

COMPLETE TO COMPETE

Common College Completion Metrics



2010 - 2011

National Governors Association Chair's Initiative

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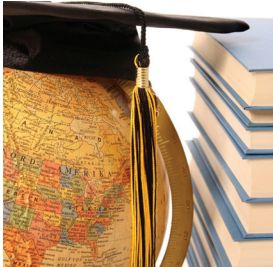
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Training

Affordable



Education

Careers



Executive Summary

Increasing degree completion at America's public colleges and universities is pivotal for the nation's economic competitiveness and longterm economic growth. To meet this goal in a time of unprecedented fiscal strain, policymakers and higher education leaders need comprehensive, consistent performance metrics to shape funding strategies and pinpoint areas for improvement. While states and their higher education systems have made strides in reporting and using performance data, more work in this area is urgently needed.

The National Governors Association, under the leadership of incoming NGA Chair West Virginia Gov. Joe Manchin III, convened a Work Group on Common College Completion Metrics to make recommendations on the common higher education measures that states should collect and report publicly. The work group members found substantial consensus on which to build their recommendations.

Governors, higher education executive officers, legislators, and college and university presidents must embrace the challenge and work together to implement the policy and data system changes that will produce accurate information. Specifically, the work group recommends the following completion metrics:

OUTCOME METRICS:

- Degrees and certificates awarded;
- Graduation rates;
- Transfer rates; and
- Time and credits to degree.

PROGRESS METRICS:

- Enrollment in remedial education;
- Success beyond remedial education;
- Success in first-year college courses;
- Credit accumulation;
- Retention rates; and
- Course completion.

Comparable, reliable metrics are essential for states under current fiscal constraints. Information on the progress toward, and degree completion of, all students in higher education allows state leaders to gauge whether policies are successful and helps inform future funding decisions. Collecting and reporting metrics at the campus, system and state levels is a necessary first step for states as they seek to improve completion rates and productivity in higher education.



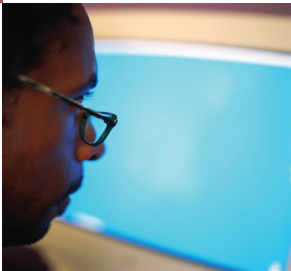
Diploma

Degree



Certificate

Graduate



Introduction

Governors face unprecedented demands across state government to deliver vital services in an environment of constrained resources. Higher education is no exception. States must increase the number of high-quality college graduates within available funding to meet workforce needs and compete globally. To meet this goal, policymakers—including governors—and higher education leaders need comprehensive and consistent performance metrics for public campuses and systems to inform policy decisions and pinpoint areas for improvement. This requires overcoming the barriers posed by incomplete and inconsistent data.

Recognizing the importance of college completion to the nation's economic vitality, incoming NGA Chair West Virginia Gov. Joe Manchin III, is launching an initiative to help all states improve higher education performance. In **Complete to Compete**, states will work to increase college completion and improve higher education efficiency. To accomplish this objective, states will need to collect and report comparable data and implement policies aligned with these goals.

As a foundation for future state action, NGA convened a Work Group on Common College Completion Metrics to make recommendations on the common higher education measures that all states should collect and report publicly. The work group benefited from an extensive, external review of the metrics and found substantial consensus on which to build their recommendations.

This paper aims to equip states with a set of common college completion metrics that can be used to monitor system performance and inform future policy decisions. Comparable higher education outcome and progress data are necessary to meet the guiding priorities of increased graduates, decreased minority and low-income attainment gaps, and improved performance using existing resources. Future publications will examine policies that states can use to improve college completion and efficiency in higher education.

Definitions

Completion rate: The percentage of individuals who complete a certificate or degree (e.g., associate and bachelor's).

Attainment rate: The percentage of a population that has obtained a certificate or degree.

Productivity: Awarding more higher education certificates and degrees within the same resources, while maintaining quality.



The Challenge Metrics Present for the College Completion Agenda

One of the most critical challenges facing states as they work to increase college completion relates to metrics. Higher education data at the state and institutional levels are too often limited and inconsistent, particularly with respect to performance. For example, current definitions of performance measures, such as graduation rates, do not account for all college students.

While states have made significant strides in developing higher education data systems in recent years, their capacity varies greatly. Currently, 44 states have longitudinal student unit record data systems in place, but there is wide variation in the types of institutional and aggregated data collected and reported across states.¹ Furthermore, at the end of 2010, only 18 states will have connected their K-12 and postsecondary data systems, and only nine state postsecondary systems will connect to a workforce data system.² Though many state data systems are limited in scope, nearly all higher education institutions collect some data on student performance.

