ACT Research has shown that it is the rigor of coursework - rather than simply the number of core courses - that has the greatest impact on ACT performance and college readiness. Figures 2 and 3 report the value added by increasingly rigorous coursework in mathematics and science respectively.

Figure 2. Average ACT Mathematics Scores by Course Sequence

Value Added by Mathematics Courses
Students who take Algebra 1, Algebra 2, and Geometry typically achieve higher ACT Mathematics scores than students who take less than three years of mathematics. In addition, students who take more advanced mathematics courses substantially increase their ACT Mathematics score.

Figure 3. Average ACT Science Scores by Course Sequence

Value Added by Science Courses
Students taking Biology and Chemistry in combination with Physics typically achieve higher ACT Science scores than students taking less than three years of science courses.

In order to ensure that all students are ready for college, an overview of vital action steps is provided.

College Readiness for All: An Action Plan for Schools and Districts

1. **Create a Common Focus.** Establish collaborative partnerships with local and state postsecondary institutions to come to a shared understanding of what students need to know for college readiness. Use ACT’s College Readiness Benchmarks as a common language to define readiness.

2. **Establish High Expectations for All.** Create a school culture that identifies and communicates the need for all students to meet or exceed College Readiness Benchmark Scores.

3. **Require a Rigorous Curriculum.** Review and evaluate the rigor and alignment of courses offered and required in your school in English, mathematics, and science to ensure that the foundational skills leading to readiness for college-level work are taught, reaffirmed, and articulated across courses.

4. **Provide Student Counseling.** Engage all students in early college and career awareness, help them to set high aspirations, and ensure that they plan a rigorous high school coursework program.

5. **Measure and Evaluate Progress.** Monitor and measure every student's progress early and often using college readiness assessments like ACT Aspire and the ACT. Make timely interventions with those students who are not making adequate progress in meeting College Readiness Benchmarks.

To learn more about these recommended action steps and ACT programs that will help improve college readiness for your students, contact ACT Customer Service at 319-337-1309 or customerservices@act.org.