The Brain-Targeted Teaching® Model

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Overview. The Brain-Targeted Teaching® Model is a pedagogical framework to guide educators in delivering a rigorous and engaging program of instruction informed by research from the learning sciences as well as evidence-based effective instruction. The model delineates six components, or "brain targets" for the teaching and learning process and describes research that supports each component.

The Brain-Targeted Teaching® Model focuses on positive and effective emotional and physical learning environments; the development of "big picture" concepts; mastery of content, skills and concepts; real-world application of learning; and evaluation for learning, as well as of learning. Fundamental to the application of the model is the integration of the arts.

The model has successfully informed teaching and learning from early childhood learning environments to adult learning classrooms and online experiences.

Brain Target 1: Emotional Climate

A large body of research supports the notion that a positive emotional climate paves the way for higher levels of learning and performance. Crafting a positive learning environment and eliminating factors that produce stress are essential to quality instructional programs, including those for early childhood to adult learners.

Brain Target 2: Physical Environment

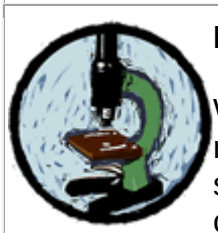
The learning environment can be a powerful tool for focusing attention and offering an engaging learning experience. Novelty in the environment can foster attention, and certain environmental factors such as lighting, sound, scent, order, and opportunity for movement can enhance the learning experience for all learners whether in early childhood centers or on college campuses.

Brain Target 3: Learning Design

This target encourages educators to use content standards, curriculum guidelines, or course syllabi to design overarching goals and concept maps and to display these learning outcomes and concept maps in visual representations such as graphic organizers. Such visual displays give students "big picture" ideas or global understandings of content and concepts, connecting these ideas to prior knowledge and understanding. In a neurological process known as "patterning" the brain uses prior knowledge to categorize stimuli into concepts that are either familiar or novel and then combines these concepts to create new patterns of thinking and understanding.

Brain Target 4: Teaching for Mastery

This target makes use of what neuro- and cognitive sciences tell us about how information is encoded, processed, stored, and retrieved in working memory and long-term memory systems. The target focuses on ways to enhance long-term retention of important content through the inclusion of active learning as well as diverse and creative learning experiences. Integration of the arts into instructional activities is a useful tool for achieving learning goals.



Brain Target 5: Teaching for Application

When students extend knowledge by applying it in real-world settings, they engage multiple and complex systems of retrieval and integration. With this target, we are seeking to strengthen and extend thinking and learning by applying skills and content in meaningful, creative problem-solving tasks. Examples include conducting investigations and surveys, designing experiments, analyzing perspective, building projects, and engaging in improvisation through the visual and performing arts.

Brain Target 6: Evaluating Learning

Evaluation of instruction is as important to the learning process as are deep and thoughtful learning activities. This target expands traditional types of assessments to include the use of oral and written probes, rubrics, student portfolios, student-generated products, performance-based assessments, and student self-reflections. The Brain-Targeted Teaching Model emphasizes that evaluation is an ongoing, two-way process. Relevant and timely feedback about performance is useful not only for teachers but also as a means for reinforcing students' knowledge.

What's next? By designing learning units that incorporate the six brain-targets, the teaching and learning process not only becomes more effective, it becomes more engaging and fun for both the teacher and the learner!

To review research on the Brain-Targeted Teaching® Model, view video segments from teachers who use the model, review field-tested learning units, and download free a planning and study guide to Brain-Targeted Teaching for 21st Century Schools, visit the web site:

www.braintargetedteaching.org