1046-Z1-810 Marja-Liisa Hassi* (hassi@colorado.edu), Ethnography & Evaluation Research, University of Colorado, 580 UCB, Boulder, CO 80309-0580, and Sandra Laursen (sandra.laursen@colorado.edu), Ethnography & Evaluation Research, University of Colorado, 580 UCB, Boulder, CO 80309-0580. Studying Affect in Undergraduate Mathematics: Efforts to Clarify Students' Experiences of Learning Mathematics. Preliminary report.

Constructivism represents a general paradigm largely accepted in current mathematics curricula throughout the world. Another widely emphasized perspective considers mathematics as social constructions taking place in social contexts. Metacognition has been stressed as an important determinant of successful mathematical problem solving that differs from pure cognition but is closely related to affect. Increased application of these aspects in mathematics education research has offered more opportunities to study the role of affective issues in students' mathematical thinking and learning. The ways that students view and experience mathematics learning situations will determine their goals and modes of understanding, responding and behavior in doing and learning mathematics. We will consider in this presentation some important affective constructs with respect to students' mathematical beliefs and experiences. Connections will be developed between theory and research practice by describing both quantitative and qualitative measurements in use in an evaluation research project focusing on inquiry-based learning in undergraduate mathematics. Examples will be offered of the quality and variation of undergraduate students' views and experiences of learning mathematics. (Received September 11, 2008)