DOMAIN 1: APPROACHES TO LEARNING AND COGNITIVE DEVELOPMENT

SUB-DOMAIN: COGNITION AND COGNITIVE PROCESSES

REASONING AND LOGIC/CRITICAL AND ANALYTIC THINKING

GOAL 13: CHILDREN BUILD KNOWLEDGE USING COMPARISON, CONTRASTS, EXAMINATION, AND EVALUATION.

Age Range	Developmental Growth	Child Indicators	Caregiver Strategies
First, Second, and Third Grades	Use if-then reasoning to explain social and natural phenomena.	▪ Combines, separates, orders, and transforms information and objects. ▪ Knows that physical aspects of objects (size, quantity, and number) remain the same even when some aspects of their appearance change. ▪ Considers multiple elements of a problem (e.g. can think about alternatives when solving problems). ▪ Mentally retraces steps when appropriate to solve a problem. ▪ Plays games with rules, though sometimes remakes rules to fit own needs. ▪ Considers behavior and psychological states when interpreting people's intentions. ▪ Describes an experience or experiment, giving logical reasons for the results. ▪ Succeeds in solving problems cooperatively with peers. ▪ Can think about past, present, and future states of objects and people. ▪ Organizes collections according to multiple criteria (e.g. sorting baseball cards according to league, team, and position).	▪ Provide child many and varied in familiar activities and objects to stimulate new abilities in problem solving. ▪ Provide time for children to arrive at conclusions through experimentation. ▪ Plan small group time for children to work together to generate multiple ideas and solutions. ▪ Plan activities where shared stories and solutions represent a variety of people, roles, and cultures. ▪ Read stories and offer scenarios with moral dilemmas and encourage child to generate multiple solutions. ▪ Ask child to relate their own stories and experiences to current topics or books in class. ▪ Document children's explanations of things and revisit the documentation daily to discuss adjustments and new ideas for solving problems or creating new concepts. ▪ Provide learning games that promote systematic thinking such as chess, checkers, Trouble, Sorry, etc. ▪ Introduce history and compare to the present and future. ▪ Provide opportunities to collect and classify objects.