

StriveTogether Community Level Outcomes

Community level outcomes are academic points along the cradle to career education continuum that are supported by research as key contributors to the achievement of cradle to career vision and goals. These outcomes are selected by partnerships from across the cradle to career continuum and are reported on regularly to ensure accountability to the community and effective alignment of community resources.

StriveTogether's Cradle to Career Network identified six core outcome areas that are most often reflected in the community reports of Cradle to Career Network members and critical for the educational success of every child. Most, but not all, have statewide indicators and corresponding data available which can help communities utilize data to drive decision making and planning. Using the [Theory of Action](#) as a guide, StriveTogether staff will focus on offering supports to sites working to improve indicators related to these six outcome areas.

StriveTogether Core Outcome Areas:

- Kindergarten Readiness
- Early Grade Reading
- Middle Grade Math
- High School Graduation
- Post-secondary Enrollment
- Post-secondary Degree Completion

Kindergarten Readiness



Kindergarten readiness is closely linked to future academic achievement and life success, though indicators for this outcome area often differ across school districts and states. During these critical formative years, a child begins to explore and discover the wider world around him or her, learning language, understanding that letters form words and relating words to the things he or she sees.

Children are developing fundamental skills and responses in early childhood that build strong foundations for reading, counting, and social interactions. Letter and number recognition, verbal skills and language complexity, empathy, and cooperation are examples of readiness skills that can prepare a child to succeed in kindergarten and beyond.

Data from Maryland shows that as a child's kindergarten readiness scores improve, third-grade reading and math scores rise accordingly.¹ Across states, school-entry academic and attention skills are highly correlated with later academic achievement in elementary school.² Elementary school reading levels appear to be predominantly determined by the reading skills children bring from kindergarten, meaning that kindergarten literacy levels predict reading ability throughout a child's educational career.³

In addition to the predictive value of kindergarten readiness, the Mayo Clinic notes that "kindergarten marks the start of a child's formal education. A child's first school experiences can influence the way he or she relates to others for the rest of life. For example, success or failure at this stage can affect a child's well-being, self-esteem and motivation. As a result, it's important to make sure that when your child begins school he or she is developmentally ready to learn and participate in classroom activities."⁴

Early Grade Reading



Literacy, across the cradle to career continuum, is critical to a child's academic success. Early grade reading is a particularly crucial milestone, as basic reading skills are being reached and measured.

Though state indicators for grade level reading vary, data shows that disparities in literacy during the early grades are linked to persistent achievement gaps. If children are behind by third grade, they

generally stay behind throughout school.⁵

In the early grades, children begin to transition from learning to read **to** reading to learn. At these grade levels, the reading curriculum becomes more complex in both meaning and vocabulary. Historically, teachers and researchers have noticed that most children's growth in reading skills tends to stall at third or fourth grade coining this phenomenon the "fourth grade slump." Estimates from recent studies suggest that by third or fourth grade, 20% of children are dysfunctional readers, with a markedly higher incidence of reading problems in schools serving disadvantaged students. One national survey detailing reading achievement of fourth graders indicated that 44% of school children were reading below a basic level of achievement.⁶

Reading at grade level is one of the strongest predictors of later success in school. Students at or above grade level reading in earlier grades graduate from high school and attend college at higher rates than peers reading below grade level.⁷ One longitudinal study found that students who do not read at grade level by third grade are *four times* more likely to drop out of high school than proficient readers.⁸

Middle Grade Math



Middle grade math has become an important milestone for high school persistence, academic achievement, college attainment, and general preparedness for the workforce. Middle grade mathematics provides both a sense of mathematical *and* intellectual achievement, as there is a strong link between mathematics curriculum and college enrollment.⁹ Middle grade math, commonly considered to be *Algebra I*, is essential for success in high school math. Students completing algebra in eighth grade are more likely to stay in the mathematics pipeline longer and attend college at higher rates compared to students who do not complete algebra in eighth grade.¹⁰ Research indicates that students successfully completing middle grade math perform better in geometry, more advanced algebra, trigonometry and calculus.

Basic algebra has been referred to as the "gatekeeper subject" because of its correlation to both college and career success. Taking algebra in middle school opens the gateway to completing advanced mathematics courses in high school which, in turn, is highly valued for admission to many four-year colleges and universities.¹¹ Students who leave high school without adequate mathematics preparation and skills require post-secondary remediation coursework later on.¹² Approximately 23% of entering college freshmen fail placement tests for college level math courses and are placed in non-credit-bearing remedial courses.¹³

High School Graduation



High school graduation is associated with higher earnings, college attendance and graduation, and other measures of personal and social welfare. As college education increasingly becomes a necessity for upward mobility, graduating more students from high school is critical.

