With NSF funding, the MAA has launched Project WELCOME (Web Educators Library Collection of Mathematical Explorations). WELCOME is a successor to MAA projects in three arenas: educational technology, increasing participation by members of traditionally underrepresented student populations, and faculty development. The technology component involves Mathwright software, a tool for building interactive mathematical activities used extensively in the MAA’s Interactive Math Text Project and elsewhere. Over several years, this software has proven to be an effective tool for teachers to bring mathematics to life for students. Project WELCOME enlists this technological tool in the MAA’s continuing effort to promote participation in mathematics by students of all backgrounds. To this end, faculty have been recruited to use Mathwright at a consortium of institutions which have traditionally served minority populations. These faculty will develop a series of Mathwright activities for their own students, while also contributing to an internet library. The library will make the Mathwright activities freely available to students and teachers everywhere reached by the internet. The presentation will discuss the aims and scope of Project WELCOME, and give an overview of the project. Supported by NSF Grant DUE-9952530. (Received September 14, 2000)