



Use Multiple Modalities

Cognitive Load Theory depends on the concept that the brain can hold and manipulate a specific amount of information at a time. Teachers, therefore, need to be aware of the amount of information, the structure of instruction, and what they are asking the students to do with that information so as to not overload the cognitive abilities of their students. Below are some strategies that will alleviate students' cognitive loads in the classroom.

COGNITIVE LOAD THEORY AND CLASSROOM STRATEGIES

Strategy	Components	Explanation
Consider Time	Reduce Number of Tasks	Limit the number of problems a student receives. By providing fewer questions, the teacher is giving students a more manageable task that will not overwhelm their cognitive abilities.
Routines and Rituals		Following established routines/rituals makes the schedule and tasks easier to remember and navigate. It can also make the process of completing certain tasks rote rather than strained.
Consider Purpose	Eliminate Unnecessary Tasks	Consider the purpose of each task and activity. If there is something that you are asking students to do that is not necessary to the purpose of the lesson or essential for the student to do independently, then provide that information and allow the students to use their cognitive abilities to focus only on what is important.
Clear and Concise Directions	Reduce Redundancy Make Information Clutter Free	Keep it simple. Complex language, especially reworded in several ways, bogs down a student's processing abilities. Don't be afraid to leave white space. Images and extra information often overload the mental capacities of students who are trying to process everything on the page.



Landmark Teaching Principle™ #2

Integrate Material		Combine material into meaningful parts whenever possible. The fewer individual pieces of information a student is asked to learn, the higher the chance the student will remember more.
Multi-Unit and Structure Tasks		Break information into manageable parts whenever possible. For instance, a large block of information would be better processed after being broken up into subheadings, bullet points, etc.
Interconnected Material	Link to preexisting knowledge	The more the teacher can rely on previously developed schema, the higher the chance that students will make those connections and, therefore, limit the amount of new schema needing to be created.
Practice and Review		As previously stated, the more times a student is exposed to material and provided time to practice it, the more likely that student is to internalize that material. Therefore, repetition, practice, and review are instrumental in the learning process.
Technology as a Tool		Using technological tools for executive function skills related to organization, as well as word processors or reading programs, limits the pressure on cognitive load and make space for increased material acquisition.
Consider Emotional Factors	Anxiety Provide Support	<u>Anxiety</u> can play a role in cognitive abilities, therefore it is important to create an emotionally supportive environment that will put students at ease and allow cognitive functions to focus on learning and not managing stress.

HOW IS THIS USING MULTIPLE MODALITIES?

While these strategies are not specifically each related to multiple modalities, each stems in the backdrop of the importance of presenting material in more than one format to ensure engagement and understanding on behalf of the learners.