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**Sarah E. Bell\*** (sb519799@sju.edu), **Josh Bargiband** (jb488519@sju.edu) and **Tetyana Berezovski** (tberezov@sju.edu). *Investigations in mathematics teacher education: the role of personal reflection as a learning instrument in mathematics classes for teachers.*

At Saint Joseph's University in the summer 2011, a geometry course was conducted for secondary mathematics teachers to develop and refine the knowledge and skills needed for the teaching of geometry. Our study attempts to demonstrate the effectiveness of reflecting on mathematical tasks; namely, how the reflective process relates to the growth in Mathematical Knowledge for Teaching (MKT, Hill; Schilling; Ball 2004). We develop a framework for analyzing the teachers' reflections in correlation with the change of their MKT that was assessed by pre-posttest. The assessment instrument included questions from the Graduate Record Examinations (GRE) and the National Assessment of Educational Progress (NAEP). The framework proved to be effective in studying the connection between the reflective process of mathematics teachers and their change in MKT. (Received September 24, 2012)