Despite the critical importance of higher education to our economy, the data that tell us how many individuals are progressing through and completing college are alarmingly poor. The postsecondary graduation rate collected by the U. S. Department of Education's Integrated Postsecondary Education Data System (IPEDS) only accounts for 48 percent of all undergraduates enrolled in four-year public institutions and 32 percent of those enrolled in two-year public institutions.³

The IPEDS graduation rate *does not* account for:⁴

1. *Part-time students* – these individuals represent 37 percent of all college students, 61 percent of public two-year college students, and more than 40 percent of all black and Hispanic students; and
2. *Transfer students* – these individuals represent a significant number of college students, as 37 percent of students who earned a bachelor's degree attended more than one institution, and 23 percent attended more than two institutions.

Moreover, the federal rate *does not* disaggregate:⁵

3. *Low-income students* - 6.2 million students that receive Pell grants, representing an \$18 billion annual public investment. This is particularly troubling as students from below-median income families have experienced the largest increases in time-to-degree;⁶ and
4. *Remedial students* - approximately 40 percent of all students and 61 percent of students who begin in community colleges enroll in a remedial education course at a cost to states of \$1 billion a year.⁷



Despite the critical importance of higher education to our economy, the data that tell us how many individuals are progressing through and completing college are alarmingly poor.

Why completion metrics are important

To understand the scope and nature of the completion challenge, states have to collect, report, and use comprehensive and consistent metrics. In particular, states need to disaggregate the metrics to highlight groups such as those referenced above. It is paramount that states understand the extent to which their systems currently fall short, identify areas for improvement, and draw upon best practices identified by the data.

In the private sector, common performance metrics focus managers' attention on results and how resources are being used. In higher education, a common set of performance metrics similarly can open the door to improved institutional outcomes: completion, quality, and productivity. Governors, legislators, and other leaders can use the state-, system- and campus-level metrics for student progress and success to answer important questions such as:

- Are students taking longer to graduate than previous cohorts?
- What proportion of recent high school graduates enters postsecondary education and enrolls directly in a credit-bearing (e.g., non-remedial) course?
- Are the financial incentives for colleges working? In what ways do they need to be strengthened?
- Which college campuses are reducing historic and significant gaps among communities and between low-income and other students?
- What investments or policies are not yielding improvement in course and degree completion? Do they need to be discontinued so resources can be reallocated?

Collecting and reporting data is a necessary first step for states as they seek to improve completion rates and efficiency in higher education.

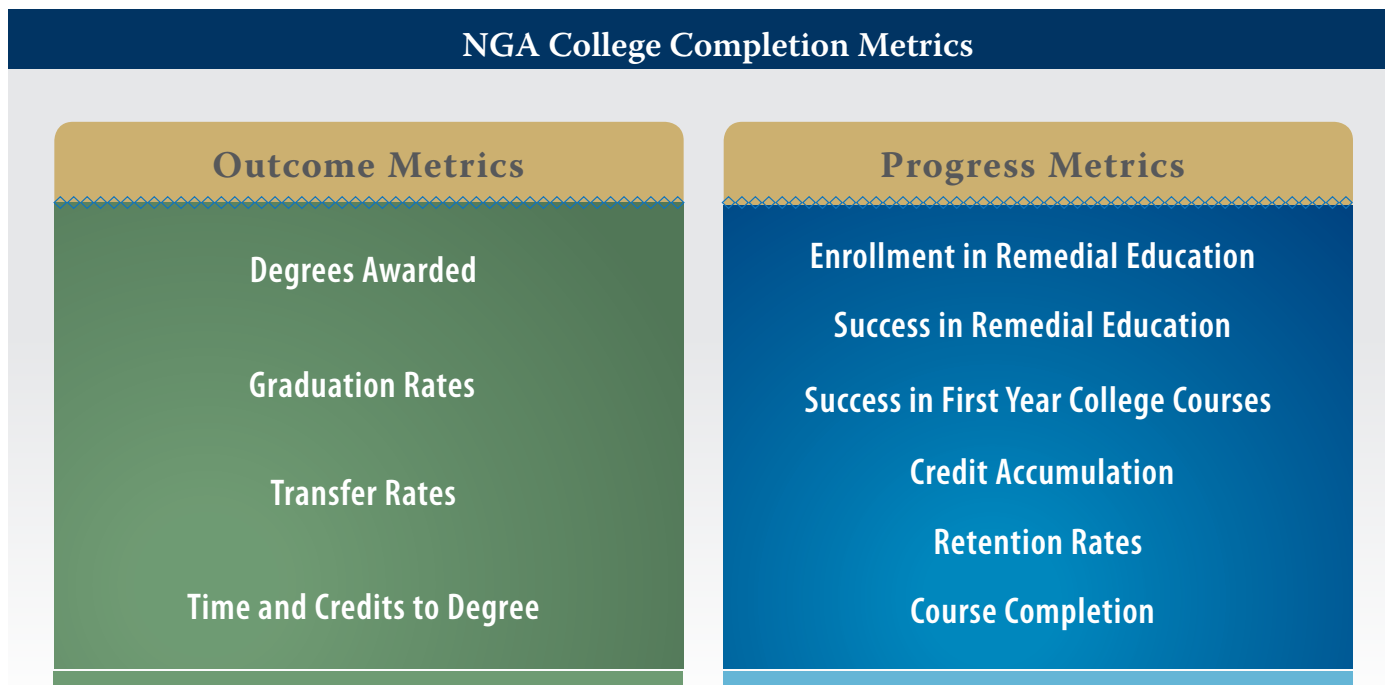
Comparable, reliable data are particularly important as states face more limited resources over the long term. Information on the progress and completion of students in higher education allows state leaders to track whether policies were successful and informs future funding decisions. Collecting and reporting data is a necessary first step for states as they seek to improve completion rates and efficiency in higher education.

