

# Module 4

## Negotiating Family and Facilitator Goals

### Module Overview

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#### Objective

In this module, participants will consider how to balance their own educational goals with the needs, interests, and agendas of family visitors. They will also practice using the cycle of responsive facilitation (observe, support, reflect) as they engage families at exhibits.

#### Materials needed



- Module 4 Video 1 (<https://youtu.be/rrL7le6c44E>)
- Module 4 Video 2 (<https://youtu.be/nTqyJ89Z3AM>)
- Handouts (one per participant)
  - Introducing Module 4: Negotiating Family and Facilitator Goals (a few copies in case participants need them)
  - Module 4 Video Discussion
  - Module 4 Reflection Homework
  - Final Reflection
- Chart paper or whiteboard and markers

#### Plan for Session (95-105 minutes)



- 1) Warm-up activity, 10 minutes (optional)
- 2) Homework sharing, 15 minutes
- 3) Introducing the module, 10 minutes
- 4) Video discussion, 60 minutes
- 5) Final reflection, 10 minutes

## Warm-Up Activity

10 MIN



If you opt to do a warm-up activity, start the session with it. We recommend the Module 4 activity, Alien Scientist (<http://www.nisenet.org/catalog/improv-exercises>). In general, an effective activity for this module will focus on the need for individuals to adapt their expectations and actions to achieve a group goal.

## Previous Session's Homework

15 MIN



In small groups, participants take turns sharing experiences they had doing the homework: one recent experience they had observing a family or one experience they had interacting with a family. After reflecting on the interaction, participants can also share what they might repeat or do differently in the future.

After 10 minutes, ask a few volunteers to share either their own learning or lessons gleaned from their group discussion. You may want to summarize observations, point out dominant themes, or make connections to practices at your institution.

## Introducing the Module

10 MIN



Introduce this module's topic, paraphrasing what is written below. Participants should have already read "Introducing Module 4: Negotiating Family and Facilitator Goals" prior to this session.

### Introducing the topic



*Today's topic is about finding a balance between the goals of the family and the goals you have as a facilitator—and why striking this balance is important. You will watch two videos, notice how facilitators and family members negotiate the interactions, and discuss strategies and techniques that facilitators can use to reflect on their facilitation choices and customize interactions to best suit the needs of both you and your visitors.*

### Connecting to previous experiences

In small groups, participants discuss their responses to the questions at the end of the handout "Introducing Family and Facilitator Goals." After a few minutes, continue the discussion with the larger group.



- 1) What are some of the different goals, interests, and agendas that family visitors seem to have at your institution?

- 2) What are some of the ways that family goals overlap with your goals as an educator? In what ways don't they overlap?
- 3) What do you usually think about when you are facilitating for a family group at an exhibit? Is there a thought process you go through to guide your facilitation approach?
- 4) Describe a time when you changed your facilitation strategies based on what you understood about the family group. Why did you change your approach? What happened as a result?

## Video Discussion

60 MIN

In this module, you will be using the following two videos:

- Module 4 Video 1: (<https://youtu.be/rrL7le6c44E>)
- Module 4 Video 2: (<https://youtu.be/nTqyJ89Z3AM>)

### Introducing the videos



This module's videos both take place at the Drawing in Motion exhibit. Ask participants if they have any questions about the exhibit. Refer to the exhibit description handout from Module 1, as needed.

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



*In the first video segment you are about to watch (Module 4 Video 1), a family approaches Drawing in Motion and the facilitator uses the cycle of facilitation to decide when and how to interact with the visitors. This video segment is the first few minutes of the whole interaction. The second video segment (Module 4 Video 2) picks up partway through an interaction and involves a facilitator negotiating two different, unrelated families simultaneously using the Drawing in Motion exhibit.*

*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 handout questions. During the second viewing, I encourage you to look for how the facilitators try to balance what they observe about family needs and interests with their own goals. Notice how the visitors—both adults and children—respond to facilitation. After the second viewing, you will have time to write down responses to the handout prompts.*

## Key video moments for the session leader

Below are some moments in the video when something particularly noteworthy happens relevant to negotiating family and facilitator goals. 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 the group. We do not recommend giving these lists to participants.

