Steps to Reduce Cognitive Load in Your Classroom

Intrinsic Load	Chunk New Content	Scaffolded Support	Explicit Instruction	Worked Examples	Limit Instructional Objectives
Intrinsic load refers to the mental effort required to learn and understand the core content of a lesson. Understanding new material relies upon the complexity of the information you teach and how well student's working memory can cope. Effective instruction can help manage students' intrinsic load, which can make learning accessible and easier to grasp.	Chunking new content involves breaking down complex information into smaller, more manageable pieces. This approach reduces intrinsic load by making it easier for students to process and understand new material. Effective instructional design uses chunking to support better retention of new information.	Scaffolded support provides step-by-step guidance to help students manage intrinsic load. By gradually reducing support as students gain confidence, instructional design ensures that learners can master complex content without feeling overwhelmed, leading to deeper understanding of new material.	Explicit instruction is critically important for managing intrinsic load, as it clearly outlines steps and expectations for students. By directly teaching key concepts and skills, teachers can reduce confusion, allowing students to focus on understanding the material. Explicit instruction supports effective retention of new information.	Teachers who use worked examples help manage intrinsic load by providing their students with clear, step-by-step models for solving problems. This teaching approach helps to reduce cognitive effort, allowing students to focus on understanding the process, making complex tasks less difficult and easier to learn.	Limiting instructional objectives can do wonders to help manage students intrinsic load by focusing students' attention on only one or two key concepts at a time. This approach can assist in preventing cognitive overload, making it easier for students to absorb and retain new information, which can lead to more effective learning.
Extraneous load	Minimize Irrelevant Information	Manage the Environment	Avoid Redundant Information	Pre-teach Key Concepts	Clear and Concise Instructions
Extraneous load is the mental effort caused by distractions or poorly designed instruction that confuses learning. Distractions can breach working memory limits, making it harder for students to focus on essential content of a lesson. Reduce extraneous load by minimizing distractions and simplifying materials.	Minimizing irrelevant information is essential for reducing students' extraneous load. When teachers focus on core content and avoid unnecessary details, students can concentrate better, which reduces mental strain. This helps to not breach students' working memory limits.	Managing the classroom environment is crucial for reducing extraneous load. By creating an organized, focused setting, teachers help students to concentrate on learning. A well-managed environment enables students to use their cognitive resources efficiently, enhancing understanding and retention.	Avoiding redundant information is key to reducing extraneous load. When teachers reduce unnecessary repetition, students are better able to focus on understanding and integrating new material. This helps to prevent cognitive overload, which can lead to better student comprehension.	The pre-teaching of key concepts can reduce extraneous load by making students familiar with essential information. Some preparation and pre-teaching of important concepts can help students to better focus on integrating new complex content, without the danger of becoming overwhelmed.	Using clear and concise instruction is vital for reducing extraneous load. When teachers communicate directly and without ambiguity, students can better understand the material and avoid unnecessary confusion. This allows for students to focus on learning key content more effectively and with greater understanding.

