Currently computers and tablets are being used to individualize a students’ learning experience. The first technology for doing that, however, has been in use for centuries – namely, the textbook. In the past 50 years, the evolution of adaptive learning has accelerated rapidly, and its development has been marked by both successes and failures. We briefly outline recent progress in individualizing math learning, introduce the emerging science of multimedia instruction, and outline the challenges in creating effective digital tools for learning mathematics. (Received September 12, 2013)