### Video 1:

- 0:33 The facilitator observes as the adult leads the interaction.
- 1:10 The facilitator tries to orient the family to the exhibit.
- 1:40 The facilitator provides more orientation and the family retries the challenge.
- 2:30 The facilitator observes the family.
- 3:11 The facilitator provides deeper explanation for the older child.

### Video 2:

- 0:52 The facilitator tries several approaches to orienting the group to the coordinate points.
- 2:00 The facilitator provides instruction.
- 2:05 The facilitator asks the adults for input.
- 2:32 The facilitator asks the “button pusher” for input.
- 2:57 One adult suggests a strategy for moving the controls.
- 4:04 The group celebrates success.

## Video discussion: Module 4 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 facilitation strategies 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 strategies. Some strategies participants might mention include: observing to understand family needs and interests, orienting families to the exhibit so that they can take charge of the experience, showing appreciation and encouraging visitors, and supporting adults as facilitators within the group.

- 1) What did you notice happening in this video segment?
- 2) Based on what you observed, what do you think were some of the family’s goals for the interaction?

- 3) What did you see the facilitator do or say to indicate that they were using the cycle of facilitation?
- 4) How did the facilitator engage differently with the different family members?
- 5) What did you see the facilitator do or say to respect the family's goals and interests? Were there times when the facilitator seemed to prioritize his own goals?
- 6) How did the visitors respond to the facilitation?
- 7) What do you think would have happened if the facilitator had tried to impose his own goals in this interaction?

### Video discussion: Module 4 Video 2



After watching the video segment twice, take 3-5 minutes for participants to quietly jot down their own answers to the 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 possible strategies on the chart paper or whiteboard.

- 1) What did you notice happening in this video segment?
- 2) Based on what you observed, what do you think were some of the family's goals for the interaction?
- 3) How did goals differ, if at all, among family members within the visitor group?
- 4) What strategies did the facilitator use to navigate different family goals?
- 5) Do you think the visitors were satisfied with this interaction? Why or why not?

### Discussion for Both Videos



After watching and discussing both videos, continue the group conversation using the questions about both videos on the second page of the handout.

- 1) What were some of the similarities and differences between these two video segments? How did the adults in each segment approach the interactions differently? How were the approaches by the two facilitators different?

- 2) What are some strategies you could use to understand family goals and interests and find overlap between these and your own educational goals?
- 3) What challenges might you encounter trying to find this alignment with families?

At the conclusion of this module, record the list of strategies generated during the conversations (e.g., take a photo or type the list) and share the ideas with participants. Other relevant strategies that participants might mention include: giving the family space, asking the family what their goals are for the activity, providing options or choice for family decision-making, and offering different roles or jobs for family members.

## Reflection Homework

10 MIN



After this session, participants will observe how families and facilitators negotiate goals while interacting at exhibits. They will also practice incorporating strategies for negotiating family and educator goals in their own facilitation.

Pass out copies of the Module 4 reflection homework handout to each participant, as well as the two background reading for the next module: “Introducing Module 5: Recognizing Expectations and Shared Understandings” and “Activity Frame Indicators.” Allow participants a few minutes to read over the handout. Ask for any questions, clarifications, or comments.

## For Further Exploration

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### More Videos

Full-length, unedited versions of the videos from this module (without subtitles) are also available:

- Module 4 Video 1, unedited (<https://youtu.be/moCAQ0ooBw0>)
- Module 4 Video 2, unedited (<https://youtu.be/nTqyJ89Z3AM>)

You can also watch videos that were assigned to other modules and the bonus videos, paying particular attention to what the interactions reveal about how facilitators negotiate their own goals with those of families.

