civil & environmental engineering department presents 2011 Distinguished Lecture Kirlin Distinguished Seminar Series

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ENHANCING ENGINEERS' CREATIVITY AND INNOVATION: A WHOLE-BRAIN APPROACH



his presentation asserts that engineers could be more creative and innovative; argues that they should be more creative and innovative, given major global changes; and offers ideas on how to enable them do so. Views of various futurists are used to argue the world is experiencing a shift from the knowledge age, with its left-brain foundation, to other possibilities such as the conceptual, opportunity, and wicked problems ages. The commonality among various future scenarios is the need for whole-brain thinking. Personal professional success and organizational success will increasingly require right-brain individual and group qualities such as adaptability, collaboration, creativity, empathy, entrepreneurship, innovation, synthesis, and visualization. After offering a brief brain primer, the presentation presents various tools and techniques which recognize that, while creative and innovative ideas lie within most of us, we need mechanisms to release them within individuals and groups. Many methods are identified and some are illustrated. The presentation offers ideas on how creativity and innovation knowledge, skills, and attitudes might be introduced to engineering students and engineering practitioners.

Stuart G. Walesh, Ph.D. PE, Dist.M.ASCE



Wednesday, October 12, 2011 11:30am Meet the speaker, refreshments 12:00pm Lecture 1179 Glenn Martin Hall