

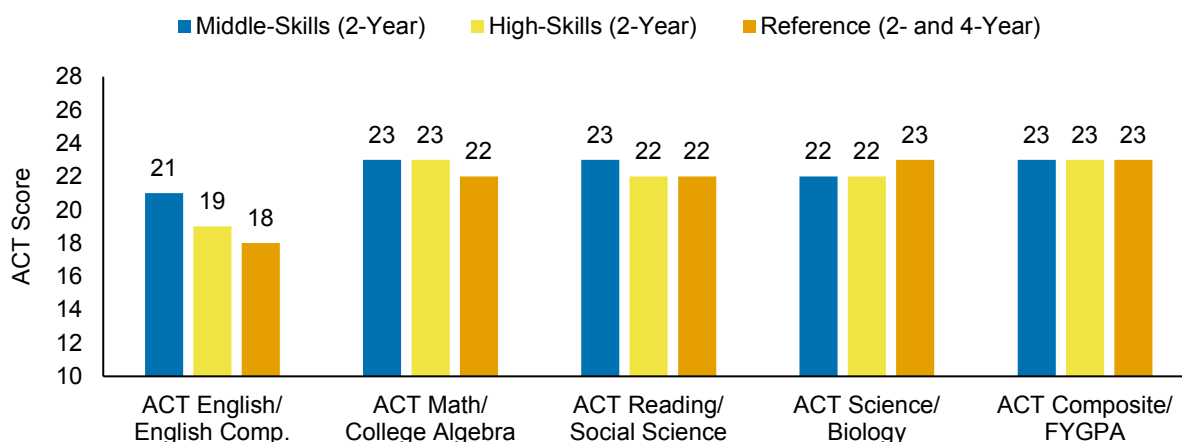
# Understanding the Preparation Levels Needed for Different Postsecondary Pathways: A Rigorous Academic Foundation Is Critical for All

Jeffrey T. Steedle, PhD, Justine Radunzel, PhD, & Krista Mattern, PhD

State policy commonly defines college and career readiness as a unified construct. A recent ACT study examined that policy by comparing the level of academic preparation—as indicated by ACT® assessment scores—predictive of success in two-year postsecondary studies in (a) middle-skills majors linked to occupations typically requiring a certificate or associate degree and (b) high-skills majors linked to occupations typically requiring a bachelor's degree.<sup>1</sup> **Results from this study do not support the commonly-accepted notion that students training for middle-skills occupations can be held to less rigorous academic preparation standards** (e.g., computer support specialists, dental hygienists, medical assistants, loan officers, tax preparers, teacher assistants, and web developers). Indeed, readiness benchmarks were similar for middle-skills majors, high-skills majors, and the national population of students at two-year and four-year institutions. With this new understanding, educators and policymakers can help shape realistic expectations among high school students to promote readiness for success in postsecondary education regardless of their educational pathways.

Figure 1 shows the ACT scores associated with a 50% chance of earning a B or higher in middle- and high-skills majors at two-year postsecondary institutions compared to the ACT College Readiness Benchmarks,<sup>2</sup> which reflect the national population of students at two-year and four-year postsecondary institutions. With one exception, the benchmarks were identical or within 1 point.<sup>3</sup> This indicates, for example, that the level of broad high school achievement (indicated by ACT Composite scores) associated with a 50% chance of earning a first-year grade point average (FYGPA) of 3.0 or higher was similar for middle-skills and high-skills majors at two-year colleges and the general college-going population.<sup>4</sup>