### Readings

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

Falk, J. H., & Dierking, L. D. (2000). *Learning from Museums*. Walnut Creek, CA: AltaMira Press. (See especially Chapter 8, “The Contextual Model of Learning”)

National Research Council. (2009). *Learning science in informal environments: People, places, and pursuits*. Washington, DC: National Academies Press.  
<https://www.nap.edu/catalog/12190/learning-science-in-informal-environments-people-places-and-pursuits> (See section 1, “Learning Science in Informal Environments”)

Pattison, S. A., & Dierking, L. D. (2013). **Staff-mediated learning in museums: A social interaction perspective**. *Visitor Studies*, 16(2), 117–143.  
[http://www.informalscience.org/sites/default/files/Pattison%26Dierking\\_Manuscript\\_11125.pdf](http://www.informalscience.org/sites/default/files/Pattison%26Dierking_Manuscript_11125.pdf)

Porter, T., & Cohen, T. (2012). *Learning Together: Families in Museums Staff Training Curriculum*. Boston, MA: Boston Children's Museum.  
<http://www.bostonchildrensmuseum.org/sites/default/files/pdfs/Learning-Together.pdf>





### Video 1

- 1) What did you notice happening in this video segment?
  
  
  
  
  
  
  
  
  
  
- 2) Based on what you observed, what do you think were some of the family's goals for the interaction?
  
  
  
  
  
  
  
  
  
  
- 3) What did you see the facilitator do or say to indicate that they were using the cycle of facilitation?
  
  
  
  
  
  
  
  
  
  
- 4) How did the facilitator engage differently with the different family members?
  
  
  
  
  
  
  
  
  
  
- 5) What did you see the facilitator do or say to respect the family's goals and interests? Were there times when the facilitator seemed to prioritize his own goals?
  
  
  
  
  
  
  
  
  
  
- 6) How did the visitors respond to the facilitation?
  
  
  
  
  
  
  
  
  
  
- 7) What do you think would have happened if the facilitator had tried to impose his own goals in this interaction?

## Video 2

- 1) What did you notice happening in this video segment?
- 2) Based on what you observed, what do you think were some of the family's goals for the interaction?
- 3) How did goals differ, if at all, among family members within the visitor group?
- 4) What strategies did the facilitator use to navigate different family goals?
- 5) Do you think the visitors were satisfied with this interaction? Why or why not?

## Both Videos

- 1) What were some of the similarities and differences between these two video segments? How did the adults in each segment approach the interactions differently? How were the approaches by the two facilitators different?
- 2) What are some strategies you could use to understand family goals and interests and find overlap between these and your own educational goals?
- 3) What challenges might you encounter trying to find this alignment with families?

- 1) Take some time, even if just 20-30 minutes, to watch another facilitator at your institution interact with visitors. When you are watching other staff members, first ask them for permission to observe.
  - When do you notice the staff member using the cycle of reflective facilitation?
  - What examples do you notice of facilitators aligning their goals with those of the family? What examples do you see of family and facilitator goals being misaligned?
  
- 2) Now that you've watched examples of staff and families negotiating goals 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). 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. Additionally, try to intentionally incorporate the cycle of reflection into your work, both during and in between interactions with families.



REVEAL researchers revisited some of the data collected during the earlier work upon which Modules 1 through 4 were developed. The findings from this study serve as the basis for Module 5: Recognizing Expectations and Shared Understandings. This module will introduce the concept of activity frames: the understandings or expectations family members and staff have about the nature and goals of the interaction at an exhibit. They 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. Activity frames are a different way of looking at exhibit interactions. Instead of focusing exclusively on *what* families are doing at an exhibit, an activity frame approach looks more at *how* families perceive the activity and on *how* families are engaging with the exhibit and each other. Activity frames also take into consideration the possibility that individuals within the group may have different ideas about how things should be done. Activity frames are not static and are continuously negotiated by the members of the group; there can even be conflict or disagreement among group members about the activity frame. As you read more about activity frames, you will likely find much of it familiar. Activity frames are not describing anything new; instead, this module provides names and definitions, a shared language, to think and talk about things we have all seen in our institutions.

