

962-S1-498

Kathleen L Bonn* (klbonn@mtu.edu), Kathy Bonn, Department of Mathematical Sciences, Michigan Technological University, Houghton, MI 49931-1295, and **Barbara L Grabowski** (bgrabowski@psu.edu), Barbara L. Grabowski, 310E Keller Building, Penn State University, University Park, PA 16802. *Generative Learning Theory: A Practical Cousin to Constructivism.*

The K-16 mathematics education research community has embraced the philosophy of constructivism, yet instructors continue to struggle with practical applications of this philosophy. We suggest that constructivist researchers and practitioners study and employ a theory of learning proposed by Merlin Wittrock in 1974—generative learning theory. Beginning with a display of Grabowski’s concept map, which illustrates Wittrock’s generative learning in action, we then highlight the similarities and differences between constructivism and generative learning theory, and conclude with potential applications of generative learning theory to research in undergraduate mathematics education. (Received October 02, 2000)