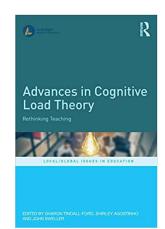


INTERACT123 Research Round-Up: **Cognitive Load**

March 2023

Welcome to the INTERACT123 Research Round-Up. Each month, we will provide you with recommendations for leading resources on a specific topic to support teaching, learning, and student success!

Books



Sharon Tindall-Ford, Ph.D. (Editor), Shirley Agostinho, Ph.D. (Editor), & John Sweller, Ph.D. (Editor)

<u>Advances in Cognitive Load Theory: Rethinking Teaching</u>

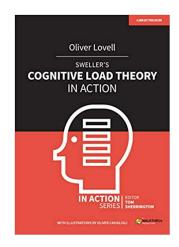
"Cognitive load theory uses our knowledge of how people learn, think and solve problems to design instruction. With contributions from the leading figures from around the world, this book provides a one-stopshop for the latest in cognitive load theory research and guidelines for how the findings can be applied in practice." book cover



Paul Kirschner & Carl Hendrick

<u>How Learning Happens</u>

"I know of no other book that provides such a rigorous, accessible and practical summary of the last 50 years of research and educational psychology, and anyone who wants to understand how research can improve teaching needs to read this book. Highly recommended." book review

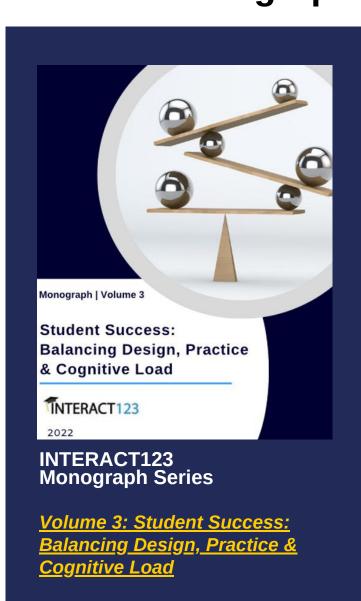


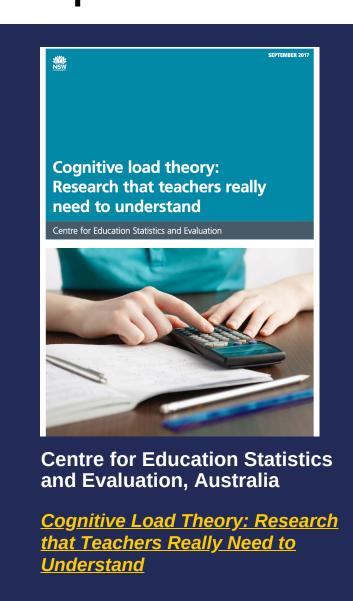
Oliver Lovell

<u>Sweller's Cognitive Load Theory in Action</u>

"What is it that enables students to learn from some classroom activities, yet leaves them totally confused by others? Although we can't see directly into students' minds, we do have Cognitive Load Theory, and this is the next best thing." book overview

Monographs & Reports





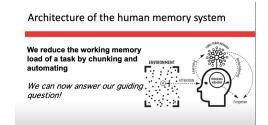
Videos



"Cognitive Load Theory: A teacher's guide - Structural Learning"

John Sweller, Professor Emeritus University of New South Wales

Video



"An Introduction to Cognitive Load Theory"

Ollie Lovell, Author, Teacher, Podcaster

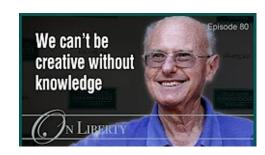
Video



"Designing Multimedia Instruction to Maximize Learning"

Richard E. Mayer Distinguished Professor of Psychology University of California, Santa Barbara

<u>Video</u>



"We Must Follow the Educational Science"

John Sweller Professor Emeritus University of New South Wales

<u>Video</u>

Articles

Five strategies for optimizing instructional materials: Instructor- and learnermanaged cognitive load

Castro-Alonso, J. C., de Koning, B. B., Fiorella, L., & Paas, F. (2021). Educational Psychology Review, 33, 1379–1407.

Optimizing lectures from a cognitive load perspective

Jordan, J., Wagner, J., Manthey D. E., Wolff, M., Santen, S., & Cico, S. J. (2019). *AEM Education & Training, 4*(3), 306–312.

Cognitive theory of multimedia learning

Richard Mayer. (2023). GoogleScholar.

<u>Cognitive-load theory: Methods to manage working memory load in the learning of complex tasks</u>

Paas, F., & van Merriënboer, J. J. G. (2020). *Current Directions in Psychological Science*, 29(4), 394-398.

<u>Shifting online: 12 tips for online teaching derived from contemporary educational psychology research</u>

Sepp, S., Wong, M., & Hoogerheide, V., & Castro-Alonso, J. C. (2022). *Journal of Computer Assisted Learning, 38,* 1304–1320.

<u>Understanding cognitive load in digital and online learning: A new perspective on</u> extraneous cognitive load

Skulmowski, A., & Xu, K. M. (2022). Educational Psychology Review, 4, 171–196.

Cognitive architecture and instructional design: 20 years later

Sweller, J., van Merriënboer, J.J.G. & Paas, F. (2019). Educational Psychology, 31, 261–292.



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Research Round-Up







