

The Science of Learning

Learning Theory: **Dual Coding**

Definition: Dual coding theory (DCT) explains human behavior and experience in terms of dynamic associative processes that operate on a rich network of modality specific verbal and nonverbal (or imagery) representations.

Effect: Recall/recognition is enhanced by presenting information in both visual and verbal form.

Why it works:

Research: [Dual Coding Theory and Education Clark, J. and Pavio, A.](#)

Key Points from the article:

- Additive effects from imagery and verbal coding is more beneficial than just verbal coding alone.
- Active learning sessions involving concrete information and vivid images help form better memory and comprehension than sessions that are more abstract/non-image arousing.

Curricular Design Application at the Lerner: The Vermont Integrated Curriculum is delivered in a multimedia format. The integration of text, photos, videos, and other interactive in-class activities allows content to be delivered in a way that enhances learning and memory formation.

1. Independent Learning that pairs words and images

2. Workshops that require sketching or concept mapping

Other Resources: [Study Strategies: Dual Coding \(Video\)](#)