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## Abstract 7

### Brain, Heart, and Education

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Connectivity asserts itself today as a universal principle. Well-informed minds recognize integral connections within all life processes. Connectivity's verity reconfirms the value of holistic perspective as a research method. Predicated on this value, heart-brain connections become a justifiable consideration for integrated studies.

This presentation reports on research which suggests that a fractal-like triad pattern of form and function repetitiously typifies brain, body, and heart function at micro and macro levels. This triad pattern offers new perspective relating heart-brain science to educational practice—learning abilities/disabilities, emotional intelligence, states of resilience, motivational considerations, heart-/brain-friendly instruction, etc. The triad construct further substantiates the need for interdisciplinary collaboration.

More than any other profession, education shapes brains and

patterns social/emotional behavior, yet teacher education currently provides little or no emphasis on the science of learning, relating, and thriving. There exists a need to include this study—including the heart's involvement—in teacher training.

Gradually forming now is a consortium recognizing this need. This evolution resembles the development of "neuroeducation," an initiative that relates brain science to classroom practice. Harvard University's Graduate School of Education leads this movement with their *Mind, Brain and Education* program.

Developing now at La Sierra University's School of Education is a graduate concentration called *Brain, Heart, and Education (BHE)*. Established on the postulate that *in order to understand the brain, we must also understand its connections to the heart*, this 20-unit concentration emphasizes study and research on educational implications of heart-brain connections. Related research already under way includes "Effect of Media Violence on HRV/GSR/RR" and "Baseline HRV Comparisons Among Varied K-6 School Populations Across North America."

This session reports on education-related heart-brain science developments. Additionally, it describes interdisciplinary affiliations, including mentorship provided by Earl Bakken in support of the concept of "blended education."