



Science Inquiry in your Classroom

Key Takeaways and Ideas to Think About

Notice how the teacher uses a flashlight to guide the children in understanding how light affects shadows. Think about the importance of choosing appropriate materials when teaching science concepts with young children.

Begin with a clear understanding of the concept that you want the children to focus on, and choose materials that will clearly illustrate the concept. Materials do not need to be complex but must distinctly demonstrate the phenomena. It may be helpful to critically explore the materials yourself. This will help you determine whether the chosen materials will clearly show what you want the children to learn.

In the video, after asking a predictive question, the children are given time to explore with the eyedroppers before they respond. Reflect on giving children time to explore and think before answering a question — why is this important?

As adults, we often expect an immediate answer and have concerns with waiting, as it may slow down the pace of an activity. Young children need time to think about the question, formulate an answer, and find the words to go with that answer before responding. Using wait time can lead to a clear, more detailed answer, engaging critical thinking skills and expanded language.

Reflecting and analyzing children’s learning can help teachers make connections between teaching and learning. Consider the importance of teacher reflection on children’s learning.

Taking the time to reflect and think about your observations of children’s activities can help gain insight into children’s growing skills. This information can be used to plan additional investigations using effective teaching methods to help deepen children’s understanding and further children’s knowledge about science concepts.

In the video, the teacher used science-based vocabulary during her conversations with the children. Consider the benefits of connecting science-based vocabulary with explorations.

The goal of including vocabulary words in discussions with children is to familiarize them with new words. Choose appropriate vocabulary that describes the properties that the children are investigating. As children hear these new words used in context, introduced naturally and frequently during conversations, they will learn the words and expand their vocabularies.