New research identifies indicators to help high school sophomores stay on-track to graduate and go on to college

Upcoming school year will be especially critical for sophomores, who may have lacked the critical supports needed to successfully transition to high school due to the COVID-19 pandemic, say researchers

New research released today by the University of Chicago Consortium on School Research and the To&Through Project develops a research-based set of indicators for sophomore year, building on 15 years of evidence around Freshman OnTrack and Chicago Public Schools’ (CPS) work using data and supports for freshmen to successfully increase graduation rates. The new report, *The Forgotten Year: Applying Lessons from Freshman Success to Sophomore Year*, shows that freshman year remains the most critical and the most predictive of future high school graduation. However, nearly one-half of CPS students who were off-track at the end of sophomore year had been on-track at the end of freshman year. For those students, the high school graduation rate dropped from 93 percent to 43 percent (see table). Monitoring students who are at risk and providing additional support during sophomore year is critical on the path to graduation and college.

Likewise, students who are off-track as freshmen can recover during sophomore year. For CPS students who were off-track as freshmen but got back on-track as sophomores, the high school graduation rate increased from 21 percent to 73 percent (see table). “Students’ fate is not determined at the end of freshman year. With the right support, students who are off-track can get back on-track to graduate,” said Alex Seeskin, study author and Director of the To&Through Project.

Researchers identified three critical changes that occur in student performance from freshman to sophomore year, across every student demographic group: 1) Course failures increase in every subject; 2) grades decline slightly, on average; and 3) attendance declines significantly. These changes in student performance give educators important signals about which students need additional support to be successful. The decline in attendance is particularly important to monitor. Both freshmen and sophomores with reasonably strong grades but low attendance—missing three or more days of school per month—are in danger of not graduating without additional monitoring and support. “The upcoming year will be especially important for sophomores,” said Alexandra Usher, Senior Research Analyst and Associate Director of the To&Through Project. “As freshmen, they missed three months of in-person classes due to the COVID-19 pandemic. In absence of those critical supports needed to successfully transition to high school, many students may still be adjusting to new expectations and demands.”

The Freshman OnTrack indicator is based on more than 15 years of research evidence that predicts a students’ likelihood of graduating, based on freshman-year grades and credits. Freshman are on-track for high school graduation if they have

<table>
<thead>
<tr>
<th>Freshman OnTrack Status</th>
<th>Sophomore OnTrack Status</th>
<th>Graduation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Track</td>
<td>On-Track</td>
<td>93% (N=13,819)</td>
</tr>
<tr>
<td>Off-Track</td>
<td>On-Track</td>
<td>73% (N=487)</td>
</tr>
<tr>
<td>On-Track</td>
<td>Off-Track</td>
<td>43% (N=1,301)</td>
</tr>
<tr>
<td>Off-Track</td>
<td>Off-Track</td>
<td>21% (N=1,647)</td>
</tr>
</tbody>
</table>

*Note: Only students whose CPS freshman and sophomore grades and attendance data were available are included. Charter students are excluded for this reason. Graduation status is based on whether a student graduated from CPS within four years of starting high school. For more information, see Appendix A.*
no more than one core course failure and have earned five credits, which is enough to go on to tenth grade. CPS defined and began monitoring a sophomore-year indicator of high school graduation in 2010. The Sophomore OnTrack indicator is similar to Freshman OnTrack in monitoring core course failures and earned credits to be promoted to eleventh grade. Many schools have already built effective systems with Freshman OnTrack data and freshman success teams, but sophomore success teams are less prevalent. This new research provides an opportunity to transfer knowledge about how to monitor and support students to sophomore year so that more students graduate and have the best chance at success in college. “Applying these findings to sophomore year will require devoting resources to bring sophomore educators into teams and training them to analyze data and co-plan interventions together,” said Shelby Mahaffie, a Consortium Research Analyst. “Indicators like these enable schools to funnel limited resources to a relatively small group of students who are likely to require significant support in order to graduate.”

