

Discussion Questions

Chapter 1

1. What does an educator mean when she or he says a child conserves for number? For solid substance? How can you tell if a child does-or doesn't- conserve?
2. What is the relationship of action to knowledge for a toddler? (p. 10)
3. What is constructivism? What does constructivist teaching look like?

Chapter 2

1. Can you explain these terms? *animism*? *artificialism*? Can you provide examples of children's ideas about specific science phenomena (for example, the moon, or shadows) which can be interpreted by using these terms? Be sure to explain how the terms apply to a specific idea that a child holds (pages 22-31).
2. What is responsible for the child's egocentric beliefs about science phenomena (pages 31-33)? What causes children to abandon these beliefs?
3. In what ways does the young child think and behave like a scientist (pages 34-38)?
4. The author draws several implications for teaching from the child's ideas about science. Select one that you especially agree or disagree with and explain why you agree or disagree with it (Pages 38-40).

Chapter 3

1. What is your understanding of the term *realism* as explained by the author? Can you give an example of a child's reasoning that reflects this type of thinking? How might this be relevant to any adult who is conversing with a young child? (pages 43-47).
2. What is your understanding of the terms *syncretism* and *juxtaposition*? Can you give an example of each term in the context of the reasoning of the young child? How might this be relevant to any adult who is conversing with a young child? (pages 47-49).
3. (About clinical interviews, pages 49-50) According to the author, what did the teacher in Interview 3-2 skillfully *avoid* doing throughout most of the interview?
4. (About clinical interviews, pages 50-52) What does the term *interview protocol* mean in the context of this chapter?
5. (To the instructor) If parents allow it,¹ have students critique each others interviews during class sessions. Have them apply the interview "pointers" on pages 50-53.

¹ You will need to adapt your parent permission form for this purpose, if you use one.

6. (To the instructor) If your students have a practicum or pre-practicum attached to this course, ask them to discuss the challenges involved in incorporating interviews into the classroom day.
7. Besides interviews, what other strategies might a teacher use to gain insight into the child's thinking about science or math (pages 54-55)?