Jane F. Reed, Ed.D.* (waytosucceed@mail.com) and Thomas W. Reed (reedconsultingllc@mail.com). *Improving success in introductory mathematics courses: A metacognitive growth approach. Preliminary report.

Many college students arrive on campus unprepared for the level of academic scholarship needed for success in first-year math classes. Administrators have focused on changing school factors—curriculum changes, pedagogy, placement tests, and tutoring centers—but poor academic outcomes persist. Effective learning practices also influence academic achievement. Unsuccessful students may not have developed personal self-regulating practices essential for success. If students were informed of effective learning practices, became aware of their own levels, and ways to improve, would they be more successful in first-year college math classes? This study, modeled after methods in the author’s dissertation, will examine a practical analysis of individual student learning practices, strategy use, and metacognitive awareness in math classes, provide prescriptive feedback reports with suggestions for improvement, encourage increase in student awareness and use of learning behaviors, and foster growth in effective learning practices. Instructors can access their students’ learning scores to identify and assist at-risk students. Evidence for success will include grade, DWF, and dropout data compared to historical data. Seven reasons for the effectiveness of this approach are explored. (Received September 24, 2018)