

## Compassion and Achievement

### Background

- Dr. Richard J. Davidson is a Professor of Psychology and Psychiatry, Director of the Waisman Laboratory for Brain Imaging and Behavior and the Laboratory for Affective Neuroscience, and Founder and Chair of the Center for Investigating Healthy Minds, at the University of Wisconsin-Madison. The center facilitates rigorous study of how healthy qualities of mind (including compassion and altruistic behavior) can positively impact the well-being of individuals and their communities. He is an expert on imaging the effects of meditation. His early work documented changes in the brains of monks and other practitioners of meditation and related contemplative practices.
- The research conducted by scholars through Dr. Davidson's center point to the core link between Compassion and Student Achievement as the cultivation of compassion through social-emotional learning, which has been scientifically proven to foster academic achievement, a sense of belonging, and positive behavior.
- There is a growing movement to create "compassionate schools" with the state of Washington at the forefront. Curriculum has been developed for use state-wide that provides a deeper understanding of learning and teaching, as well as the concepts of compassion, compassionate schools, resiliency, and school-community partnerships. (*The Heart of Learning and Teaching: Compassion, Resiliency, and Academic Success*, January 2011 -superintendent of public instruction, Washington; Western Washington University)

### Key Findings

- Dr. Davidson's research center, as well as other scholars studying this area, indicates that compassion and mindfulness have implications for reducing prejudice, bullying, discipline problems, and stress, and improving resiliency, promoting social-emotional learning, and improving cognitive functioning.
- Dr. Davidson's brain research has demonstrated that positive emotions such as kindness and compassion can be learned in the same way as playing a musical instrument or proficiency in a sport. Scans of brain circuits used to direct emotions and feelings were dramatically changed in subjects who practiced compassion mediation.
- The skills of kindness and mindfulness are critical for learning. Mindfulness cultivates the capacity to regulate attention – the building block for all kinds of learning; and kindness facilitates the ability to cooperate which is important for success in life, team-building, and leadership.
- In children, more exposure to stress is related to some lessened cognitive processes such as memory. The experience of compassion evokes responses in the human body that arouse the nervous system that operates as an antidote to stress, maintaining a healthier state with more access to brain power for learning.
- Compassion prevents escalating tit-for-tat aggression and downward spirals of pro-social behavior, and enhances individual success by reducing the likelihood of engaging in punishment.

## Recent Studies on students and teachers from Dr. Davidson's Research Center

- An experimental study of a kindness curriculum for four and five-year old students to examine the effects of training on students' attention and emotion regulation, relationships with classmates, and pro-social behaviors.
  - Comparisons from before and after the kindness curriculum indicated improvements in attention and increases in pro-social behaviors, including self-regulation, among children who received instruction. (Pre-K Kindness Project; Flook & Pinger)
- A recent experimental study evaluating the effects of mindfulness training for elementary school teachers and their students was conducted. Teachers underwent an 8-week modified mindfulness-based stress reduction program.
  - Teachers were assessed on cognitive tasks, physiological markers of stress, behavioral observation in the classroom, and self-report. Results indicated that teachers who underwent the mindfulness training reported increased mindfulness and well-being, reduced stress, and demonstrated more effective teaching behaviors.
- A recent experimental study was conducted with eighth grade students receiving mindfulness training in school.
  - The intervention group that received mindfulness training made fewer errors and improved in their use of strategy on a problem solving task involving working memory, reported feeling more in control and responsible for their actions (internal locus of control), and teachers observed greater social competence from before to after the training.
- Dr. Davidson is currently working with others on a test of two educational games to help eighth graders develop beneficial social and emotional skills-empathy, cooperation, mental focus and self-regulation through technology.

**Sources:** Davidson, R.J., Ekman, P., Saron, C.D., Senulis, J.A. and Driesen, W.V. 1990. Approach-withdrawal and cerebral asymmetry: Emotional expression and brain physiology I, *Journal of Personality and Social Psychology*, 58(2): 330-341.; Davidson, R.J., Jackson, D.C. & Kalin, N.H. 2000. Emotion, plasticity, context and regulation: Perspectives from affective neuroscience, *Psychological Bulletin*, 126: 890-909.; Davidson, E.H. 2001. *Genomic regulatory systems: development and evolution*. NY: Academic Press; Teacher Wellness Program; Flook & Pinger; Pre-K Kindness Project; Flook & Pinger; Condon, P. & DeSteno, D. Compassion for one reduces punishment for another: *Journal of experimental Psychology*; <http://www.investigatinghealthyminds.org/>; *The Heart of Learning and Teaching: Compassion, Resiliency, and Academic Success*, January 2011 Wolpaw, Johnson, Hertel, Kincaid (superintendent of public instruction, Washington; Western Washington University;

Department of Data Management, Planning & Program Evaluation  
Dr. Robert J. Rodosky, Executive Director