Recommended College Completion Metrics

Federal and state leaders are devoting more attention to achieving the goal of increasing college completion within current fiscal constraints. At the same time, improving higher education efficiency is at the forefront of national and state education agendas. As leaders focus on improving higher education outcomes, few factors are as important as knowing the progress of students through the system and their ultimate outcomes.

Higher education institutions serve multiple purposes and types of students, from a displaced worker seeking a certificate in a new skill to an 18-year old student enrolling in a four-year university. Only one-fourth of students enrolled in higher education can be considered “traditional;” that is, enrolled full-time in a residential, four-year college and financially dependent on their parents. To reach an additional 8.2 million college graduates by 2020—a goal that will take the nation back to ranking first in the world in college completion—32 states will need to rely heavily on increasing degree attainment among adults aged 22 and older.⁸ Just like the diverse populations they serve, the measures of higher education performance should also be multiple and varied.

The metrics that NGA recommends for college completion are organized into two categories: outcomes and progress. Breaking the data into two categories enables policymakers and the public to track how well the state and its public institutions are currently performing against the completion goal, as well as whether they are on track to meet the goal in the future. The outcome metrics shape future higher education productivity conversations, while the progress metrics highlight areas in need of policy change. On the whole, the recommended set of metrics improve upon current higher education performance measures because they account for part-time and transfer students and can be disaggregated.



OUTCOME METRICS⁹

The outcome metrics quantify the end-product of the educational process, informing policymakers and the public on how students, institutions, and the state are performing on the goal of increased postsecondary attainment. The common measures that all states should track include:

- **Degrees awarded:** annual number and percentage of certificates, associate degrees, and bachelor's degrees awarded;
- **Graduation rates:** number and percentage of certificate- or degree-seeking students who graduate within normal program time (two years for associate's degrees; four years for bachelor's degrees) or extended time (three years for associate's degrees; six years for bachelor's degrees);
- **Transfer rates:** annual number and percentage of students who transfer from a two-year to four-year institution; and
- **Time and credits to degree:** average length of time in years and average number of credits that graduating students took to earn a certificate, an associate degree, or a bachelor's degree.

PROGRESS METRICS

Progress metrics measure student movement from semester-to-semester and year-to-year toward the completion of an academic program. Such measures help policymakers identify specific challenges and opportunities for improvement in higher education. The measures also enable institutions to target intervention and support services to increase the likelihood of completion. The common measures that all states should track include:

- **Enrollment in remedial education:** number and percentage of entering first-time undergraduate students who place into and enroll in remedial math, English, or both;
- **Success beyond remedial education:** number and percentage of first-time undergraduate students who complete a remedial education course in math, English or both and complete a college-level course in the same subject;
- **Success in first-year college courses:** annual number and percentage of entering first-time undergraduate students who complete entry college-level math and English courses within the first two consecutive academic years; and
- **Credit accumulation:** number and percentage of first-time undergraduate students completing 24 credit hours (for full-time students) or 12 credit hours (for part-time students) within their first academic year;
- **Retention rates:** number and percentage of entering undergraduate students who enroll consecutively from fall-to-spring and fall-to-fall at an institution of higher education;
- **Course completion:** percentage of credit hours completed out of those attempted during an academic year.