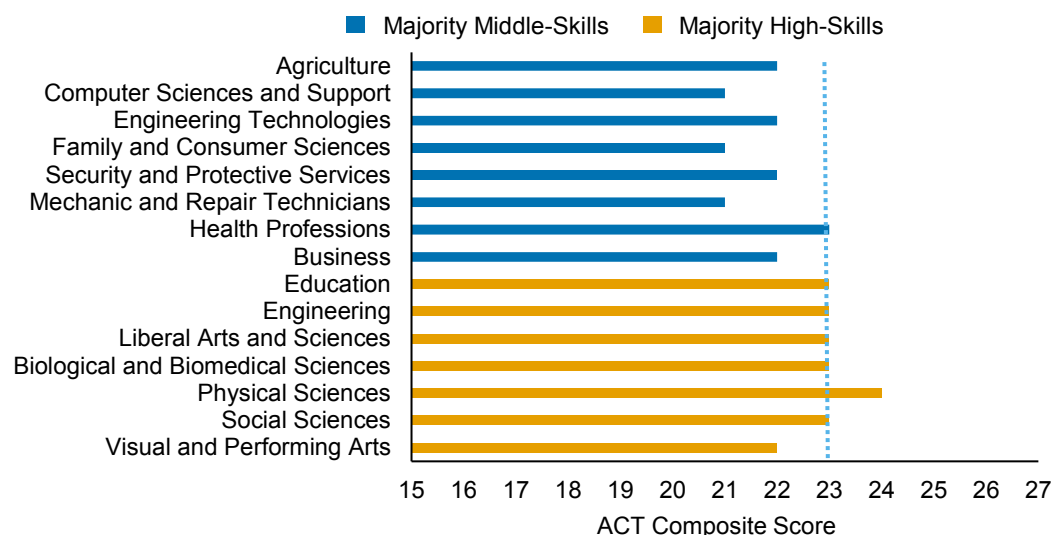
**Figure 1.** Readiness Benchmarks for Two-Year Middle-Skills and High-Skills Majors Compared to the ACT College Readiness Benchmarks



[ACT.org/research](https://act.org/research)

Figure 2 shows the estimated ACT Composite readiness benchmarks for 14 major families. The ACT Composite benchmark for predicting FYGPA was within 1 point of the reference benchmark (23, shown as a blue dashed line) for all high-skills major families, and all but two of the middle-skills major family benchmarks were within 1 point of the reference benchmark. **Overall, results suggest that high school graduates need a strong academic foundation regardless of the postsecondary path they choose.**

**Figure 2.** FYGPA Readiness Benchmarks for College Major Families



## Notes

1. Steedle, J. T., Radunzel, J., & Mattern, K. D. (in press). Comparing academic readiness for different postsecondary pathways: What admissions tests tell us. *Journal of Educational Measurement*. Earlier white paper available from <https://www.act.org/content/dam/act/unsecured/documents/R1676-readiness-admissions-testing-2017-12.pdf>
2. Allen, J. (2013). *Updating the ACT College Readiness Benchmarks*. Iowa City, IA: ACT. Retrieved from <http://files.eric.ed.gov/fulltext/ED546851.pdf>
3. When comparing one student to another, a difference of 1 point would not be deemed practically significant, considering that the standard error of measurement is approximately 2 for subject-area test scores and 1 for Composite scores.
4. The ACT College Readiness Benchmarks do not include an ACT Composite benchmark related to probability of earning a 3.0 or higher FYGPA. The benchmark score of 23 was derived using similar methods and samples. See Allen, J., & Radunzel, J. (2017). *Relating ACT Composite score to different levels of first-year college GPA*. Iowa City, IA: ACT. Retrieved from <http://www.act.org/content/dam/act/unsecured/documents/R1645-act-composite-to-fygpa-2017-05.pdf>

### Jeffrey T. Steedle, PhD

Jeffrey Steedle is a senior research scientist in Validity and Efficacy Research specializing in educational and labor market outcomes research and validity evidence for ACT's workforce assessment programs.

### Justine Radunzel, PhD

Justine Radunzel is a principal research scientist in Validity and Efficacy Research specializing in postsecondary outcomes research and validity evidence for the ACT test.

### Krista Mattern, PhD

Krista Mattern is a senior director in Validity and Efficacy Research specializing in the validity and fairness of assessment scores as well as more general issues in higher education such as enrollment, persistence, and graduation.