

ADVOCACY & POLICY CENTER AFFINITY NETWORK

BACKGROUND PAPER

USING CROSS-SEGMENTAL DATA EFFECTIVELY TO SUPPORT ALIGNMENT

HOW K–12 AND POSTSECONDARY EDUCATORS CAN ACCESS, EXAMINE,
AND USE CROSS-SEGMENTAL DATA TO FRAME DISCUSSIONS ABOUT
STUDENT TRANSITION AND SUCCESS IN COLLEGE

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The implementation of the Common Core State Standards (CCSS) over the coming years will provide an opportunity for K–12 and postsecondary educators to share and use data effectively to support alignment between the sectors and reduce the need for remedial education. This brief describes how these groups can work together to make the most of data and their shared expertise to increase the proportion of students who are college ready. It also provides a framework for collecting data and information on the critical goal of improving college readiness, including data on related outcomes, processes, and inputs. In an upcoming report, we will provide recommendations for key data and other information that can be used to support specific goals and strategies being developed by Affinity Network teams.

College readiness can be defined as students' ability to successfully complete introductory, credit-bearing, college-level courses in mathematics and English (reading, writing, or both) and possibly other subjects. This conception of college readiness assumes a sharp dichotomy — a student is either ready for college or not — but could be extended to include different gradations of readiness. In practical terms, a student's college readiness in a subject can be measured in multiple ways, including earning a sufficiently high score on a relevant exam or assessment, neither needing nor taking remedial courses, passing an introductory college-level course, or otherwise being deemed by a counselor or instructor at the college as having the capacity to succeed.

The remainder of this brief follows steps described in *At Your Fingertips*, a primer on using data to improve educational outcomes (Levesque, Bradby, Rossi, & Teitelbaum, 1998). Having established the goal of improving college readiness, next steps include defining precisely what is meant by college readiness; identifying related practices and inputs for achieving that outcome; identifying available data sources for measuring the key outcomes, practices and inputs; and,

finally, choosing useful and appropriate indicators. These steps are summarized below:

1. Identify and define desired outcome(s);
2. Identify and describe related practices and inputs needed to achieve the outcome(s);
3. Identify available data sources for measuring the outcomes, practices, and inputs; and
4. Select the most useful indicators for tracking critical outcomes, practices, and inputs.

Targeted goals and strategies may vary across Affinity Network teams. Both available data sources and appropriate indicators may vary across and even within states. Available data may include those that are collected locally by one organization in a group for internal purposes but that could prove useful to the entire group. As teams endeavor to determine the indicators to be used to assess the status quo as well as determine future actions, they will find it worthwhile to consider the full range of available data and then select those indicators that will provide the most value. Keep in mind that as CCSS and related assessment systems (predominantly PARCC and Smarter Balanced) are implemented in K–12 schools, the data landscape may change. Therefore, both K–12 and college educators are well advised to track state developments with regard to college readiness measures and the timelines for implementation. In addition to data from various assessments, other types of college readiness data to consider at the postsecondary level include enrollment, persistence, and completion (NSC, 2012); need for remediation (College Board, 2012); and participation in remediation (CCA, 2011, 2012). At the K–12 level, some data to consider include high school attendance (Richards, 2012, pp. 17–18) and high school course taking (UC Regents, n.d.).

Although data on college readiness may be available, not all indicators may prove useful. For example, while more than half of states publicly report the percentage of entering community college students who *took* remedial courses, only one state reports the percentage of students identified as *needing* remediation, and even then, the data were missing for more than one-third of the state's students (Horn & Radwin, 2012, pp. 20–23). While data on remedial course taking are more commonly available, data on the need for remediation may provide a more precise measure of college readiness from the K–12 perspective. Therefore, once available data sources are identified, it is important to assess their value to both the K–12 and postsecondary representatives on your team. Educators from both sectors can use this opportunity to collaborate and share information about the measures of college readiness that are most useful to them and ask questions such as the following:

- How closely does the measure reflect students' ability to successfully complete introductory college-level work?
- How specific are the data? For example, the CCSS for high school algebra are detailed to the level of separate standards for solving a system of linear equations (A-REI.6) and a system of linear and quadratic equations (A-REI.7).¹ However, college placement exam results may be limited to an overall score for algebra or mathematics, providing little insight into students' specific knowledge or deficits.