Research Questions and Key Findings

As Freshman OnTrack rates have improved, how, if at all, has the predictive power of Freshman OnTrack changed?

• The predictiveness of Freshman OnTrack has held over time.
• As graduation and Freshman OnTrack rates increased, a greater proportion of non-graduates were on-track as freshmen.

Key takeaway > Freshman year remains the most critical year in students’ educational trajectories. However, Freshman OnTrack does not determine a student’s fate. There is still an opportunity for off-track freshmen to recover and graduate.

How accurately does Sophomore OnTrack predict high school graduation? What is the relationship between students’ freshman and sophomore year performance?

• Sophomore OnTrack is highly predictive of high school graduation.
• Some students fall off-track during sophomore year. For example, in the 2016-17 freshman class, 8 percent were on-track as freshman, but fell off-track during sophomore year.
• From freshman to sophomore year:
  o Rates of course failure increase in every subject;
  o Students grades decline slightly, on average, and
  o Attendance declines significantly.

Key takeaway > Changes in student performance between freshman and sophomore year give educators important signals about which students need additional support to be successful.

What indicators can sophomore educators use at the beginning of sophomore year to understand the needs of their incoming students?

• Three key freshman warning indicators suggest a need for support or intervention for incoming sophomores: 1) Off-track status at the end of freshman year; 2) freshman attendance below 85 percent; and 3) any course failure during freshman year, including non-core courses.
• Attendance is predictive of graduation even among students who earn similar grades. For example, among freshman with a GPA between 2.0 and 2.5, 90 percent graduated when attendance was at least 95 percent, but only 59 percent graduated when attendance was 80-85 percent.

Key takeaway > By monitoring simple indicators, sophomore educators can identify, at the beginning of the year, approximately 70 percent of students who are unlikely to graduate without additional intervention.
What indicators can sophomore educators use during sophomore year to monitor students’ progress toward high school graduation and post-secondary success?

- Three key sophomore warning indicators suggest a need for support or intervention: 1) Sophomore off-track status at the end of sophomore year; 2) attendance below 85 percent; and 3) any course failure during sophomore year, including non-core courses.
- Like freshman attendance, sophomore attendance is highly predictive of GPA and high school graduation, even among students with similar GPAs.

Key takeaway: By monitoring simple indicators, sophomore educators can identify, by the end of the year, up to 85 percent of students who are unlikely to graduate without additional intervention.

How frequently do students change success categories from freshman to sophomore year of high school, and what are the high school and college outcomes of students in different success categories?

- There is a high degree of movement between freshman and sophomore success categories.
- Nearly one-half of the students who were off-track at the end of sophomore year had been on-track at the end of freshman year.
- Students from every demographic group fell off-track for the first time during sophomore year.
- For students who were on-track as freshman but fell off-track as sophomores, the high school graduation rate dropped from 93 percent to 43 percent.
- For students who were off-track as freshman but got back on-track as sophomores, the high school graduation rate increased from 21 percent to 73 percent.

Key takeaway: Sophomore year is an opportunity for schools to provide additional support to struggling sophomores, increase high school graduation rates, and improve the chance for students to succeed in college.

Cite as:

About the University of Chicago Consortium on School Research
With the goal of supporting stronger and more equitable educational outcomes for students, the UChicago Consortium conducts research of high technical quality that informs and assesses policy and practice in the Chicago Public Schools (CPS). We seek to expand communication among researchers, policymakers, practitioners, families, and communities as we support the search for solutions to the challenges of school improvement. The UChicago Consortium encourages the use of research in policy action and practice but does not advocate for particular policies or programs. Rather, we help to build capacity for school improvement by identifying what matters most for student success, creating critical indicators to chart progress, and conducting theory-driven evaluation to identify how programs and policies are working.

About the To&Through Project
In collaboration with educators, policymakers, and communities, the To&Through Project aims to significantly increase high school and postsecondary completion for under-resourced students of color in Chicago and around the country by providing education stakeholders with research-based data on students’ educational experiences and facilitating dialogue on its implications for adult practice.

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