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Marie Nicole Ermete* (ermet1mn@gmail.com), **Natasha Dawn Brackett** and **Karli Nicole Powell**. *The Role of Dynamic Representations in Development of Algebraic Concepts*. Preliminary report.

One of the goals of mathematics education is to allow students to understand mathematical ideas from various perspectives. The ability to move among representations allows the student to become better problem-solvers. Based on the symbolic mediation model proposed by Kaput, Blanton, and Moreno (2008), this talk lays out a theoretical framework for the use of dynamically-connected representations to help students develop algebraic concepts. In addition, research on the use of data collection devices suggests that real-time connection of representations is essential for students to make linkages among various aspects of the concepts (Lapp, 2000). This talk discusses the use of technology that dynamically links multiple representations as a tool so that the learner can make connections of algebraic concepts. This particular study is situated in a College Algebra class where students had access to both a computer algebra system (CAS) and dynamically linked representations. Results regarding both student learning and teacher change from two semesters (one using a basic graphing calculator and the other using CAS) will be shared. Directions for future research will also be discussed (Received July 27, 2011)