

STRATEGIES FOR FACILITATING SCIENCE TALKS

1. Start slowly. For example, you might begin with five- to ten-minute conversations and increase the time as children increase their engagement. Take cues from the children to decide when to stop and when to continue.
2. Choose a concrete stimulus for the conversation. For example, you might choose materials being used to explore water, such as tubing and a funnel, a child's drawing, or a picture from a book.
3. Be enthusiastic and curious. For example, "I am so excited about what happened this morning. Who wants to talk about the setup on the wire wall?"
4. Model ways of sharing your thoughts and some of the questions you have. For example, "I noticed the water flowed fast when Jasmine held the tube up high. I wonder what happens when it is lower?"
5. Expand on children's observations and ideas. For example, if Kabir says, "It came out here (pointing)," you might rephrase by saying, "Kabir noticed the water coming out of the other end of the hose into the bucket."
6. Ask questions to engage children in analysis. For example, "How are the drops on aluminum foil different from the drops on the paper towel? Why do you think that is? What do you think drops would look like on waxed paper?"
7. Ask questions to help children predict. For example, before going on a walkabout to explore the building, ask, "Where do you think we will find water? What will it look like?" Be sure to follow up by asking why they think so or by getting them to compare different responses.
8. Provide children with the support they need to share their thoughts about the following:
 - Give children time to think before you expect them to respond. Silent time is okay.
 - Find ways for children with limited language and second language learners to demonstrate what they know.
 - Model using descriptive language by explaining a child's actions. For example, "Shannon is showing us how she held the hose to get the water to move fast. She shows how she held it up high."
9. Draw out ideas. For example, "Tuan described using a baster to get water to move up. Has anyone used a different strategy to get water to move up? How did you do it? Does anyone have other ideas they would like to try?"
10. Avoid comments that inhibit or limit thinking. Avoid the following:
 - Explaining the science phenomena yourself
 - Correcting children
 - Leading them to the "correct" answer
 - Moving on too quickly