Steve C Hennagin (hennagin@obu.edu), Department of Mathematics, 410 Ouachita Street, Arkadelphia, AR 71998, and Darin Buscher* (buscherd@obu.edu), Department of Mathematics, 410 Ouachita Street, Arkadelphia, AR 71998. Filling the Middle Grades Mathematics Gap. Report of a project which is a collaborative partnership that addresses a critical need in school districts in Southwest Arkansas. Its purpose is to increase the number of highly qualified 5th - 9th grade Mathematics teachers and improve student achievement. This is being accomplished by introducing 30 teachers to comprehensive standards-based curricula, helping them with curriculum alignment to state standards through long term University Mentor relationships. The role of the mentors is to demonstrate on-site model instruction with effective use of assessment and technology. (Received September 27, 2005)