



<http://www.educationpartnerships.org>

ACT and College Success

Question: What is the relationship between ACT scores and success in college?

Summary of Findings

For decades, admissions policies in colleges and universities across the country have required applicants to submit scores from a college entrance exam, most typically the ACT (American College Testing) or SAT (Scholastic Aptitude Test). This requirement suggests that high school students' performance on these exams can help predict their academic success as college students. In fact, research conducted over the past four decades on the efficacy of the ACT assessment as a predictor of college success generally supports this belief; there is a strong positive relationship between performance on the ACT and college GPA (Noble, 1991; Noble, Davenport, Scheil, Pommerich, 1999; Noble & Sawyer, 2002; Paszczyk, 1994; Price & Kim, 1976; Stumpf & Stanley, 2002; Thornell & Jones, 1986).

Clearly, college admissions policies have been shaped by research-supported "prediction models," that is, combinations of data generated by students during high school with the greatest likelihood of predicting their success in college. "Success in college" is generally defined in these studies as first-year college GPA, though some studies have looked at college completion or GPA at college graduation (e.g., Paszczyk, 1994; Stumpf & Stanley, 2002).

As a predictor of college success, the most reliable prediction models consists of a combination of both high school GPA and ACT scores. In fact, combining high school GPA and ACT scores is a much stronger predictor of future success for students regardless of race or gender than using either of these scores alone as a predictor (Hoffman & Lowitski, 2005; Noble, 1991). Although the combination has been shown to be highly successful as a predictor of college success, researchers continue to explore the intricacies of this prediction model and its impact on various groups of high school students.

- In some studies, high school GPA has been shown to have a higher “predictability contribution” than ACT scores (Hoffman & Lowitzki, 2005; Paszczyk, 1994, p. 6).
- In other studies, ACT composite scores have been shown to be a better predictor of college GPA at all levels than high school GPA (Noble & Sawyer, 2002; Paszczyk, 1994; Price & Kim, 1976) . This is especially true at the higher levels (3.25 and above) where a high school GPA of 4.0 is not a strong predictor of a college GPA of 3.25 or above (Noble & Sawyer, 2002).
- Composite ACT scores (combined with high school GPA) are a stronger predictor of college success than the ACT subtest scores (Thornell & Jones, 1986).
- The efficacy of combined high school GPA and ACT (and SAT) scores as a predictor of college success is much stronger for groups of students (e.g., all students within a particular grade point range) than for individual students. In other words, important individual differences such as perseverance and other non-cognitive qualities also play a role in a student’s future college success (Noble et al., 1999; Stumpf & Stanley, 2002).

Although using ACT scores as component of college admissions seems well supported in the research, a final reminder may be in order for high school leaders. Although ACT scores can be highly successful in predicting future success in college, students’ performance on the ACT is largely determined by the courses students take during high school (Paszczyk, 1994), and the high school they attended (Noble et al., 1999). The “quality of the education they receive” during high school, the rigor of their course work, and access, especially to rigorous math and science courses regardless of the grades they receive in those courses, largely determine their performance on the ACT—and their future success in college. “The responsibility for providing challenging, quality education falls to administrators, teachers, and counselors, as well as to the communities that support the school system” (Noble et al., 1999, pp. 29 – 30).

References and Online Resources

ACT: American College Testing. For information visit <http://www.act.org/>.

Hoffman, J. L., & Lowitzki, K. E. (2005). Predicting college success with high school grades and test scores: Limitations for

minority students. Retrieved from http://muse.jhu.edu/journals/review_of_higher_education/v028/28.4hoffman.html .

Noble, J. P. (1991). Predicting college grades from ACT assessment scores and high school course work and grade information.

Retrieved from http://act.org/research/researchers/reports/pdf/ACT_RR91-03.pdf

Noble, J., Davenport, M., Schiel, J., & Pommerich, M. (1999). Relationships between the noncognitive characteristics, high school

course work and grades, and test scores for ACT-tested students. Retrieved from

http://act.org/research/researchers/reports/pdf/ACT_RR99-04.pdf .

Noble, J., & Sawyer, R. (2002). Predicting different levels of academic success in college using high school GPA and ACT

composite score. Retrieved from http://act.org/research/researchers/reports/pdf/ACT_RR2002-4.pdf .

Paszczyk, S. L. (1994). A comparative analysis of ACT scores and final GPAs of Chicago State University undergraduate

students. Retrieved from

http://eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nfpb=true&&ERICExtSearch_SearchV%20alue_0=ED370519&ERICExtSearch_SearchType_0=no&accno=ED370519

Price, F. W., & Kim, S. H. (1976). The association of college performance with high school grades and college entrance test

scores. Retrieved from <http://epm.sagepub.com/cgi/content/abstract/36/4/965> .

SATexam: For information visit <http://sat.collegeboard.com/home> .

Stumpf, H., & Stanley, J. C. (2002). Group data on high school grade point averages and scores on academic aptitude tests as

predictors of institutional graduation rates. Retrieved from <http://epm.sagepub.com/cgi/content/abstract/62/6/1042> .

Thornell, J., & Jones, R. (1986). The college admissions equation: ACT scores versus secondary school grade performance.

Retrieved from

http://eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_n%20fpb=true&_ERICExtSearch_SearchValue_0=ED278687&ERICExtSearch_SearchType_0=no&accno=ED278687

Submitted: Date: 2/5/10 By: Dr. Barbara Bleyaert, Eastern Michigan University
<http://www.educationpartnerships.org>

This article is provided as a service to educators by Education Partnerships, Inc, which does not assume any responsibility for the content of the article or the positions taken by the authors or the Web sites or other authors whose works are included. This article reflects information currently available and is not the official position of Education Partnerships, Inc.

Disclaimer: All URLs listed in this site have been tested for accuracy, and contents of Web sites examined for quality, at the time of addition. Content accuracy and appropriateness, however, cannot be guaranteed over time as Web sites and their contents change constantly. The author takes no responsibility for difficulties that may result from the use of any Web site listed herein. Please notify the [Webmaster](#) if you find any dead links or inappropriate material.

Permission: You may use or download content for research or educational purposes, or for your personal, noncommercial purposes, provided you keep unchanged all copyright and other notices with them. No other use of any content is permitted. You agree that you will make only lawful use of this article, and will only use articles in compliance with all federal, state and local laws and regulations. You agree that you will make no use of the research that violates anyone else's rights, including copyright, trademark, trade secret, right of privacy, right of publicity or other rights