High school graduation is not only a precursor to college enrollment; it is also a major indicator for earnings throughout adulthood. On average, high school graduates make at least \$10,000 more annually than individuals who did not complete high school.¹⁴ Over a lifetime, high school graduates earn over half a million dollars more than their counterparts without a diploma.

Unemployment rates for high school dropouts are higher than for high school graduates. In 2012, approximately 12% of individuals who dropped out of high school were unemployed, compared to the national average of 8.1%.¹⁵ If the number of high school dropouts in the 50 largest U.S. cities were cut in half, the extra earnings of

those high school graduates would add up to \$4.1 billion per year.¹⁶ High school dropout rates also correlate strongly with poverty; high school dropouts are almost twice as likely to live in poverty as high school graduates.

It is estimated that about one-third of high school students do not finish high school on time, if at all. This has tremendous repercussions for students and communities. Educational attainment, particularly high school graduation, has been shown to predict health, mortality, teen childbearing, marital outcomes, and crime. Increasing the educational attainment of one generation improves the next generation's academic and social outcomes.¹⁷

Post-secondary Enrollment



Post-secondary enrollment marks one of the critical transitions in the cradle to career pipeline where students, particularly low-income and students of color, are less likely to pursue education beyond high school. Students from lower income schools enrolled in college at an average rate of 50%, compared to 65% of students from higher income schools.¹⁸ Research has shown that “low income students, even those with high academic performance levels, are less likely to enroll in college, more likely to attend two-year colleges when they do enroll, and less likely to apply to more selective institutions compared to their more advantaged peers with similar academic preparation.”¹⁹

This important phase, necessary to help a student progress from high school graduation to post-secondary degree completion, is now more exigent than ever. Nationally, the workforce is pivoting away from traditional labor-intensive careers toward careers requiring a strong technical knowledge foundation.²⁰ As students begin to understand the impact of post-secondary education on their future plans, it is critical to ensure their access to post-secondary program options and financial aid information. Post-secondary credentials are not limited to four-year universities; two-year programs and technical certifications are also valuable in this knowledge-based economy.

Post-secondary Degree Completion



Post-secondary degrees are more valuable than ever. The benefits of post-secondary education span across social and economic domains. By 2018, over 60% of jobs will require some level of post-secondary education.²¹ According to the Lumina Foundation, the number of jobs requiring an associate degree has grown by 1.6 million and the number of jobs requiring a bachelor's degree has grown by 2 million since the end of the recession.²² Historically, it has been difficult to track the myriad post-secondary credentials of Americans, but the Lumina Foundation estimates that approximately 5% of the U.S. population holds a certificate with high economic value.²³

An individual with only a high school diploma can expect to earn approximately \$1.76 million over a lifetime, while it is estimated that the average lifetime earnings of workers with at least a bachelors' degree is approximately \$3.38 million – post-secondary degree holders can generate almost 2.5 times the amount of income of high school graduates alone.²⁴ While earnings potential has always been a motivator for post-secondary completion, it has shifted to an even more fundamental base. In this economy, it can be difficult to even obtain a job, let alone a job with high earnings potential.²⁵

College attainment is linked to improved health and social outcomes. Adults with a college education typically live longer and are generally healthier than those without a post-secondary credential. Society benefits from a more educated population, including: lower instances of child abuse, lower rates of criminal behavior, and fewer teen

pregnancies among children of college-educated parents.²⁶ Typically, adults with post-secondary education also participate more frequently within the civic domain of their community.²⁷

Supporting the Success of Every Student, Cradle to Career

These six core outcome areas are informed by research as reliable predictors for a child's educational success. The StriveTogether Cradle to Career Network recognizes the importance of each community tracking these outcomes and the Network role of providing resources and support aligned with indicators related to outcomes. While StriveTogether supports communities to primarily impact core academic outcomes, it is understood that there are many contributing factors to educational outcomes. Each community can define their indicators taking into account local context, assets, and disparities.

Though outcome areas are designated to help communities achieve their cradle to career vision and goals, this approach does not generate impact overnight. A combination of partners, practices, and patience are all vital for continuous improvement. Early wins are important to build and sustain community morale; intermediary points of progress can be used to guide strategy and accelerate momentum.

