

APPENDIX F

POLICY BRIEF SUMMARIES

NORTH CAROLINA CONTEXT AND TALENT PIPELINE

REACHING A POSTSECONDARY ATTAINMENT GOAL: A MULTISTATE OVERVIEW

(SIMS & SIDDIQI, 2018)

In response to disappointing results on national and international assessments of student learning and a decline in the United States' standing in international education attainment rankings, both President Obama and the Lumina Foundation announced ambitious national postsecondary attainment goals in 2009. The purpose of these goals was to raise awareness of the need to bolster economic competitiveness by increasing the number of Americans earning some form of credential beyond a high school diploma. This push from the federal level, along with Lumina's grant making and advocacy, led to a flurry of state activity. State attainment goals were largely absent until 2010, but since that time, all but nine states, including North Carolina, have set postsecondary attainment goals that have been formally adopted by a statewide leadership group. While most states used similar criteria in their goals, the 41 state-level attainment goals vary in a number of ways, including the definition of postsecondary attainment, time frame, and ambition. This policy brief reviews the differences in states' postsecondary attainment goals, outlines how states have approached this important and challenging task—with a deeper focus on lessons learned from Tennessee, Virginia, and Maine—and offers recommendations for North Carolina policymakers.



POSTSECONDARY ENROLLMENTS REPORT: 2009-2016 NORTH CAROLINA PUBLIC HIGH SCHOOL GRADUATES

(TIPPETT & KAHN, 2018A)

Individual educational attainment and barriers to attainment are not readily captured by a single indicator. Educational attainment is a process with multiple key steps. After completing high school, individuals must enroll in college and persist in their enrollment until degree completion. In a series of four data briefs, the authors use National Student Clearinghouse data to better understand key transition points and the college-going behaviors of North Carolina public high school graduates from 2009-2016. This report examines the question of access: How many students are going to college? It focuses on the details related to college access among North Carolina high school graduates, examining enrollment timing, the characteristics of students who enroll, where students enroll, and whether they are enrolled full- or part-time.

POSTSECONDARY PERSISTENCE REPORT: 2009-2016 NORTH CAROLINA PUBLIC HIGH SCHOOL GRADUATES

(TIPPETT & KAHN, 2018B)

Individual educational attainment and barriers to attainment are not readily captured by a single indicator. Educational attainment is a process with multiple key steps. After completing high school, individuals must enroll in college and persist in their enrollment until degree completion. In a series of four data briefs, the authors use National Student Clearinghouse data to better understand key transition points and the college-going behaviors of North Carolina public high school graduates from 2009-2016. This report examines the question of persistence: How many students are still enrolled in postsecondary after their first year? It focuses on the details related to persistence among North Carolina high school graduates, examining both college persistence and retention, and how these vary by students' demographic and enrollment characteristics, including timing of enrollment, intensity of enrollment, and institution of first enrollment.



POSTSECONDARY COMPLETION REPORT: 2009-2016 NORTH CAROLINA PUBLIC HIGH SCHOOL **GRADUATES**

(TIPPETT & KAHN, 2018C)

Individual educational attainment and barriers to attainment are not readily captured by a single indicator. Educational attainment is a process with multiple key steps. After completing high school, individuals must enroll in college and persist in their enrollment until degree completion. In a series of four data briefs, the authors use National Student Clearinghouse data to better understand key transition points and the college-going behaviors of North Carolina public high school graduates from 2009-2016. This report examines the question of success: How many students persist in their postsecondary enrollments to successfully complete a degree or credential? It focuses on the details related to success among North Carolina high school graduates who enroll in a postsecondary program, examining degree completion within six years among 2009-2011 high school graduates and how this varies by students' enrollment and demographic characteristics.

POSTSECONDARY PATHWAYS AND BARRIERS TO OPPORTUNITY REPORT: 2009-2016 NORTH CAROLINA PUBLIC HIGH SCHOOL GRADUATES

(TIPPETT & KAHN, 2018D)

Individual educational attainment and barriers to attainment are not readily captured by a single indicator. Educational attainment is a process with multiple key steps. After completing high school, individuals must enroll in college and persist in their enrollment until degree completion. In a series of four data briefs, the authors use National Student Clearinghouse data to better understand key transition points and the college-going behaviors of North Carolina public high school graduates from 2009-2016. This report examines the questions of postsecondary pathways and barriers to opportunity: What are the most common pathways through postsecondary? What are the potential barriers to success as suggested by pathways that end in stop-out or dropout? It examines the key transition points in the postsecondary pipeline to understand how losses or leaks from the pipeline can compound over time, identifies postsecondary outcomes and examines how patterns of institutional and enrollment characteristics come together to reveal common postsecondary pathways among the 2009-2011 North Carolina public high school graduates, and identifies the academic and economic characteristics

107



of students on these pathways to highlight opportunities for interventions to promote postsecondary success.

