit—whether they spend a long time exploring all the parts (*Refining*) or move through the activity as quickly as possible (*Completing*)?
- 3) How do you think the perception of an activity by a family as *Teaching* or *Exploring* would influence your interaction with that family at an exhibit? What facilitation strategies might you use or change to respond to each approach?

In this module, you will use two videos from other modules:

- Module 2 Video 1
- Bonus Video 1 (*please note that this video does not have subtitles*)

Introducing the videos



Each of the videos in this module take place at a different exhibit, “Drawing in Motion” or “Balancing Art.” One of these you have viewed before; the other may be new to you. You will now watch and discuss them through the lens of activity frames. Participants should have read the exhibit descriptions as part of their preparation for this session (found in “Introductory Session: Introducing the REVEAL PD Program”). Before beginning, ask if there are any questions about the exhibits.

Pass out copies of the Video Discussion handout and give participants a minute or two to review it. Paraphrase the following information about the videos to participants.



In the first video segment you are about to watch (Module 2 Video 1), a facilitator is working at “Balancing Art” with a family of two adults and three boys between about 7 and 11 years old. The video segment starts partway through the interaction. Up to this point, two of the older children have been handling the exhibit pieces more than the younger child and have been discussing the mathematics of the exhibit. One adult has talked with the boys and interacted with the exhibit several times. The other adult has stayed in the back. In the second video (Bonus Video 1), a child begins to investigate the “Drawing in Motion exhibit,” encouraging the adults in his group to join, while the facilitator talks to another visitor group.

We will watch each video twice. The first time, ignore the handout and just try to take in the whole interaction. In between the first and second viewing, read over the questions. During the second viewing, I encourage you to notice what clues you can pick up about family members’ approaches to the exhibit, goals, and roles. You may also notice how the facilitator picks up on and responds to this information and what he or she says or does to help support the family’s goals. Notice how the visitors—both adults and children—respond to this facilitation. In preparation for discussing your observations and reactions, you will have time to jot down responses to the questions on the handout after the second viewing of each video.

Key video moments for the session leader

Below are some moments in the video when something particularly noteworthy happens relevant to expectations and shared understandings. This is not an exhaustive list of every interesting moment in each interaction. We point these out to help you, the session leader, have evidence to support observations by participants. We do not recommend giving these lists to participants.

Module 2 Video 1:

- 0:29 Facilitator offers a challenge and hands a mystery piece to the adult female.
- 1:30 Facilitator hands a mystery piece to the adult male.
- 2:12 Facilitator hands a mystery piece to the adult female.
- 2:48 Adult female takes a photo.
- 3:20 Facilitator assigns a role to the youngest boy.
- 3:50 Facilitator asks adults if they remember the values of the mystery pieces and tells the boys that they can ask adults for that information.
- 4:09 Facilitator steps to the side to talk with the adults.
- 4:55 Facilitator gives a job to the adult female.
- 5:47 Facilitator encourages oldest boy to use white board.
- 6:28 Facilitator explains to other family what is going on.
- 6:45 Group celebrates success.

Bonus Video 1:

- 0:18 Adult male shrugs off child.
- 0:40 Facilitator asks the child how they think the exhibit works.
- 0:50 Adult male approaches exhibit.
- 0:52 Child reads instructions from screen.
- 1:20 Facilitator asks child for exhibit orientation observations.
- 1:35 Child continues to read instructions from screen and give instructions to the adult male.
- 1:50 Adult male leaves the exhibit.
- 2:00 Child attempts Free Draw alone.

Video discussion: Module 2 Video 1



Watch the video segment twice. Then take 3–5 minutes for participants to quietly jot down their answers to questions on the first page of the video discussion handout.



Next break into small groups of 2–4 participants (if possible, try to mix up groups from previous discussions) and share answers. Ask one member from each group to share a summary of their discussion with the larger group.

In your discussion, keep track of the activity frames participants mention on the whiteboard or chart paper. You may want to write down other group responses as well, but keep those ideas separate from the list of frames. Note any changes in frames during the interaction and/or actions facilitators take to shift activity frames.

- 1) What roles do each of the children take on? The adults? Is this family in an *Exploring* or *Teaching* activity frame? How does the facilitator affect these roles?
- 2) As the facilitator introduces the question marks, how do the family members work together—competitively or collaboratively? Do all family members have the same goal orientation? How do they interact differently with each new question mark?
- 3) When the facilitator assigns a job to the child wearing plaid, how does it affect each family member’s ideas of collaboration and competition?
- 4) Does this family take an approach of *Completing* or *Refining*? Do you think all family members share the same activity frame? How do you know?

Video discussion: Bonus Video 1



Watch the video segment twice. Then take 3–5 minutes for participants to quietly jot down their answers to questions on the second page of the video discussion handout.



Break into small groups of 2–4 participants and share answers. Ask one member from each group to share a summary of their discussion with the larger group. Continue to record activity frames on the chart paper or whiteboard.

- 1) What activity frames do the child and the adult with the mustache assume (*Teaching* or *Exploring*)? How do you know?
- 2) What factors do you see influencing how the family works together (*Competing* or *Collaborating*)?
- 3) How does each family member approach the activity (*Completing* or *Refining*)? How do the differing expectations affect the family interaction at the exhibit?
- 4) What does the facilitator do to support or challenge the activity frames of the family?

