Using modified materials from The Algebra Project with pre-service K-8 mathematics teachers. Preliminary report.

We will present a preliminary report regarding the use of a modified version of the Road Coloring unit (originally developed by Greg Budzban for The Algebra Project) with preservice K-8 teachers at Eastern Michigan University. The Road Coloring unit facilitates students’ development of multiple representations of the function concept as they ”mathematize” their experience solving problems that involve the creation and coloring of directed graphs. The goals of using a modified version of the Algebra Project curriculum (designed for a high school Algebra I course) with the preservice K-8 teachers was two-fold: to deepen their own understanding of the subject matter (functions), and to provide an experience from which they could discuss pedagogical issues concerning teaching algebra concepts to kids. (Received September 03, 2009)