

Chapter 7, 8, 9

I. Front Page (200)

- A. Laura Bickford
 - a. Master teacher
 - b. Nordoff High School

II. The Information Processing Approach to Development (201)

- A. Shares basic characteristic with theories of cognitive development
- B. Focuses on how children think
- C. Analyzes how children manipulate information, monitor it, and create strategies for handling it.
- D. Computer Metaphor
 - a. Children's memory is limited by capacity and speed

III. Cognitive Resources: Capacity and Speed of Processing Information

- A. Developmental changes in information processing are likely influenced by increases in both capacity and speed of processing
- B. Cognitive resources
- C. Both biology and experience contribute to growth in cognitive resources
- D. Biological developments occur in brain structures and at the level of neurons
- E. The speed with which children can articulate a series of words affects how many words they can remember
- F. Reaction-Time-Task (202)
 - a. Push a button as soon as they see a stimulus such as light

IV. Mechanism of Change (202)

- A. Robert Siegler
 - a. Encoding
 - i. Process by which information gets into memory
 - 1. Letter shape: cursive versus print being the same letter
 - b. Automaticity
 - i. Refers to the ability to process information with little or no effort
 - 1. Once learn to read they don't think of each word as letters
 - c. Strategy Construction
 - i. Creation of new procedures for processing information
 - d. Metacognition
 - i. Knowing about knowing

V. Comparisons with Piaget's Theory (203)

- A. Piaget
 - a. Children construct their knowledge and understanding of the world
 - b. Thinking develops in distinct stages
- B. Information Processing Approach
 - a. Some versions are constructivist
 - b. Children direct own cognitive development
 - c. Do not see development as occurring abruptly in distinct stages with a brief transition period
 - d. Individuals develop a gradually increasing capacity to process information, which allows them to acquire increasingly complex knowledge and skills
 - e. Focuses on more precise analysis of change and on the contributions made by ongoing activity

VI. What is Attention (204)

- A. **Attention:** the focusing of mental resources
 - a. Improves cognitive processing

XXXV. Front Page (259)

A. Helen Keller

XXXVI. Defining Language (260)

- A. **Language**: form of communication – whether spoken, written, or signed – that is based on a system of symbols
- B. **Infinite generativity**: is the ability to produce an endless number of meaningful sentences using a finite set of words and rules

XXXVII. Language's Rule Systems

- A. Ralph Waldo Emerson
- B. Organization of language involves five systems
 - a. **Phonology**: is the sound system of a language, including the sound that are used and how they may be combined
 - i. **Phoneme**: is the basic unit of sound in a language; it is the smallest unit of sound that affects meaning
 - b. **Morphology**: the rule system that governs how words are form in a language
 - i. **Morpheme**: is a minimal unit of meaning; it is a words or part of a word that cannot be broken into smaller meaningful parts
 - c. **Syntax**: involves the way words are combined to form acceptable phrases and sentences
 - i. Often used interchangeably with the term grammar
 - d. **Semantics**: refers to the meaning of words and sentences
 - i. Girl and women
 - e. **Pragmatics**: the appropriate use of language in different contexts
 - i. Thank you

XXXVIII. Infancy

- A. Babbling and Other Vocalizations
 - a. Practice making sounds, to communicate, and to attract attention
 - b. Sequence
 - i. Crying
 - ii. Cooing
 - iii. Babbling
 - c. Deaf infants
 - i. Babble with their hands
- B. Gestures (264)
 - a. Showing and pointing at 8 months to 12 months
- C. Recognizing Language Sounds
 - a. Long before they begin to learn words infants can make fine distinctions among the sounds of the language
 - b. Patricia Kuhl
 - i. Research, phonemes from languages all over the world are piped through a speaker for infants to hear
 - c. Infants must fish out individual words from the nonstop stream of sound that makes up ordinary speech
- D. First Words
 - a. Infants understand words before they can produce or speak them
 - b. First word
 - i. 10-15 month
 - ii. Important people
 - iii. Familiar animals
 - iv. Vehicles
 - v. Toys