Wendy Hageman Smith* (smithwh@longwood.edu), Department of Mathematics and Computer Scienc, Longwood Univeristy, 201 High Street, Farmville, VA 23909, and Becker Sidney Smith. Turbo-charging freshman engagement in introductory courses through a 2-lecture motivational seminar on how and why to succeed at college mathematics.

Freshman don’t arrive knowing what math courses they need to achieve their academic and career goals, how the specific courses offered can help them better achieve those goals, or how to optimize their chances of success in the math courses they choose (or are required) to take. Most regrettably, too few freshmen are offered this information. Missed opportunities, poor curriculum choices, and academic failure are the inevitable result. We have combined the authors’ research into student attitudes towards mathematics (including math anxiety) with best practices for the teaching and learning of mathematics as promulgated by the NCTM. The result is a brief (2 or 3 lecture) program for integration into ”first experience” college math courses that orients their attitudes, expectations, and study habits towards getting the most out of their current—and likely future—coursework in mathematics. This ”short-course” in the value of college math, in disarming math anxiety, and in establishing sound student skills enhances student optimism and engagement exactly when they need it most. In addition to serving the needs of the students, math programs benefit from lower failure rates, increased enrollment in additional courses, and a greater likelihood of acquiring new majors and minors. (Received September 15, 2014)