Research has shown that activity frames are a fundamental part of human social interactions, affording and constraining the roles participants can adopt within a specific interaction, behaviors that are expected or sanctioned, and ways that actions and talk are interpreted (Rowe, 2005, Pattison et al., in review, 2018). Goffman (1986) described activity frames as certain situational characteristics (e.g. understandings, expectations, goals) within individual interactions that become salient, determining how participants perceive that particular situation and the roles and the identities that they assume while in it (Greeno, 2009; Hand, Penuel, & Gutiérrez, 2012; Hegedus et al., 2014; Norris, 2011; Norris & Jones, 2005; Scollon, 1998). According to Rowe (2005), activity frames are central to social interactions because they determine which behaviors are expected and acceptable, including the roles available and the interpretation of behaviors.

The REVEAL research team identified six activity frames which appear most consequential to the quality of the exhibit experience and richness of the mathematical behaviors observed. These six frames are presented as contrasting pairs to facilitate interpretation and illustration and include (a) Completing and Refining, (b) Teaching and Exploring, and (c) Collaborating and Competing.

## Completing and Refining

This contrasting pair of activity frames refers to the way that families approach engaging with the challenges provided by the exhibit, facilitators, or other members of the group. For the purposes of this conversation, a challenge is defined as a call to take part in an activity and can be built into an exhibit, such as the drawing challenges at the “Drawing in Motion” exhibit, or issued by a facilitator or family member, such as a balancing challenge at the “Balancing Art” exhibit. Groups coded as in a Completing Activity Frame perceive the exhibit as a task that they want to finish, sometimes to simply get it done and move onto some other activity within the museum or to meet a goal. Under this activity frame, families focus on working through the challenges as quickly as possible. Conversations among group members usually revolve around the speed or process of completing the challenge and there is not as much room for iteration.

Groups coded as in a Refining Activity Frame generally perceive the activity as a task that they want to complete accurately or thoroughly by refining their approach and strategy. These groups usually engage in iteration until they meet a “standard” set by the group. In these cases, families often try a challenge multiple times when the outcomes are not as they anticipate, such as fixing a “mistake” by erasing a diagonal line in at the DiM exhibit because it looks “messy” or finding alternative solutions to a challenge that satisfies the members of the group. Often families coded under this activity frame discuss their approaches to the challenge and are vocal about their goals or strategies, such as coordinating movements at the DiM exhibit (e.g. “Let’s go slow,” “On the count of three”).

## Teaching and Exploring

This contrasting pair of activity frames refers to the ways that families approach the learning goals underlying the activity. Families can perceive the activity as a didactic activity in which a member of the group or the facilitator takes on the role of teacher and others take more of learner roles. In these cases, one person appears in a position of authority relative to others. This person gives instructions to others, telling them what to do or how to do it. Conversations can include procedural assistance such as when members say “move to the circle,” “go up to 7 and stay put,” and “now, hang a 3 there.” They can also include the person taking on more of the facilitator role asking leading questions such as “Where are you thinking of putting that?” providing suggestions such as “What if you put it here?” and/or giving hints such as “Is there anything times 3 that will give you 28?” This person might ask for a summary statement, testing for understanding at the end of an interaction or providing a critique of the group’s performance. For example, “So how does where you put the weight affect the bar?”, “See when you move the slider, the line goes up,” or “You went past 10.” These questions and conversations appeared to be geared towards deepening conceptual understanding of or engagement with the exhibit.

In activity frames coded as Exploring, families appear to conceive of the exhibit as an activity where they will be engaging together. In this activity frame, family members work for the most part as equals at the exhibit. They may provide suggestions or directions to each other, but communication is not unidirectional from a place of authority to others; rather, it goes back and forth, or in multiple directions with everyone contributing. Members of the group likely consult and advise each other with no individual taking a leadership or supervisory position. In most cases, family members are working toward a similar goal and the communication and discussion between them is constructive. All parties appear interested in using the exhibit.

