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**Final Reflection**

## Concept Map III:

## Potential Mediating Factors of Instructional Design for Neurodiverse Learners

Reflecting on the journey from Concept Map I to Concept Map III, I realize that this course has fundamentally transformed how I understand the mechanisms behind teaching, learning, and cognition. This progression isn't just about adding new ideas to old ones but about intentionally reorganizing which theories I prioritize in my instructional design approach. In particular, because instructional design choices may shape outcomes for neurodiverse learners, this course helped me identify potential mediating factors such as cognitive load, executive function, motivation, and self-regulated learning. This shift has led me to question the assumptions I initially held and to confront the complexities of applying theory to practice.

This tension sparked reflection, posed a productive challenge for my research, and prompted me to register for *EDEP 822, Advanced Learning, Motivation, and Self-Regulation,* next semester. I realize that my framework must now integrate the mechanistic precision of Information Processing Theory with the humanistic, context-sensitive insights provided by social cognitive theory and motivation theory. Meanwhile, I am beginning to understand that cognitive load and executive function (which are increasingly central to my thinking about neurodivergent learners) will serve as mediating variables (thanks to my EDRS 811, Quantitative course). While I know that cognitive load influences how much information a learner can process, I am learning that executive function impacts whether a learner can maintain self-regulated learning, and that motivation requires both for a learner to decide whether they want to engage in the effort.

This course has also confirmed my belief that I cannot design for neurodivergent learners simply by "accommodating" them within a universal framework. Reflecting on the traditional theories I studied earlier, such as constructivism, behaviorism, and cognitivism, most of these were developed with neurotypical learners in mind. While keeping this in mind, my goal as I continue at GMU is to ask: *How should these theories be reinterpreted when applied to learners whose cognitive, executive function, and motivational profiles differ significantly?* This shift will move my work from basic accommodations to a theoretical reorientation that applies existing psychological and learning science evidence through a neurodiversity-affirming lens.

As I move forward, I commit to three objectives for myself and my future research. First, I will continue exploring the specific connections between motivation, self-regulated learning, cognitive load, and executive function, aiming to gather empirical evidence about how they interact and how they function as mediating mechanisms between instructional design decisions and outcomes for ADHD, AuADHD, and autistic learners. Second, I will stay attentive to the distinction between learning theories and instructional design theories, ensuring that my framework ultimately provides guidance rather than just explanations. Third, I will embrace the productive discomfort of working across different theoretical domains, resisting the urge to resolve tensions too quickly, since these tensions may hold valuable insights for designing for neurodivergent learners.

The concept map I have created is no longer just a landscape of educational psychology. More than just an artifact I create to show what I already know, this concept map slowly became an intellectual scaffolding for my own learning and a tool for thinking through how the concepts, frameworks, and theories will fit into my research. This shift in how I relate to my own conceptual frameworks reflects the change I want to promote in my research: moving from passive information consumption to active, scaffolded construction of a neuro-embracing design philosophy that combines rigor and humility.