Context Metrics to Consider

Policymakers want to observe trends and make choices about resources based on those trends. To accomplish those objectives, NGA recommends that states consider collecting and reporting additional context measures. These metrics help states analyze and apply the outcome and progress metrics, providing governors and other state leaders with more information on which to base policy decisions. The additional measures that NGA recommends states should track include:

- **Enrollment:** total first-time undergraduate students enrolled in an institution of higher education;
- **Completion ratio:** annual ratio of certificates and degrees awarded per 100 full-time equivalent (FTE) undergraduate students; and
- **Market penetration:** annual ratio of certificates and degrees awarded relative to the state's population with a high school diploma.

These measures are particularly important for policymakers because they provide: a check to ensure that access to higher education is not sacrificed in favor of completion; a system wide snapshot of higher education productivity; and a method to track the growth in the overall level of education in the state.

Implementation Recommendations

For comparability and use by policymakers, states need to report on a common set of completion metrics at the institutional and state levels that can be disaggregated by subpopulation. States also will need to take action to clarify some of the metric definitions and the credit-to-degree requirements to implement the metrics in a timely manner.

Recommendation 1: Clarify Definitions for the Completion Metrics

Existing state policies may affect a state's ability to adopt, calculate, and report on the recommended metrics. For example, whether and how "remedial" education courses are defined in the state may impede the effort to implement recommended metrics around remediation. States also will need to consider how to define a "first-year" or "gateway" college course, which may differ by institution. The information is essential for calculating measures of student progress.

Recommendation 2: Collect College Completion Data

Not all state higher education systems are capable of reporting on the full set of recommended metrics at this time; however, a majority of the measures are collected at the individual institution level. States that have fully functional data systems should collect information on the outcome and progress metrics now. As some of these metrics include definitions not previously used, collecting these data may require additional time by institutions or the state. States without system-wide information for each of the nine recommended metrics should collect and report the information available. Where gaps exist, procedures to begin collecting the information should be established. Although full data reporting may not be possible in all cases, it is important to begin the effort now to monitor system performance, make policy decisions, and ultimately, drive reform. In general, moving from a partial collection and reporting system to a fully functioning one may take only one or two years for most state higher education systems.

Consult "Data System Requirements for Completion Metrics" (p. 13) for additional information and resources regarding state data system capabilities and completion metrics.

Recommendation 3: Disaggregate Completion Metrics

Significantly increasing college completion will require closing the gaps in success rates for low-income and minority students as well as encouraging the success of targeted sub-groups, such as adults and part-time students. To understand and track improvement, states should disaggregate the outcome and progress metrics by: gender; race/ethnicity; income; age; enrollment status; degree type; and, discipline.¹⁰

Recommendation 4: Report Data Annually on All Completion Metrics

States should report the data on the outcome and progress metrics annually for public campuses, systems, and the state. Improvement at all levels will not occur if these data are not made public. Recognizing the importance of public reporting, states such as **Georgia, Indiana, Minnesota, and Ohio** each release data on higher education performance in easily understood formats for public consumption. It is not enough to monitor performance at the state level alone; rather, policymakers and the public need to know how each public institution and system performs with regard to the progress and completion of its students.

Data System Requirements for Completion Metrics

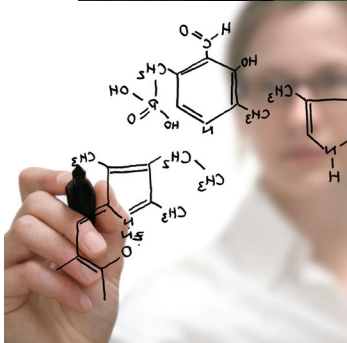
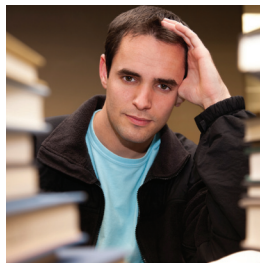
All states need to take stock of their current postsecondary data system capabilities, and improve them if necessary, to report on the recommended completion metrics. States need the following postsecondary data system characteristics to report on the outcome and progress metrics:

- A unique statewide student identifier;
- Student-level data for all public colleges and universities on: enrollment, demographics, financial aid, transfer, persistence, course/transcript, remediation, degree completion, and graduation;
- Privacy protection for all individually identifiable student records; and
- A data audit system to assess data quality, validity, and reliability.

States should not wait to implement all elements before reporting on the progress and outcome measures. States without data system capacity to report on each of the nine recommended metrics should collect and report the information available. Where gaps exist, states can look to national organizations and federal government for assistance.