BRINGING IT ALL TOGETHER: LEAKS IN THE POSTSECONDARY PIPELINE

(TIPPETT & KAHN, 2018E)

This report serves as a supplement to the authors' data briefs on on the individual aspects of the postsecondary pipeline: enrollment, first-year persistence, and six-year attainment, and examines these three distinct milestones in combination to understand how group differences at each point may contribute to widening or narrowing educational disparities over time. It focuses on differences by geography, sex, race/ethnicity, economic disadvantage, and high school academic performance, and suggests interventions for improving postsecondary attainment for different groups based on their trajectory through the educational pipeline.



PRESCHOOL, ELEMENTARY, AND SECONDARY **ACHIEVEMENT**

IMPROVING EDUCATIONAL OUTCOMES IN NORTH CAROLINA: ALIGNING POLICY INITIATIVES IN PRE-**KINDERGARTEN THROUGH GRADE 3**

(MUSCHKIN, 2018)

High-quality early education provides the foundation for children to succeed in school, graduate from high school, enroll in postsecondary education, and complete a higher education degree. Programs that optimize learning gains during Pre-K through Grade 3 have important positive effects for student outcomes, particularly among children who are at academic risk. However, for some children these gains tend to fade out as they progress through school. Early gains are most likely to persist if educational efforts are integrated in a pre-K to Grade 3 policy framework that emphasizes improved program access, quality, and alignment. North Carolina is a leader in developing initiatives for enriching early environments and reducing academic achievement gaps, and is committed to a pre-K to Grade 3 early education strategy, which has led to important improvements in the state's early education landscape. Nonetheless, many children are currently entering kindergarten lacking school readiness skills, while others fail to sustain early learning gains and are unable to achieve reading proficiency by the end of third grade. This policy brief provides recommendations for strengthening and sustaining early learning through strategic alignment of policies and practices.

K-12 ACHIEVEMENT AND PROFICIENCY GAPS

(TOMBERLIN, 2018)

The goal of North Carolina Public Schools is not only to raise proficiency rates among all students, but to ensure that there are no significant gaps in achievement among student demographic groups. In order to give a brief overview of how North Carolina's public education system is serving students, this brief presents achievement data from the 2016-17 school year. This overview focuses on three critical points in a student's educational path: fifth grade, eighth grade, and high school. For fifth and eighth grade students, data are presented on students' performance in the subjects of mathematics, English language arts (ELA), and science. For high school students, the data



reflect student achievement in the three subjects tested by state End of Course Exams (EOCs): Mathematics I, English II, and Biology.

NORTH CAROLINA K-12 ACHIEVEMENT

(LAUEN & TOMBERLIN, 2018)

When considering a postsecondary attainment goal for North Carolina, it is critical to examine key elementary and secondary academic benchmarks. Students who perform well on standardized tests will have more opportunities for postsecondary education and in the workforce than those who perform less well. Most economically disadvantaged students and some minority groups do not have ACT scores high enough to gain access to many of the more selective UNC campuses. Because test scores are highly correlated across time, it is possible to predict with some accuracy how a student will perform on the ACT based on prior test score performance. To aid in the establishment of a postsecondary attainment goal for North Carolina, as well as strategies for meeting that goal, this policy brief summarizes key data points about elementary and secondary academic achievement. The brief works backward through the age span of students from postsecondary, to high school, middle school and elementary school to emphasize that educational achievement is strongly linked across time. Learning begets learning, which means that raising and maintaining achievement takes concerted action across many different levels of schooling.

ADVANCING STUDENT ACHIEVEMENT AND **DEVELOPMENT IN NC: PROMISING POLICIES AND** PRACTICES FOR THE TEACHING WORKFORCE

(BASTIAN, 2018)

Teachers matter to the short- and long-term trajectories of students. In the short term, teachers influence student achievement and the development of social and emotional skills. In the long term, teachers affect educational attainment, employment, and earnings. Given the importance of teachers, North Carolina's state and local officials are charged with enacting policies that recruit, prepare, develop and retain a highly effective teacher workforce. North Carolina has been a regional and national leader in many of these policy areas; however, there are also opportunities to innovate and better align policy initiatives to strengthen the teacher workforce. This policy brief describes the importance of teachers, what we know about improving teacher quality and retention, and how policy and practice can accomplish these goals.