### **Competing and Collaborating**

This contrasting pair of activity frames involves the way that families approach the challenges provided by the exhibit, facilitators, or other members of the group. Families can perceive the activity as a collaborative activity where they need to work together to complete the activity. In this case, family members are working together toward a common goal. This is characterized by family members engaging in conversations and discussions about how to approach or solve a specific challenge or activity at an exhibit. These conversations could happen before engaging with the activities or during the time the family is working through the activity. In general, in activity frames coded as Collaborating, families decide together and agree on what they are trying to do as well as their approaches or solutions. In a collaborative frame, families use inclusive terms such as “let’s,” “we,” and “us.”

In a Competing Activity Frame a group perceives the activity as a competition, and members are not working together to complete the activity but rather working as individuals to see who can complete the activity first or better. Family members in a competitive frame are observed trying to outdo others in their group by proving themselves to be more competent, better, or faster than other members at finding solutions to the challenges or activities.

Sometimes emerging competitive activity frames are observed even when the activity encourages collaboration. For example, one of the exhibit affordances of “Drawing in Motion” is that it promotes collaboration by requiring two people to work together to create a picture; however, some groups instead work competitively. For example, the competition might revolve around which member can get to the designated coordinate first. At the “Balancing Art” exhibit, facilitators might encourage families to work together by asking one member of the group to hang a weight on one side of the bar and asking another family member to balance it by placing weights on the other side of the bar. This strategy, intended to foster a collaborative interaction, sometimes ends up in a Competing Activity Frame where a member of the group is trying to “stump” another family member.

Activity frames provide educators with a lens through which they can view a family interacting with an exhibit. Recognizing some common activity frames, and knowing how they interact with each other and can impact the exhibit experience, gives educators perspectives and tools for shaping the visitor experience.

Think about these questions in preparation for small group discussions when you meet to participate in Module 5.

- 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 each approach?



An effort has been made to identify indicators for each of the activity frames. In a situation where exhibits are facilitated, awareness of these activity frames may provide educators with a new perspective on how to guide family groups toward activity frames that appear to support math learning.

### Description and Possible Indicators of Completing and Refining

<u>Completing and Refining</u> : involves the way that families approach engaging with challenges provided by the exhibit, facilitators, or other members of the group. Families can perceive the activity as a task that they want to finish in order to get it done or to move onto another activity (Completing). Families can also perceive the activity as a task that they want to engage in thoroughly and accurately by refining their approach and strategy iteratively (Refining).	
Completing	Refining
Working quickly	Responsive to feedback
Less responsive to feedback	More use of “standards” for satisfactory completion, repeating challenges and/or fixing mistakes
“Good enough” attitude/language	Conversation around goals
Stop after one completed challenge	Coordination
	Talk of strategies
	Repeat activities or accomplish multiple challenges

## Description and Possible Indicators of Teaching and Exploring

<p><u>Teaching and Exploring</u>: involves the way that families approach the learning goals underlying the activity. Families can perceive the activity as a didactic activity in which a member of the group takes on a role of authority, teaching or facilitating others in the group (Teaching). Families can also perceive the activity as an inquiry activity in which they will all engage with the exhibit, exploring and determining what they need to do together with or without specific goals (Exploring).</p>	
Teaching	Exploring
One-way communication	Two-way dialog
Conversation includes instructions, explanations, questions, suggestions, and statements	Statements and questions from participants
One individual in a position of authority	Participants on “equal ground”
Imbalance in verbal and physical activity between individuals	No individual taking a leadership or supervisory position
	Shared participation at exhibit

## Description and Possible Indicators of Collaborating and Competing

<p><u>Collaborating and Competing</u>: involves families’ negotiation of group member roles while engaging with the challenges provided by the exhibit, facilitators, or other members of the group. Families can perceive the activity as an activity in which they need to work together and help each other (Collaborating). Families can also perceive the activity as a competition in which some members attempt to “outperform” others doing something better or faster than others (Competing).</p>	
Collaborating	Competing
“We” language—Let’s work together	“I” language
Conversation around goals, what to do and how to do it	Less responsive to feedback
Helping each other	Individual focus on the exhibit and/or other individuals
Taking turns	Disagreement about what to do or how to do it
Individuals focus on group progress and dynamics	