Discussion Questions for Chapters 9 – 12

Chapter 9: Social Cognition Study Questions

1. Why is joint attention particularly important for social cognition?
2. What is social referencing, and why is it important for learning?
3. How does understanding of the self -- physical, perceptual, social, and psychological -- change in the first five years?
4. Why is understanding of intention so basic to people's theory of mind?
5. What is the appearance/reality distinction? How is it tested, and why is it important within a theory of mind?
6. Describe the basic tasks used to study understanding of false belief and children’s behavior on them. What are the main interpretations of the findings, and which do you think is most compelling?
7. Do 4- to 8-year-olds truly believe in magic or do they just view it as a form of play or pretending? On what evidence do you base your conclusion?
8. Why do children develop imaginary companions if they understand they are not real?
9. What are the main explanations for the development of theory of mind, and which strikes you as most persuasive?
10. How do social, moral, and physical rules differ, and what evidence indicates that preschoolers understand the differences among them?
11. What are the main types of understanding that children attain about gender, and how do they learn about them?
12. What are the main milestones in understanding of race? What experiences lead to them? How can racial prejudice be reduced?

Chapter 10: Problem Solving Study Questions I

1. Why do you think that problem solving is a bigger part of research on children's thinking than of that of adults?
2. Why is the *bricoleur* metaphor particularly apt as applied to children’s problem solving?
3. How do conflicts among goals influence problem solving, for example in the context of Klahr’s research on the dog-cat-mouse problem?

4. What is encoding? Why do encoding problems arise with balls falling from flatcars?

5. What are mental models? Why do so many children develop faulty mental models of the earth?

6. What are the main lessons of microgenetic studies? What are the advantages of this approach relative to typical cross sectional and longitudinal approaches?

7. What does it mean for children to have a rule for solving problems, and how can you tell whether a child is using a specific rule (for example on the balance scale)?

8. How did encoding contribute to developmental differences in learning about balance scales? On what other tasks might encoding influence the development of problem solving?

9. What leads to 5-year-olds so often relying on a single dimension to solve problems?

Chapter 10: Problem Solving Study Questions II

1. Why do children so often fail to plan when planning would help them?

2. When do children rely on the Humean variables (the variables identified by Hume) to draw causal inferences, and when do they rely on understanding of mechanisms?

3. What is an analogy, and why is the ability to draw analogies important within cognitive development?

4. Why is the ability to draw causal inferences crucial for the ability to draw analogies?

5. What led DeLoache to conclude that 2 1/2-year-olds’ difficulty in using scale models was a conflict between viewing the scale models as interesting objects in their own right and viewing them as symbols?

6. Children sometimes abandon strategies that are producing correct responses. What are the implications of this phenomenon for cognitive development?

7. In what way does it make sense to view children as little scientists, and in what way is the metaphor misleading?

8. What evidence has led to the conclusion that young children do not understand the difference between inductive and deductive reasoning?
Chapter 11: Development of Academic Skills Study Questions I

1. What are the implications of children who start school relatively early outperforming peers who start relatively late on math problems but not on number conservation? What are the implications of children who attend first grade learning the same amount regardless of which side of the cutoff they were? Would this information influence your decision of when to start your child in school if their birthday was near the cutoff?

2. Why do 4- to 8-year-olds use such a wide variety of strategies on arithmetic problems?

3. Provide arguments for and against the view that teachers are making a mistake when they tell children not to use their fingers to solve arithmetic problems.

4. How does the analysis of individual differences that comes out of the strategy choice model differ from that which would emerge from standardized tests?

5. How do children with mathematics disabilities differ from other children; which problem do you think is most central to their difficulty in learning math?

6. Why does it take children so long to understand problems such as a+b-b=___? and a+b+c=___+c?

7. What process leads children to generate the types of bugs that are described in long subtraction, fractions, and algebra?

8. What is representational fluency, and how does it help children learn?

Chapter 11: Development of Academic Skills Study Questions II

1. What are the basic stages of reading development, and when do they occur?

2. Why is phonemic awareness now thought to be more crucial to learning to read than knowing the names of the letters?

3. Why is it important for children to possess both phonological decoding and retrieval skills?

4. In what ways are choices among strategies for decoding words similar to, and different from strategy choices in the context of arithmetic?

5. What is the difference between phonological dyslexia and surface dyslexia? Which can be assessed through presentation of pronounceable non-words and which through presentation of exception words? Why would the strategy choice model predict that the two skills should be correlated (as indeed they are)?
6. Why are oral comprehension and reading comprehension correlated positively, but not perfectly?

7. Why does early automaticity of reading predict later reading comprehension?

8. Why is background knowledge a critical determinant of reading comprehension?

9. What do you think is the key factor in producing the effectiveness of reciprocal instruction?

10. Given the several reasons for why writing well is difficult, how would you go about helping children to write better?

11. Do you think word processing will improve children’s writing in the future?

Chapter 12: Conclusions and Challenges Study Questions

1. Does it surprise you that discoveries fairly often follow successes using existing approaches? Why do you think this happens? Can you think of any cases where it happened to you?

2. How is the experience-expectant versus experience-dependent distinction an improvement over the traditional maturation versus learning distinction?

3. What are the implications of infants and young children being so cognitively competent in some ways, but so cognitively incompetent in others for theories of cognitive development?

4. Why is causal knowledge so crucial in so many areas of cognitive development?

5. Why do you think we see a mix of anatomical specificity and plasticity in the brain?

6. What are the advantages and disadvantages in thinking about multiple intelligences rather than intelligence? Is Gardner’s seven intelligences approach an improvement or a regression relative to previous approaches?

7. Why do you think that research results on the effects of variations in social support for learning have been so inconsistent?

8. Which areas of cognitive development have yielded the greatest practical implications to date? Which areas do you think are likely to yield the greatest practical implications in the future?