The State Higher Education Executive Officers (SHEEO) and the National Center for Higher Education Management Systems (NCHEMS) have created a set of recommended elements for state postsecondary data systems that can serve as a guide for states.¹¹ The U.S. Department of Education provides grants and technical assistance to states to improve their longitudinal data systems.





Graduate

Conclusion

Improved college completion rates are critical to the future of the United States. But without better data, states cannot adequately understand the nature of the challenge they confront or target areas for policy change.

Governors, higher education executive officers, legislators, and college and university presidents must embrace the challenge and work together to implement the policy and data system changes that will produce accurate information.

Collecting and reporting on college completion metrics is only the start. Using the data is the next step. The collection of more reliable data will enable governors and other state leaders to better understand whether policies have an impact on increasing college completion rates. States must use this information to improve efficiency and results, connecting the data to financial decisions and program approval. In particular, states can identify and learn from institutions that have successfully increased college completion without new funding. States also can use the data to inform performance funding decisions as is done in **Indiana** and **Tennessee**.

Efforts to increase degree attainment must start with common, comparable data for public higher education institutions. Common metrics for higher education performance can unify our states around a shared goal and communicate our commitment to doing the work necessary to bring about improvement. Now is the time for states to adopt and report common college completion metrics.

Endnotes

- 1 Personal interview with Jeff Stanley, Associate Vice President, State Higher Education Executive Officers, May 13, 2010.
- 2 Data Quality Campaign, “Action 1: Link P-20/workforce data systems” (Washington, D.C.: Data Quality Campaign, 2010). Available at: http://www.dataqualitycampaign.org/files/Action1_Compendium.pdf.
- 3 Jorge Klor de Alva, Mark S. Schneider, and Jay Klagge, “Proof of Concept Study: On Proposed Changes Needed to Improve IPEDS Data (To Better Serve National Higher Educational Goals and Consumer Information and Research Needs).” Available at <http://www.nexusresearch.org>.
- 4 Stan Jones, “Metrics that Inform and Drive Improvement in College Completion Rates,” (presentation given at the Southern Regional Education Board College Completion Conference, Charleston, WV, April 2010).
- 5 Ibid.
- 6 John Bound, Michael F. Lovenheim, and Sarah Turner. “Increasing Time to Baccalaureate Degree in the United States,” National Bureau of Economic Research Working Paper 15892 (Cambridge, Mass.: National Bureau of Economic Research, 2010).
- 7 Alliance for Excellent Education, “Paying Double: Inadequate High Schools and Community College Remediation” (Washington, D.C.: Alliance for Excellent Education, 2006). Available at: <http://www.all4ed.org/files/archive/publications/remediation.pdf>.
- 8 National Center on Higher Education Management Systems, “Closing the College Attainment Gap between the U.S. and Most Educated Countries, and the Contributions to be made by the States” (Denver, Colo.: National Center on Higher Education Management Systems, 2010); and, Council for Adult and Experiential Learning, *Adult Learning in Focus: National and State-by-state Data* (Chicago, Ill.: Council for Adult and Experiential Learning in partnership with the National Center on Higher Education Management Systems, 2008). Available at: http://www.cael.org/pdf/State_Indicators_Monograph.pdf.
- 9 For technical definitions of the outcome, progress, and context metrics, see the forthcoming “Complete to Compete: Common College Completion Metrics Technical Guide.”
- 10 Lumina Foundation for Education, “Focus” (Indianapolis, In.: Lumina Foundation for Education, 2010). Available at: http://www.luminafoundation.org/publications/focus_archive/Focus-Spring_2010.pdf.
- 11 For more information on these categories, see the forthcoming “Complete to Compete: Common College Completion Metrics Technical Guide.”

NGA CENTER DIVISIONS

The NGA Center is organized into five divisions with some collaborative projects across all divisions.

- **Economic, Human Services & Workforce** focuses on best practices, policy options, and service delivery improvements across a range of current and emerging issues, including economic development and innovation, workforce development, employment services, research and development policies, and human services for children, youth, low-income families, and people with disabilities.
- **Education** provides information on best practices in early childhood, elementary, secondary, and postsecondary education. Specific issues include common core state standards and assessments; teacher effectiveness; high school redesign; science, technology, engineering and math (STEM) education; postsecondary education attainment, productivity, and accountability; extra learning opportunities; and school readiness.
- **Environment, Energy & Transportation** identifies best practices and provides technical assistance on issues including clean energy for the electricity and transportation sectors, energy and infrastructure financing, green economic development, transportation and land use planning, and clean up and stewardship of nuclear weapons sites.
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