MATHEMATICA Policy Research

ssue BRIEF

Luke Heinkel, Kristin Hallgren, Brian Gill, and Megan Shoji

Making Effective Use of Postsecondary Data in K-12 Education Settings

State, district, and school officials in K–12 education are increasingly paying attention to the postsecondary outcomes of their former students. Services such as the National Student Clearinghouse StudentTracker for High Schools provide states, districts, and schools the capability to examine college enrollment, persistence, and completion data on students they previously served in K–12 settings. Yet many officials are unsure about how best to use these data. This issue brief (1) summarizes the uses and limitations of postsecondary data in raw form, (2) describes three sophisticated ways that K–12 officials can use these data to inform K–12 policy and practice, and (3) discusses the importance of dissemination.

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USES AND LIMITATIONS OF POSTECONDARY DATA IN RAW FORM

Postsecondary data in raw form are useful for descriptive purposes. By summarizing raw data, officials can identify how a state, district, or school's students are doing after graduation, what types of postsecondary institutions they attend, and whether (or not) particular subgroups tend to struggle more than others. Postsecondary data in raw form is most useful for agencies that are not sure how their students fare after they leave high school. If made public, raw data can also help raise awareness about whether students or subgroups are doing poorly (or not). However, raw postsecondary data alone may not provide educators with substantial new information that they did not know from high school indicators (such as student achievement). And, raw postsecondary data cannot:

 Identify whether a school is effective in promoting its students' college readiness.

- Tell educators *how to improve* students' college readiness.
- Be easily used by staff in individual schools to identify *risk factors in current students*.

SOPHISTICATED WAYS TO USE POSTSECONDARY DATA TO INFORM POLICY AND PRACTICE

Additional processing or analysis of postsecondary data is required to use these data in more sophisticated ways.

Using postsecondary data to understand trends. States can compare postsecondary data across three to seven years of high school graduation cohorts or subgroups to understand trends in the postsecondary outcomes among graduates. Population subgroup analyses can assess possible inequities in students' high school preparation or raise awareness about achievement gaps. Commonly used subgroups for these analyses include racial/ethnic minority students, special education students, English-language learners,

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student enters college.

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and students from low-income families. Data users must take care not to assume similar outcomes for current students who look similar to former students. In addition, while cohort or subgroup analyses help identify trends, they do not reveal causation and should be reviewed by trained data analysts.

Using postsecondary data to identify at-risk students. Statewide postsecondary data that are carefully analyzed longitudinally at the studentlevel can identify factors that place a student at risk of being unprepared for college, particularly when compared with similarly situated students from recent years. These factors could in turn be incorporated into an early-warning system that flags at-risk students. For example, the data might be integrated into a tool to chart the outcomes of former students and the coursework those students took. Skilled researchers can develop this kind of tool by incorporating high school performance and postsecondary data from past students with the goal of identifying and intervening with current students with similar profiles. Obtaining outside assistance to develop such a tool will likely be necessary.

Using postsecondary data in accountability reports. Due to the necessary time lag in obtaining the data, one cannot expect postsecondary data to be useful for real-time decision making processes because these data do not become available until 2 to 3 years after a student enters college. Thus, postsecondary data may be more useful to state-level officials involved with accountability regimes than to classroom educators. State education agencies can examine variation in college enrollment rates among graduates of different high schools to explore whether common practices set apart more successful schools from those struggling to prepare students for postsecondary success. These data, incorporated in a "postsecondary value-added" measure for high schools and districts, would be created and analyzed at the state-level in a way that accounts for differences

in the characteristics of each school's entering 9th-grade students. Such a measure could be a valuable complement to existing measures that rely on test scores and graduation rates, and might provide a fair comparison across schools.

Statewide postsecondary data that are analyzed using a postsecondary value-added measure can help identify schools that are doing especially well or especially poorly over a long period of time (since baseline data have to come from prior to 9th grade) at improving the college readiness of students they serve. However, even these data cannot provide a guide for how educators can improve college readiness. While these analyses might point the way for state officials to commission carefully-designed studies that seek to identify what distinguishes high-performing schools from low-performing schools, this is not something that can be usefully done by eyeballing the data.

IMPORTANCE OF POSTSECONDARY DATA DISSEMINATION

Dissemination of postsecondary data is important for engaging stakeholders. Agencies can intentionally distribute data and analysis results to district, school, and community leaders. Districts can present findings to school staff and the community to raise awareness about college readiness within the district and schools. District administrative leadership can share these data and analyses with the superintendent, assistant superintendent, and relevant executive staff such as the chief academic officer, director of instruction, or secondary directors. At the school level, principals and guidance counselors might be most relevant for accessing and sharing the data. These data can be shared in annual reports about postsecondary enrollment, persistence, and degree attainment of students who already graduated. Data authorized for public release can appear on district websites and be shared with local universities and community colleges or community organizations.

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