Video discussion for both videos



After watching both videos and having small group discussions about each, continue the group conversation about the broader themes and implications of activity frames.

- 1) How could you support a family that has a *Completing* activity frame? Or a *Refining* activity frame? How would you interact with a family whose members differ in how much time they want to spend at an exhibit in your institution?
- 2) If you were facilitating an exhibit at your institution, what might you do or say to support a family *Competing* or *Collaborating* while also supporting intergenerational communication, the family context, and their content exploration?
- 3) How do you think being able to recognize activity frames will benefit your facilitation?

At the conclusion of this module, record the list of activity frames and strategies generated during the conversations (e.g., take a photo or type the list) and share the ideas with participants to help them explore how to recognize activity frames.

Homework

10 MIN



After this module, participants will practice noticing activity frames both with and without facilitators present. They will also try out some facilitation strategies for supporting and shifting activity frames.

Pass out copies of the Module 5 reflection homework handout to each participant. Allow participants a few minutes to read over the homework handout. Ask for any questions, clarifications, or comments.

Because this is the last module, you may want to schedule one additional, shorter meeting (about an hour) with the group to discuss the Module 5 homework. This can also be a good chance for the group to reflect on the professional development program as a whole. (See the “What now?” section for additional ideas about how to build on the program and continue to promote professional learning within your organization.)

For Further Exploration

More Videos

Full-length, unedited version of Module 2 Video 1 (without subtitles) is available at: <https://vimeo.com/203905379>.

You can also watch videos that were assigned to other modules and the bonus videos, paying particular attention to activity frames, how they may shift during an interaction, and strategies facilitators use to change activity frames.

Readings

The following books and articles can be useful for continuing to explore the topics introduced in this module:

Ramos-Montañez, S., Randol, S., Herran, C., Pattison, S., Rubin, A., Shagott, T., Andanen, E., & Benne, M. (2018). **Emergent Activity Frames in Facilitated Family Interactions at Math Exhibits**. Portland, OR: Oregon Museum of Science and Industry. <https://www.informalscience.org/emergent-activity-frames-facilitated-family-interactions-math-exhibits>

Pattison, S. A., & Dierking, L. D. (2013). **Staff-mediated learning in museums: A social interaction perspective**. *Visitor Studies*, 16(2), 117–143. <https://www.informalscience.org/staff-mediated-learning-museums-social-interaction-perspective>

Pattison, S., Gontan, I., & Ramos-Montañez, S. (in review). **The identity-frame model: A preliminary framework to describe situated identity negotiation for adolescent girls participating in an informal engineering education program**. *Journal of Learning Sciences*.

Rowe, S. (2005). **Using multiple situation definitions to create hybrid activity space**. In S. Norris & R. H. Jones (Eds.), *Discourse in action: Introducing mediated discourse analysis* (pp. 123–134). New York, NY: Routledge.

Module 2 Video 1

- 1) What roles do each of the children take on? The adults? Is this family in an *Exploring* or *Teaching* activity frame? How does the facilitator affect these roles?
- 2) As the facilitator introduces the question marks, how do the family members work together—competitively or collaboratively? Do all family members have the same goal orientation? How do they interact differently with each new question mark?
- 3) When the facilitator assigns a job to the child wearing plaid, how does it affect each family member's ideas of collaboration and competition?
- 4) Does this family take an approach of *Completing* or *Refining*? Do you think all family members share the same activity frame? How do you know?

Bonus Video 1

- 1) What activity frames do the child and the adult with the mustache assume (*Teaching* or *Exploring*)? How do you know?
- 2) What factors do you see influencing how the family works together (*Competing* or *Collaborating*)?
- 3) How does each family member approach the activity (*Completing* or *Refining*)? How do the differing expectations affect the family interaction at the exhibit?
- 4) What does the facilitator do to support or challenge the activity frames of the family?

Both Videos

- 1) How could you support a family that has a *Completing* activity frame? Or a *Refining* activity frame? How would you interact with a family whose members differ in how much time they want to spend at an exhibit in your institution?
- 2) If you were facilitating an exhibit at your institution, what might you do or say to support a family *Competing* or *Collaborating* while also supporting intergenerational communication, the family context, and their content exploration?
- 3) How do you think being able to recognize activity frames will benefit your facilitation?

- 1) Take some time, even just 20 to 30 minutes, to watch both facilitated and unfacilitated family groups engaging with exhibits at your institution. When you are watching another staff member, first ask him or her for permission to observe. When watching unstaffed interactions, respect the privacy of families by being unobtrusive and ending your observation if families appear to be uncomfortable.
 - For unfacilitated groups: Do you see any examples of *Teaching* and/or *Exploring*? Are they *Competing* or *Collaborating*? Are they moving through the exhibit rapidly or are they exploring all parts in-depth?
 - For facilitated groups: How does the facilitator support the family's activity frames to help the family have an enjoyable experience? What, if anything, do they do or say that changes the activity frames?

- 2) Now that you've watched examples of facilitators interacting with families through the lens of activity frames and considered how to incorporate new ideas into your own practice, you can try these strategies out yourself (if needed, refer to the list generated during the video discussion). Before you meet for the next session, try to incorporate a few new strategies into your facilitation with families at exhibits. Observe how visitors react and reflect on ways you can continue to improve the new approaches. Choose one interaction to share with the group during the next module session.