

Indicators of Postsecondary Success

Introduction

In December 2006, the city of Pittsburgh initiated a campaign to increase students' postsecondary enrollment by launching the Pittsburgh Promise—a scholarship that provides well-qualified graduates of the Pittsburgh Public Schools (PPS) and local charter schools¹ with up to \$40,000 to attend a college or trade/technical school in Pennsylvania. In 2011, to help prepare students to graduate from high school ready for college and careers, PPS began developing the College Readiness Indicator System (CRIS),² a tool that provides PPS administrators and practitioners with data-driven indicators of students' progress towards high school graduation and postsecondary readiness and success.

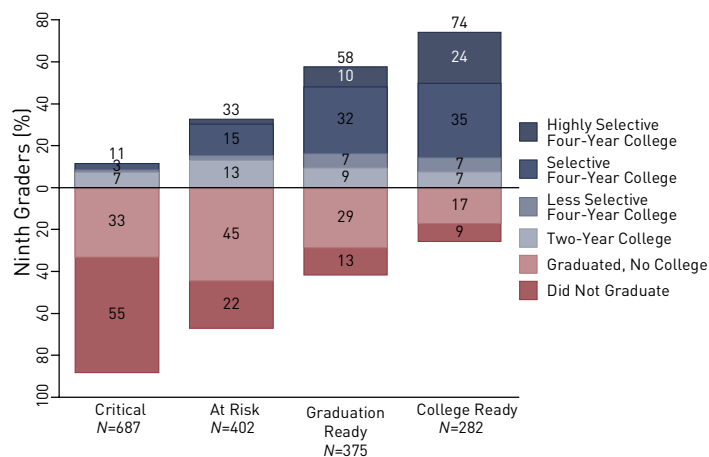
During the 2013–14 school year, PPS partnered with the Strategic Data Project (SDP) to examine key outcomes related to students' high school graduation and enrollment and persistence in college. SDP's analyses complemented PPS' work on the CRIS by merging postsecondary data from the National Student Clearinghouse³ onto student records, allowing PPS administrators to examine students' transition from high school into college. We were particularly interested in examining students' predicted level of college-readiness at the end of ninth grade and whether their subsequent high school and college outcomes revealed that they had over- or under-performed relative to this prediction. This Key Finding Report summarizes the results of these analyses.

Evidence

Overall, we found that, by the end of ninth grade, the majority of PPS students were not ready for college. On the contrary, at the end of ninth grade, 62% of this cohort of students were deemed to be Critical or At Risk of not being ready for college. Further, we found that, while the CRIS is generally predictive of students' subsequent high school graduation and college enrollment (as it is designed to be), groups of students both over- and under-perform relative to their ninth grade college-readiness status. We describe these and other findings in greater detail below.

Figure 1 shows the college-readiness levels and high school and college enrollment outcomes of the cohort of students who entered high school in the 2009–10 school year. The four bars represent the subset of PPS high school students that the CRIS categorized into four different levels

Figure 1. Students' High School and Postsecondary Outcomes, by Ninth-Grade College-Readiness Level



Note. This sample includes 1,746 2009–10 ninth graders with non-missing readiness information. Sample excludes alternative and special education high schools. Postsecondary enrollment outcomes are from NSC matched records. All other data from administrative records.

of college-readiness at the end of ninth grade (Critical, At Risk, Graduation Ready, College Ready).⁴ The number of students that CRIS grouped into each category appear below the x-axis category labels. The blue gradations in the figure represent the outcomes of students who seamlessly enrolled in some type of postsecondary institution after graduating from high school.⁵ The total above each bar represents the total percentage of students who seamlessly enrolled in some type of postsecondary institution (i.e., the sum of all of the “blue” two- and four-year college options). The red gradations in the figure represent the outcomes of students who did not enroll in any postsecondary study, including both students who did not graduate from high school and students who graduated but did not enroll in college.

As the figure reveals, a greater number of PPS students were identified as Critical or At Risk at the end of ninth grade than were deemed Graduation Ready or College Ready. At the end of ninth grade, 687 students in this cohort were deemed Critical, 402 were At Risk, 375 were Graduation Ready, and 282 were College Ready.

