1125-O5-2554 Veronica Ocampo* (ocampod3@uwm.edu), 2979 s 45th St, Milwaukee, WI 5321. Building Middle School Mathematics Foundational Skills Using the Environment as a Culturally Responsive Setting. Preliminary report.

A considerable number of minority students arrive to middle schools mathematics classrooms with low mastery levels of foundational mathematics concepts and skills. Frequently, previous failed experiences with math might have produced negative perceptions of this content area. Outdoor classrooms are the setting that will bring students to natural areas and city parks to build and understand some of the prerequisite skills necessary for a successful performance in higher mathematics courses. This project presents the experiences of urban students as they interact with math problems and with their peers and nature in outdoor settings as they complete different seasonal mathematics problems. No matter if it is spring, summer, fall, or winter, the multiple connections with this natural context and the interaction with peers support students in understanding and mastering foundational mathematics topics, developing different solution strategies, and generating, communicating, and sharing the formal knowledge gained. Through focused seasonal activities, students experience how mathematics permeates every aspect and activity of their everyday lives, gaining a new appreciation and insight of mathematics as a content area. (Received September 20, 2016)