

WHAT'S GOING ON AT THE MATH CENTER

Key Focus: Mathematics

Observation: Ms. Luke is concerned that children are not engaged in the Math Center that she has developed. Usually she places pattern blocks and linking cubes on the table. Every five minutes over the course of her 45-minute center time she attempts to document how many children are participating in this center. The maximum number of children who can be there at any one time is four.

Time	Center	# Of Children
9:45	Math	3
9:50	Math	2
9:55	Math	3
10:00	Math	1
10:05	Math	1
10:10	Math	0
10:15	Math	0
10:20	Math	0
10:25	Math	1
10:30	Math	1

Reflecting on the documentation:

**Participants may quickly shift from reflecting on the documentation to interpreting the observation or suggesting strategies for extending learning. Remind participants to discuss the advantages and disadvantages of the documentation technique.*

Ask: What advantage does time sampling of participation offer over a one-time observation?

Sample Responses: Allows the teacher to understand the rhythm and flow of her classroom and the general patterns that children are following in one center. It is easy to document quickly.

This participation record might be better if you knew which children were there each time—did one of the children stay there most of the time or did the children change each 5 minutes?

Ask: How could an anecdotal record or jottings have improved this observation?

Sample Responses: Although the time sampling gives a sense of how many children are occupying this area, it does not provide a picture qualitatively of how children are interacting there. Were they doing something with the materials? Just observing a peer? For example, is there one child who is very engaged with creating something or is he or she only moving the materials around? Did the children (particularly the initial three) go over there by choice, or was this participation teacher-directed?

Interpretation of the observation:

**Remind participants that in their interpretation they are looking for patterns, critical incidents, or errors. It is important to stick to the data. Observations often lead to new questions to be answered or hypotheses to be tested.*

Ask: What can you learn about the children from these observations?

Sample Responses: This center begins with a few children there, but participation dwindles over time. For much of the center time, no children are present at this station. Do the children need more modeling of how to put shapes together? How could the teacher create a game or pose a challenge to engage children in using the linking cubes?

Relating your observation to the Child Outcomes Framework:

**Although participants can defend other interpretations, there should be general consensus that this observation demonstrates:*

This observation does not provide enough information to inform the outcomes. However, you can have a discussion at this point about the teacher's role in establishing environments that lead to approaches to learning that demonstrate motivation and persistence for tasks.

Next steps for large group instruction:

**Help participants make connections between what they learn from the assessment and the next steps they want to take in instruction. If suggestions for instruction extend activities to new areas of learning, ask participants to consider what aspects of children's progress they would assess and how they would do so during those extension activities.*

Ask: What would you recommend that the teacher do next for the class as a whole?

**Responses will vary but might include:*

- Lead a guided discussion during large group time about how to engage with materials at the math station. It is possible that children without scaffolding run out of ideas for ways to explore the multiple manipulatives available to them. By hearing about the different ways to engage with linking cubes or pattern shapes, and so on, children can regain interest. Children may be ready to move to more advanced interactions with materials (creating a design to match cards) or may need something more social (for example, a game that involves adding cubes).

Next steps for individualized instruction:

Ask: What would you recommend that the teacher do next for individual children?

**Responses will vary but might include:*

- Ms. Luke can station herself at the Math Center for an entire center time and call children over and interact with them 1:1 or in pairs with different manipulatives.
- Ms. Luke can bring to this center more engaging and inviting materials that are different from those normally housed there.

Additional Notes: