In 2007 the Department of Mathematics at Illinois began a new placement and assessment program. This talk will be a retrospection on 8 years and 75,000+ students, in particular we will compare program data from Fall 2009 to 2014. The data will show continued and consistent success rates in Calculus I since the inception of the program. Students arrive at the University of Illinois with diverse mathematical backgrounds. This results in a diversity of mathematical knowledge, augmented by the fact that what constitutes precalculus at the various institutions varies greatly, as do grading procedures used by different high schools, confounding traditional indicators of students' mathematical knowledge and maturity. Getting students started in the appropriate math class is important not only for their mathematical success, but their success on campus in general. Thus there is a great need to evaluate preparedness precisely and implement placement policies effectively. (Received September 11, 2015)