1. See <http://www.corestandards.org/the-standards>.

- Can the data be provided for individual students or for subgroups of interest? The larger and more heterogeneous the population, the more important it is to obtain individual-level results or results disaggregated for important subgroups, rather than school or districtwide summary statistics.
- How timely are the data? A 2011 analysis by the Data Quality Campaign found that most states published outcomes for recent high school graduates, but in a few states, the most recent reports were for students who graduated three or more years before.²
- Are the measures consistent over time? Accurately assessing trends requires the same measurement at two or more points in time, but many measures of college readiness at the K–12 level may change as new CCSS-based assessments are adopted. It may be wise to determine whether consistent data will continue to be available.
- How early in the student’s educational path should college readiness be measured? Assessments of eighth-graders allow more time to help those with deficiencies in specific areas than do exit exams taken by 12th-graders or placement tests given to beginning college students.

Once a team has identified relevant data and agreed on the best available measures to support alignment and effective implementation of CCSS, it can examine results. The goal of improving college readiness seems fairly straightforward, but the details can be complex. Readiness can vary by subject (e.g., mathematics) or topic within a subject (e.g., quadratic equations), as well as by demographic characteristics such as gender, race/ethnicity, and socioeconomic status. Factors contributing to college readiness may also include specific course taking or even specific teachers or instructors, among others. It is important for a team to decide how to disaggregate results to be most useful for college readiness efforts.

Data often raise more questions than they answer. Initial examinations of results may suggest the need for additional or different data, both quantitative and qualitative. As with quantitative data, access to qualitative data will vary by location, although workshops, conferences, and networks (such as this one) that involve both K–12 and postsecondary educators can all be good starting places for gathering qualitative information. Cross-sector conversations may lead to a better understanding of college readiness than can be obtained from relying solely on quantitative data. Reviewing, together, samples of rubrics, formative assessments, and syllabi, for example, can provide valuable insight about similarities or differences in expectations and where adjustments may be needed to improve alignment. Conversations can also clarify the importance of “hard to measure” factors related to students’ success in college, such as self-discipline or time management. Although some methods exist to systematically measure noncognitive factors (sometimes referred to as “soft” or “21st-century skills”), conversations can help align expectations about students’ development and lead to improved practices. For example, if students’ poor study habits are found to be a major obstacle to their college readiness, educators at both levels could consider introducing or strengthening instruction or tutoring in time management and study skills to help students in this area. Understanding current expectations at each education level is an important first step.

It may be difficult to find data that shed light on all of the key factors contributing to college readiness. Nonetheless, existing data sources from the K–12 and postsecondary sectors can provide a starting point for tracking progress, and conversations can clarify expectations for

2. See <http://www.dataqualitycampaign.org/files/HS%20Feedback%20Table.pdf>.

college readiness and identify areas where greater alignment is needed. While this brief provides an initial framework for collecting data and information on college readiness efforts, future guidance will provide specific recommendations based on the goals and strategies currently being developed by Affinity Network teams.

REFERENCES AND RESOURCES

Burdman, P. (2012, August). *Where to begin? The evolving role of placement exams for students starting college*. Boston: Jobs for the Future. Retrieved August 1, 2012, from http://www.jff.org/sites/default/files/ATD_WhereToBegin_080212.pdf

College Board Advocacy & Policy Center. (2012). *The completion arch*. Retrieved from <http://completionarch.collegeboard.org>

Complete College America (CCA). (2011). *Time is the enemy*. Washington, DC: Author. Retrieved from http://www.completecollege.org/docs/Time_Is_the_Enemy.pdf

—. (2012). *Remediation: Higher education's bridge to nowhere*. Washington, DC: Author. Retrieved from <http://www.completecollege.org/docs/CCA-Remediation-final.pdf>

Horn, L., & Radwin, D. (2012). *The completion arch: Measuring community college student success — 2012*. New York: College Board Advocacy & Policy Center. Retrieved from http://advocacy.collegeboard.org/sites/default/files/10b-3074_Completion_Arch_Web_120410.pdf

Levesque, K., Bradby, D., Rossi, K., & Teitelbaum, P. (1998). *At your fingertips: Using everyday data to improve schools*. Berkeley, CA: MPR Associates Inc. Retrieved from <http://eric.ed.gov/ERICWebPortal/contentdelivery/servlet/ERICServlet?accno=ED419571>

National Student Clearinghouse (NSC). (2012). StudentTracker. Retrieved July 31, 2012, from <http://www.studentclearinghouse.org/colleges/studenttracker>

Richards, A. (2012). *Harnessing information from state longitudinal data systems*. Presented at the 32nd annual conference of the National Association for Career Technical Education, Portland, OR. Retrieved July 31, 2012, from <http://nactei.org/aboutus/2012/TheAdvanceSysHarnessing%20SLDS%20Information1.ppt>

UC Regents. (n.d.). Transcript Evaluation Service Reports. Retrieved July 31, 2012, from <https://www.transcriptevaluationservice.com/tesreports.htm>

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