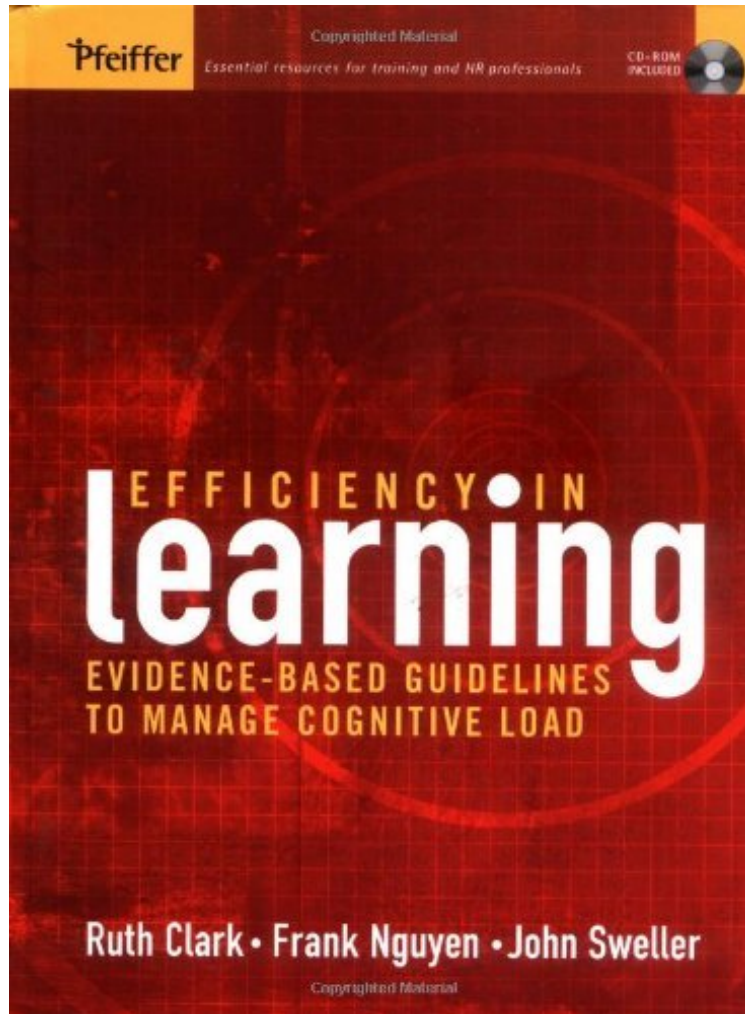


Efficiency in Learning: Evidence-Based Guidelines to Manage Cognitive Load

Ruth C. Clark, Frank Nguyen, John Sweller
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Ruth C. Clark, Frank Nguyen, John Sweller : Efficiency in Learning: Evidence-Based Guidelines to Manage Cognitive Load before purchasing it in order to gauge whether or not it would be worth my time, and all praised Efficiency in Learning: Evidence-Based Guidelines to Manage Cognitive Load:

3 of 3 people found the following review helpful. ExcellentBy Wade Stuart WillettI use Adobe Captivate to teach a high school science class. This book allows me to go through my lessons and polish them in a way that will help students understand, learn and retain the material more efficiently. This is exactly the research I was looking for. It is very practical. She shows the research, the results and then how to apply these results to designing effective lessons. Thankyou.That said, the book continuously refers to a CD which apparently the kindle version doesn't have. So there is a significant difference between the Kindle version and the book. This is a book about Elearning and using

multimedia, you would think they would have been able to include anything on the CD with the book in the Kindle edition. 18 of 18 people found the following review helpful. Efficiency in Learning: Efficiency in Design By Kevin Wilcoxon I've been a big fan of Ruth Clark since I attended one of her workshops in 2002, and especially since buying her book, e-Learning and the Science of Instruction, in 2004. There are at least a few reasons. One, Ruth's guidance for instructional designers is based in research - not fad and not personal belief. Two, she bridges the gap between educational research and training for adults. Three, she always makes sure to build specific, useful guidelines from the research and theory she cites. This time out, Ruth, along with Frank Nguyen of Intel and John Sweller of the University of New South Wales, lay down a host of design recommendations based on cognitive load theory. The theory centers around the reality of working memory - the in-the-now processing capacity of the brain, limited to 7 bits, plus or minus two. Learning is limited by the capacity of working memory, and there are a number of strategies instructional designers can use to manage the cognitive load placed on it so that learning is made more effective, more efficient or both. I'll point out just two important ideas from the book and trust that you will be sufficiently tempted to take possession of this important book. The theory has evolved three types of cognitive load: intrinsic, extrinsic and germane. Intrinsic load is the demand placed on working memory by the nature of the task, more specifically the interactivity between content elements that must be learned. The amount of intrinsic load can be seen in the difference between learning the alphabet and learning to read. Reading involves understanding grouped letters as words, attaching meaning to them and understanding them when placed with other words that create complete thoughts. Extraneous load is that imposed on working memory that does not add to learning. Poor writing increases extraneous load, the kind that needs to be minimized or eliminated. Germane load places demand on working memory that contributes to learning - practice exercises, varied examples and the like. Ruth and friends cite plenty of research to support the theory and then provide many practical guidelines flowing from it. The other big idea, at least for me, is the realization that managing cognitive load for experts is very different than for novices. Most of the guidelines used for designing instruction for novices must be faded and eventually eliminated as learners gain expertise. Again, research and practical guidelines follow from this insight. My single - and small - criticism for Ruth Clark is the continued inclusion of material from her previous works. For example, I keep seeing the same little guy and his memory looking at the computer screen and listening to his computer speakers in every one of her books. She also continues to treat the reader as a novice, supplying all those supports for novices that frustrate me a little. The obvious answer is to ignore those supports and move on to the more meaty content. Problem is, from a value perspective, I'd be skipping over about a third of the book! In sum, I find this book to be essential for instructional designers and those who manage or purchase learning programs. Just as the practice of medicine is improved by evidence-based procedures and guidelines, so too is instructional design. 0 of 0 people found the following review helpful. Well presented, and well enough supported By Odd dot This is the second Ruth Clark book on instruction and learning that I've read. I believe her work is amongst the most accessible and relevant in instruction presentation, from both an academic and practical standpoint. Here she ties practical, logical approaches and solutions to managing cognitive load in various learning environments, and supports those solutions with simple documentation of viable research. As with her book, 'Developing Technical Training,' her style in 'Efficiency in Learning...' is uncluttered and really delivers valuable insight. It's one of those books you come away from feeling you've really learned something relevant, and reference back to again and again.

Efficiency in Learning offers a road map of the most effective ways to use the three fundamental communication of training: visuals, written text, and audio. Regardless of how you are delivering your training materials—;in the classroom, in print, by synchronous or asynchronous media—;the book's methods are easily applied to your lesson presentations, handouts, reference guides, or e-learning screens. Designed to be a down-to-earth resource for all instructional professionals, Efficiency in Learning's guidelines are clearly illustrated with real-world examples.