Finally, we recognize the degree of interdependence among outcomes and the activities that drive progress across the continuum. Over time, communities are able to identify gaps in support along the continuum and align resources to maximize impact. As communities begin to track core outcome areas and reallocate their resources to maximize impact, every child is truly supported – cradle to career.

¹ Maryland State Department of Education. 2010. *Getting Ready: The 2010-2011 Maryland School Readiness Report*. Annapolis, Maryland: Department of Education.

² Duncan et al. 2007. School Readiness and Later Achievement. *Developmental Psychology* 43(6):1428–1446.

³ Storch, Stacey A., and Grover J. Whitehurst. 2002. Oral Language and Code-Related Precursors to Reading: Evidence From a Longitudinal Structural Model *Developmental Psychology* 38(6):934-947.

⁴ Mayo Clinic. Kindergarten readiness: Help your child prepare, <http://www.mayoclinic.com/health/kindergarten-readiness/MY01437>

⁵ Schorr, Lisbeth, and Marchand, Vicky. 2007. *Pathway to Children Ready for School and Succeeding at Third Grade*. Cambridge: Project on Effective Interventions at Harvard University.

⁶ Strive Partnership. (2006). *Welcome to the Roadmap to Success*.

⁷ Lesnick, Joy et al. 2010. *Reading on Grade Level in Third Grade: How Is It Related to High School Performance and College Enrollment?* Chicago: Chapin Hall at the University of Chicago.

⁸ Hernandez, Donald. 2011. *Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation*. New York: Foundation for Child Development and the Annie E. Casey Foundation.

⁹ Strive Partnership. (2006). *Welcome to the Roadmap to Success*.

¹⁰ Spielhagen, Frances. 2006. "Closing the Achievement Gap in Math: The Long-Term Effects of Eighth-Grade Algebra." *Journal of Advanced Academies*, 18(1).

¹¹ American Institutes for Research. (2006). *The Gateway to Student Success in Mathematics and Science*.

¹² Great Schools, Why is algebra so important?, <http://www.greatschools.org/students/academic-skills/354-why-algebra.gs>

¹³ Achieve. 2006. *Do All Students Need Challenging Math in High School?* Washington, D.C.: Achieve.

¹⁴ U.S. Census Bureau. (2010), <http://www.census.gov/compendia/statab/2012/tables/12s0232.pdf>

¹⁵ U.S. Department of Labor, Bureau of Labor Statistics, <http://www.bls.gov/news.release/empsit.nr0.htm>

¹⁶ Curran, Bridget, and Reyna, Ryan. 2009. *Implementing Graduation Counts: State Progress to Date*. Washington, D.C.: National Governors Association Center for Best Practices.

¹⁷ Oreopoulos, Philip, Page, Marianne, and Stevens, Ann. 2006. "The Intergenerational Effects of Compulsory Schooling," *Journal of Labor Economics*, 24.

¹⁸ National Student Clearinghouse. *Tracking the Road to College Success: Inaugural National High School Benchmarks Report*, http://www.studentclearinghouse.org/about/media_center/press_releases/files/release_presskit_2013-10-15.pdf

¹⁹ National Student Clearinghouse. *Tracking the Road to College Success: Inaugural National High School Benchmarks Report*, http://www.studentclearinghouse.org/about/media_center/press_releases/files/release_presskit_2013-10-15.pdf

²⁰ The Lumina Foundation. *A Stronger Nation through Higher Education*, http://www.luminafoundation.org/stronger_nation/report/main-narrative.html

²¹ Georgetown University Center on Education and the Workforce.

²² The Lumina Foundation. *A Stronger Nation through Higher Education*, http://www.luminafoundation.org/stronger_nation/report/main-narrative.html

²³ The Lumina Foundation. *A Stronger Nation through Higher Education*, http://www.luminafoundation.org/stronger_nation/report/main-narrative.html

²⁴ National Governors Association Chair's Initiative. 2010. Complete to Compete: Improving Postsecondary Attainment Among Adults. Washington, DC: National Governors Association.

²⁵ The Lumina Foundation. *A Stronger Nation through Higher Education*, http://www.luminafoundation.org/stronger_nation/report/main-narrative.html

²⁶ Riddell, W. Craig. 2006. The Impact of Education on Economic and Social Outcomes: An Overview of Recent Advances in Economics. Vancouver: University of British Columbia.