South Dakota State University

ECE 361: Methods and Materials in Early Childhood Education

Concepts addressed in this course: Major cognitive processes associated with student learning: inductive and deductive thinking

Students should refer to:

Specifically, students should review:
Approaches to Reasoning
Inductive Reasoning
1. An argument that is based on details, specific experiences, or events and a conclusion is drawn from it.
2. Formulating general principles based on one’s knowledge of examples and details
3. Bottom-up thinking/argumentation
4. Observation, pattern, tentative hypothesis, theory
Deductive Reasoning
1. An argument that is based on a general principle, an event (a consequent experience) is seen, and a specific conclusion is reached.
2. Drawing conclusions through application of rules and principles; logically moving from a general rule or principle to a specific solution
3. Top-down thinking/argumentation
4. Theory, hypothesis, observation, confirmation

Helpful websites include:
Exercises with inductive and deductive reasoning:
http://www2.sjsu.edu/depts/itl/graphics/induc/ind-ded.html