As the escalating height of the bars reveals, students' postsecondary outcomes were generally related to their ninth-grade college-readiness status. Students rated as Critical at the end of ninth grade had a seamless college enrollment rate of 11%. By comparison, 33% of the At Risk

students, 58% of the Graduation Ready students, and 74% of the College Ready students went on to graduate from high school and seamlessly enroll in a two- or four-year college, respectively. However, this analysis also revealed that some students over- and under-performed relative to their ninth grade college-readiness status. For example, 26% of the students who were deemed College Ready at the end of ninth grade did not end up seamlessly enrolling in any college. This appears to be a highly qualified group of students who were unable to realize their postsecondary potential. By comparison, 11% of the students who were identified as Critical at the end of their first year in high school were able to graduate from high school on time and enroll in two- and four-year colleges. This group represents a subset of students who managed to successfully transcend their predicted path.

Implications

This analysis reveals the potential for Pittsburgh's CRIS to help identify students who may need additional support in order to graduate from high school and pursue postsecondary study. With the CRIS now available as a framework, PPS can examine how students' readiness status changes over time as they progress through high school. Specifically, PPS can examine how students who are At Risk or Graduation Ready at the end of ninth grade perform on an annual basis to make sure these students continue to make progress towards graduation. Simultaneously, PPS practitioners can intervene and target resources and support to students deemed Critical.

Moving forward, PPS may choose to extend the CRIS in order to identify students who have fallen off-track at earlier points in their schooling. Researchers are increasingly advocating that on-track analyses examine students' performance prior to high school in order to support students' transition into and through the critical middle school grades.⁶ Finally, PPS could continue to examine whether refinements to the CRIS—such as including data on students' course-taking and disciplinary incidents—enhance its accuracy and predictive power.

These findings may also help PPS administrators identify potential best practices that can be shared across the district, as well as pitfalls that school or district personnel may wish to address. SDP conducted similar analyses at the high school level (not shown) in order to help PPS administrators determine where to look for practices and

policies that appear to be helping Critical and At Risk students graduate from high school and enroll in college. At the same time, PPS might gather additional qualitative data about the circumstances of College Ready students' who are unable to fulfill their anticipated goals in order to better understand the obstacles that these students face in the later years of high school. Finally, the district may consider developing partnerships with local colleges to help ensure that qualified students successfully transition from high school into college.

In distributing this Key Findings Report, SDP and PPS collectively hope that these findings may help other districts think about how to ensure students' postsecondary readiness by using their data to identify effective leverage points along a student's high school to college progression.

Endnotes

¹ Any student who graduates from the Pittsburgh Public Schools (PPS) with a cumulative GPA of 2.5 or better and an attendance record of 90% qualifies for the Pittsburgh Promise scholarship.

² The College Readiness Indicator System (CRIS) project was conducted in partnership with the Annenberg Institute for School Reform at Brown University, the John W. Gardner Center for Youth and Their Communities at Stanford University, and the University of Chicago Consortium for Chicago School Research.

³ National Student Clearinghouse (NSC) is a national nonprofit organization that provides postsecondary enrollment verification for colleges and universities. The NSC maintains student enrollment records at over 3,000 institutions of higher education throughout the United States, including career and technical training institutes, as well as two- and four-year colleges and universities.

⁴ The CRIS estimates students' college-readiness at the end of ninth grade using data on students' GPA and attendance—the two factors that PPS found to be most highly predictive of students' eventual college enrollment. Students at the College Ready level have GPAs of at least 3.00 on a 4.00 scale and attendance rates of at least 95%. Graduation Ready students have GPAs between 2.50 and 2.99 or attendance rates between 90% and 94.9%; At Risk students have GPAs between 2.00 and 2.49 or attendance rates between 80% and 89.9%. Students measured as Critical have GPAs of 1.99 or less or attendance rates of 79.9% or less. If a student falls in two groups separately for GPA and attendance rate (for example, with a 2.75 GPA and 85% attendance rate), the student's readiness level is the lower one of the two.

⁵ Selectivity ratings for four-year colleges and universities come from the Barron's Academic Competitiveness Index. As illustrations, "Highly Selective" institutions include Carnegie Mellon University and the University of Pennsylvania, "Selective" institutions include the University of Pittsburgh and Pennsylvania State University (all campuses), and "Less Selective" institutions include Clarion University of Pennsylvania and Edinboro University of Pennsylvania. Seamless enrollers enroll in some postsecondary institution by October 1 in the fall following high school graduation.

⁶ Kieffer, M., Marinell, W., and Rak Neugebauer, S. (in press). Navigating into, through, and beyond the middle grades: the role of middle grades attendance in staying on track for high school graduation. *Journal of School Psychology*.

