Formal instruction in Developmental Mathematics began at Shippensburg University in the fall of 2003. Our overriding goal has been to provide remediation which will help those students in the Developmental Mathematics program move into a college level mathematics course and be successful at a rate similar to the overall success rate in the given course. Using our assessment data we have made several changes to the method of instruction that we provide in order to better attain this goal. The purpose of this session is to discuss how our Developmental Mathematics program has evolved over the years and the role that assessment has played. In addition, we will discuss some of the newest changes to the program and what we hope to see in the future. (Received September 17, 2009)