This talk is about a project to help the mathematically low-performing Baker school district in Louisiana in an attempt to create a replicable model for creating high-performing mathematics programs in the U.S. There are two features of this project that make it unique: (1) The district is implementing the Primary Mathematics Curriculum, a highly-rated mathematics curriculum for grades K-5 from Singapore (referred to in the nation press as "Singapore Math"), and (2) the project uses mathematics graduate students to support the implementation of the curriculum and to provide work-embedded professional development on a daily basis to improve teacher’s content and mathematical teaching knowledge. In this talk we will describe this ambitious project and discuss some of the issues we faced in the first year of this project. (Received September 16, 2008)