Understanding How We Learn: A Visual Guide

By Yana Weinstein and Megan Sumeracki with Oliver Caviglioli. (2019), 165 pages, ISBN:9781138561724. $27.22

Subject: How to Be a Better Teacher

Useful for: Useful for those who teach or learn, especially if you like solid, evidence-based practices and visual aids.

Format: Chapters (with detailed overviews for each), plus a glossary, index, and lots of illustrations.

Reviewer’s Comments:

As co-founders of the Learning Scientists, Weinstein and Sumeracki are dedicated to translating the results and data behind years of cognitive psychology research into easy-to-understand and usable information that can be applied in the classroom. All of the suggestions that they provide in this book are supported by scientific research and are nicely illustrated by Caviglioli. The authors make tracking down the original studies easy, with detailed bibliographies after each of the thirteen chapters.

The book is broken down into four parts, with the first part examining the common misconceptions about learning and teaching. For example, did you know that learning styles have been debunked as a method for learning several times over? The authors then take it a step further by explaining why these misperceptions continue despite having been solidly vilified by cognitive psychology research. The answer, the difficulty of both reading and keeping track of that type of data when you are a classroom teacher, caused this book. As such, the authors explicitly couch the book as a bridge between those doing the research and those attempting to apply that research in the classroom.

Overall, they succeed. The second part provides an overview of what we know about how we learn, focusing specifically on perception, attention, and memory. Then, the authors turn to the meat of the book in part three, where they walk through the top learning strategies for effective learning. For those familiar with this area of study, the results are unsurprising: use spaced practice rather than cramming; interleave topics rather than studying one topic at a time (and try to make connections between disparate topics); encourage elaboration by asking how and why questions about a topic to pull out key concepts; use multiple, different concrete examples as a way to get at that ever-elusive goal of transfer; use relevant, visual cues; and practice difficult retrieval. I especially appreciated the discussion of the difficulties of transfer, and how to teach students using examples that are relatively disparate but that require a similar method in order to solve them (sound familiar to anyone who’s given multiple hypotheticals and tried to explain the process underlying them)?
The last part provides tips, based on the previous three section, to three different audiences: teachers, students, and parents. The tips are essentially the same for each audience, just couched in slightly different language.

Overall, I enjoyed this book – it was readable and the illustrations and examples were a nice grab, but it provided very similar information to other like-minded books, such as Make It Stick. If you are new to these concepts, I would certainly recommend this book. It’s a short, easy read and it’s packed with good information. If these concepts are familiar to you, I would still recommend this book (remember, spaced repetition!), perhaps with an eye towards the best way to translate this information into a legal research classroom.