



Dual Coding¹

UDL CHECKPOINT 2.5: [Illustrate through multiple media](#) — Provide alternatives, especially illustrations, simulations, images, or interactive graphics, to support comprehending and retaining information.

What is it?

Dual coding is a learning theory that posits that people learn best when information is presented in visual and verbal formats. The human brain processes information through verbal (linguistic) and visual (non-linguistic) channels. When presented in both formats, it creates two separate representations of the information in the brain, enhancing comprehension and retention.

Why do it?

Dual coding is vital because it capitalizes on the human brain's ability to process information more effectively when presented in multiple formats. By integrating text and visuals, you engage both language and visual processing systems. Dual coding can help learners (a) engage in learning, (b) comprehend new information, (c) remember information, and (d) apply what they have learned to new situations.

How can I apply it?

Here are some suggestions for implementing dual coding in your practice.

- **Include relevant visuals in lectures and presentations.** This could include diagrams, graphs, images, videos, or real-world objects.
- **Provide graphic organizers.** Graphic organizers are visual representations of information that help learners understand and organize complex concepts.
- **Create multimodal assignments.** Multimodal assignments require learners to combine different media types to communicate their learning.
- **Encourage learners to create their own visuals.** Learners actively process and engage with the information when they construct their own visual representations (e.g., diagrams, mind maps, infographics) alongside written notes or explanations.

Summary

Dual coding is a valuable tool for enhancing the effectiveness of learning methods, materials, and resources. It can improve learners' comprehension, memory, and overall learning experience.

¹ Developed using AI, peer-reviewed journal articles, and web-based resources.