
Understanding how the brain learns should inform our teaching practices, but finding the literature on this topic is challenging as it comes from the behavioral sciences, education, and cognitive psychology, as well as the neurosciences. Two recognized experts in the field, David A. Sousa and Mariale Hardiman, have recently published updated versions of earlier books, *How the Brain Learns*, 4th ed., and *The Brain-Targeted Teaching Model for 21st-Century Schools*, respectively, providing valuable resources for educators. Both books are aimed at K–12 teachers, but can easily be applied to teaching in higher education.

Both books are research-based and contain comprehensive, up-to-date references from a wide variety of sources including original research from respected journals in the cognitive and neurosciences. For those interested in keeping up with the literature, the reference list alone will provide you with key journals and authors to follow. A quick comparison of the references in both books showed that while key references were cited in both, the majority were different, reflecting the different approaches to the topic as well as the amount of literature on this topic.

But what does it look like in the classroom? The jump from theory to practice is not always easy. Just because you understand how the brain works, does not mean you can change your teaching practice to reflect that. Both books do an excellent job of helping you create that bridge, by providing sections on application at the end of each chapter including examples from expert teachers. Additionally, there is a brain-targeted teaching website, http://braintargetedteaching.org, which provides an overview of the model, including links to relevant journal articles and teaching units for K–12 classrooms.

The information is similar in both books, but is organized differently and approached from different perspectives. If you were to choose one book, you might want to do it on the basis of how the book is organized. The chapters in *How the Brain Learns* are based on different functions of the brain and include, among others, basic brain facts, how the brain processes information, memory, retention, and learning, the power of transfer, brain organization and learning, and thinking skills and learning. The chapters in *The Brain-Targeted Teaching Model for 21st-Century Schools* are organized by the six brain targets of the model and include, among others, information from the neuro- and cognitive sciences that educators should know: separating neuromyth from neuroscience; brain structure and function; establishing the emotional climate for learning; designing the learning experience; teaching for mastery of content, skill, and concepts; and teaching for the extension and application of knowledge—creativity and innovation in education.
Since the target of the books is K–12 teaching, some sections, such as the one on “learning to read”, struck me as particularly irrelevant until I started thinking about it. In addition to teaching students how to read scientific literature, which is a learned skill, we also teach students to read graphs, gels, X-rays, and a variety of other data outputs. We also complain that they don’t do this type of reading well. After reading the section on learning to read, I understood why they have difficulty and how I could help students learn to “read” data.

I found both books informative and useful. The different presentations of the information help me contextualize and apply it to my teaching. I will continue to use both books. They provide information that helps me understand why some things I do work, which will help me transfer effective teaching to other settings, and also provide “Aha” moments which will, I hope, translate to more effective learning in my classes.

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