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Tamara Lefcourt Ruby* (lefcourt@ict1.org), Efrata College of Education, Ben Yefune Street, #17, Jerusalem, Israel. *Changing personal epistemologies of mathematics across cohorts of pre-service secondary mathematics teachers.*

Beliefs about knowledge and knowing (personal epistemologies) have been studied for many groups of students, including math students, but there is limited research on the personal epistemologies of math education students. This study examines personal epistemologies of mathematics of pre-service secondary mathematics teachers in a three-year program.

Qualitative categorical analysis highlights two aspects of personal epistemology: source of and justification for knowledge. Results suggest a transition over time—from justifying mathematical knowledge from learning outcomes to justification based on teaching success. In addition, a shift from external to internal attributions of knowledge source was seen. Few students related to post-secondary, academic mathematics, despite the program’s emphasis on academic level mathematics; participants focused on “school mathematics.”

The shift in personal epistemologies across cohorts suggests that self-identities of math education students evolve from learners to teachers. Participants did not self-identify as mathematicians; they did not see themselves as “consumers” of academic mathematics. This raises questions about how to include math education students and teachers of mathematics in the wider community of mathematicians. (Received September 21, 2015)