

## Research Foundations

“Engage Learning consultants transform research into action by combining it with the most current teaching resources to provide teachers with the tools needed to increase student achievement.”

-Diana Jo Johnston, President

Engage Learning provides a research driven, student-centered learning philosophy. We know that an educator’s time for research is limited, if not nonexistent. Our consultants collaborate professionally with experts in the field, attend relevant trainings, and study contemporary research. We transform the daunting task of staying current into helpful, teacher-friendly methods and ideas that we tailor to each individual’s needs.

### Engage Learning Consultants:

- Know current research
- Translate current research into practice
- Assist teachers in implementing research in the classroom
- Use research to achieve results

## The Engage Learning Student-Centered Approach is based upon the following research:

### *The Theory of Multiple Intelligences by Howard Gardner*

Howard Gardner initially formulated a list of seven intelligences (Gardner 1983). In 1999, Gardner also found evidence to support an eighth intelligence. They are:

1. Linguistic intelligence
2. Logical-mathematical intelligence
3. Musical intelligence
4. Bodily-kinesthetic intelligence
5. Spatial intelligence
6. Interpersonal intelligence
7. Intrapersonal intelligence
8. Naturalist intelligence

Using these eight intelligences, Gardner identifies eight different ways of teaching and learning. His theory supports what educators know from their observations; students think and learn in many different ways. Engage Learning uses the Theory of Multiple intelligences to provide educators with a conceptual framework for organizing and reflecting on pedagogical practices to inform instruction, assessment, and develop a student-centered educational approach to better meet the needs of the entire range of learners in each classroom.

### *References:*

- ◇ **Gardner, Howard** (1999) *The Disciplined Mind: Beyond Facts And Standardized Tests, The K-12 Education That Every Child Deserves*, New York: Simon and Schuster (and New York: Penguin Putnam).
- ◇ **Gardner, Howard** (1999) *Intelligence Reframed. Multiple intelligences for the 21st century*, New York: Basic Books.
- ◇ **Gardner, H.** (1991) *The Unschooled Mind: How children think and how schools should teach*, New York: Basic Books.

- ◇ **Gardner, Howard** (1989) *To Open Minds: Chinese clues to the dilemma of contemporary education*, New York: Basic Books.
- ◇ **Gardner, Howard** (1983; 1993) *Frames of Mind: The theory of multiple intelligences*, New York: Basic Books.

### ***The Zone of Proximal Development by Lev Vygotsky***

Vygotsky (1978) maintained that the child follows the adult's example and gradually develops the ability to do certain tasks without help or assistance. He called the difference between what a child can do with help and what he or she can do without guidance the "zone of proximal development" (ZPD).

The balanced literacy approach to teaching reading and writing incorporates this concept known as scaffolding. As children play and interact with others at home and at school, they develop specific models of communication, expression and explanation. Goodman and Goodman (1990) believe this social use of language forms the basis for literacy. Tharp and Gallimore (1988) use a four-stage model of ZPD to show how children develop speech and language.

Various researchers (Newman, Griffin, & Cole, 1989) also suggest that the activities included in the ZPD reflect the cultural background of the learner.

Engage Learning uses the ZPD research to transfer knowledge through *The Coaching Model*<sup>TM</sup>.

#### *References:*

- ◇ **Vygotsky, L. S.** (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- ◇ **Au, K. H.** (1992). Changes in teacher's view of interactive comprehension instruction. In L.C. Moll (Ed.), *Vygotsky and education: Instructional implications of sociohistorical psychology* (pp. 271-286). New York: Cambridge University Press.
- ◇ **Beyer, B. K.** (1991). *Teaching thinking skills: A handbook for elementary school teachers*. Boston: Allyn and Bacon.

### ***Brain Research***

Engage Learning integrates what we know about how the brain learns with current educational practices to enhance the success of each individual learner. We use the brain research and information of Eric Jensen, David Sousa and Leslie Hart, as well as the Mind Mapping techniques of Tony Buzan and Nancy Margulies to unleash the natural learning potential of each student by enhancing memory, concentration, creativity, and comprehension to accelerate a student's ability to learn, remember, and apply information.

