Components of Metacognition

Knowledge about Cognition	Regulation of Cognition
Declarative Knowledge: • knowledge about one's skills, intellectual resources, and abilities as a learner • the factual knowledge the learner needs before being able to process or use critical thinking related to the topic • students can obtain declarative knowledge through presentations, demonstrations, discussions **Procedural Knowledge:** • knowledge about *how* to implement learning procedures (e.g., strategies) • requires students know the process as well as when to apply process in various situations • students can obtain procedural knowledge through discovery, cooperative learning, and problem solving **Conditional Knowledge:** • knowledge about *when* and *why* to use learning procedures • the determination under what circumstances specific processes or skills should *transfer* • students can obtain conditional knowledge through simulation	**Planning:** • planning, goal-setting, and allocating resources *prior* to learning **Information Management:** • skills and strategy sequences used to process information more efficiently (e.g., organizing, elaborating, summarizing, selective focusing) **Monitoring:** • assessment of one's learning or strategy use **Debugging:** • strategies to correct comprehension and performance errors **Evaluation:** • analysis of performance and strategy effectiveness after a learning episode