#### *References:*

- ◇ **Caine, Renate Nummela & Caine, Geoffrey** (1994, 2004) *Making Connections: Teaching and the Human Brain*. Menlo Park, CA: Addison-Wesley Publishing Company.

- ◇ **Sousa, David** (2001) *How the Brain Learns*. California: Corwin Press.
- ◇ **Wolfe, Patricia** (2001) *Brain Matter – Translating Research into Classroom Practice*. . Virginia, ASCD
- ◇ **Jensen, Eric** (1994) *Brain-Based Learning & Teaching*, Turning Point for Teachers. San Diego: The Brain Store.
- ◇ **Jensen, Eric** (1994) *The Learning Brain*, Turning Point for Teachers. San Diego: The Brain Store.
- ◇ **Buzan, Tony** (1993) *The Mind Map Book: How to Use Radiant Thinking to Maximize Your Brain's Untapped Potential*. New York: Penguin Group.
- ◇ **Margulies, Nancy** (1991) *Mapping Inner Space*. Tucson, AZ: Zephyr Press

### ***Higher Order Thinking.***

In 1956, Benjamin Bloom, Bertram Mesis, David Krathwohl and others worked to develop the *Taxonomy of Educational Objectives: The Classification of Educational Goals*, It was a model describing educational activities in three domains; cognitive, affective, and psychomotor. The work in the cognitive domain included six levels of thinking: knowledge, comprehension, application, analysis, synthesis, and evaluation. These levels have now become the basis for higher order thinking skills. The model provides a structure for Engage Learning to use in building curriculum materials and developing instructional strategies that lead to greater depth of understanding. Engage Learning consultants use Bloom's taxonomy and current work in critical thinking by David Perkins, Robert Marzano, and others to chunk information into meaningful and manageable pieces based on the categories of difficulty to facilitate the acquisition and application of knowledge. Engage Learning uses these skills involving complex thought processes are utilized by Engage Learning in creating assessment practices and curriculum standards and benchmarks.

#### *References:*

- ◇ **Costa, Arthur** (2001) *Developing Minds: A Resource Book for Teaching Thinking*, Virginia, ASCD
- ◇ **Perkins, David** (1995) *Smart Schools: Better Thinking and Learning for Every Child*. New York. The Free Press – A division of Simon & Schuster, Inc.
- ◇ **Benjamin S. Bloom, Bertram B. Mesia, and David R. Krathwohl** (1964) *Taxonomy of Educational Objectives* (two vols: The Affective Domain & The Cognitive Domain). New York. David McKay.

### ***Effective Schools***

The Effective Schools Research Abstracts address topics related to instruction, assessment of student progress, instructional leadership, school improvement, school mission, school culture, home/school relations, high expectations and overall characteristics of effective schools. Engage Learning uses the research abstracts to provide the momentum for continuing to reflect on current practices and revise, refine, and renew instruction, leadership and learning.

Robert Marzano's recent work in effective schools, effective classrooms, and effective grading provide remarkably clear guidance for schools to employ in developing high quality programs. Using current



research, Engage Learning analyzes instructional strategies, school environments, student motivation and the critical role of leadership to provide guidance and support in the implementation of student-centered learning.

*References:*

- ◇ **Marzano, Robert J** (2003) *What Works in Schools: Translating Research into Action*. Virginia. ASCD
- ◇ **Marzano, Pichering, Pollock** (2001) *Classroom Instruction that Works Research –Based Strategies for Increasing Student Achievement*. Virginia. ASCD
- ◇ **Reading and the Native American Learner Research Report** (2000). Prepared by Joe St. Charles, M.P.A., Magda Costantino, PhD., The Evergreen Center for Educational Improvement, The Evergreen State College. This report was prepared in collaboration with the Office of Superintendent of Public Instruction, Office of Indian Education Programs, Bureau of Indian Affairs, Department of the Interior.
- ◇ **Dalton, Stephanie S.** (1998) *Pedagogy Matters: Standards for Effective Teaching Practice*. California. CREDE (Center for Research on Education, Diversity & Excellence.)

Integrating these principles with teaching and administrative expertise Engage Learning has created a research based student-centered educational approach.

Engage Learning welcomes any additional research inquiries you may have.  
Please contact us at [research@engagelearning.com](mailto:research@engagelearning.com)