TRANSITIONS TO AND **ACROSS POSTSECONDARY OPPORTUNITIES**

THE TRANSITION FROM HIGH SCHOOL TO **COLLEGE IN NORTH CAROLINA**

(EDMUNDS, 2018)

The transition from high school to further postsecondary education is a joint in the educational pipeline with the clear potential to leak. The K-12 sector needs to consider whether students are prepared with the knowledge and skills they need to be successful in postsecondary education, while the postsecondary sector needs to consider the types of supports that are needed to facilitate the transition and ensure that students are successful in postsecondary education. Data show that North Carolina has made improvement in some areas relevant to the transition to college but challenges remain, particularly in the area of mathematics achievement and in reducing performance gaps between different groups of students. North Carolina has already undertaken key policy initiatives facilitating the transition to college, but the K-12 and postsecondary sectors could take additional steps to improve the transition. This policy brief outlines these strategies, as well as proposes a more radical re-envisioning of the education continuum that would reduce the potential for leaks.

COMMUNITY COLLEGE-TO-UNIVERSITY **TRANSFER**

(D'AMICO & CHAPMAN, 2018)

This policy brief outlines the community college-to-university transfer landscape and assesses how well North Carolina is positioned to improve experiences and outcomes for transfer students. Key factors to consider when developing strategies for improving these experiences and outcomes include: educational attainment for community college students who transfer to public and private universities is imperative for meeting state workforce needs at the certificate, associate degree, and baccalaureate levels; while North Carolina falls behind the national average on some benchmarks, the growth in transfer shows there is promise in this area; and transfer students too often have lower completion rates and follow inefficient pathways to the baccalaureate. No single initiative is likely to improve outcomes on its own; however, the state should consider leveraging a host of strategies, including statewide transfer





pathways in key program areas, universal course numbering for public higher education, emphasis on articulation of credit to universities for students completing a workforce preparation-focused associate degree, improved data quality and sharing, incentives for pre-transfer associate degrees, and communication during secondary education. Combined, these initiatives would demonstrate an enhanced commitment to transfer students, lessen uncertainty, and clarify a way forward for future community college transfer policy improvements.

STUDENT DEBT

AFFORDABILITY IN NC'S COLLEGES AND UNIVERSITIES: POLICY SOLUTIONS TO MINIMIZE STUDENT DEBT AND MAXIMIZE REPAYMENT

(ROBINSON, 2018)

As North Carolina considers a postsecondary attainment goal, it is critical to include affordability and student debt as part of the discussion. In order for students to successfully transition from higher education to the workforce, they must navigate several hurdles: paying for college, graduating from college, and obtaining work that is commensurate with their education and skills. There is strong evidence that North Carolina is serving most of its students well. Postsecondary education in the state is more affordable than elsewhere in the country and most students have little trouble finding the resources needed to pay for college in the forms of federal, state, and institutional financial aid. However, there is a subset of institutions and students who struggle. In particular, students who fail to complete their education, either because of financial or academic difficulties, often default on their student loans. This policy brief examines the questions: how much does postsecondary education in North Carolina cost and how do students pay for it? The brief first examines the current landscape of affordability and financial aid in North Carolina's postsecondary institutions—from community colleges to four-year public and private universities. Then, it discusses the relationship between affordability, debt, and postsecondary attainment. Lastly, it suggests several policy reforms to address the biggest challenges to current and prospective college students.

112



WORKFORCE TALENT DEVELOPMENT

TALENT DEVELOPMENT PIPELINE FOR YOUTH: CREATING A CAREER-READY WORKFORCE IN NORTH CAROLINA

(BARTLETT & HOWZE, 2018)

In order to sustain the economy, North Carolina residents must have the skills, education, and training to fill the jobs available in the future. This brief provides an overview of the state's workforce pipeline through a review of employment projections, current workforce preparation curriculum in the K-12 and postsecondary sectors, student educational and work outcomes, and problems and best practices.

A FOCUS ON NON-COMPLETERS: ONE STRATEGY FOR UPSKILLING THE EXISTING WORKFORCE IN NC

(BROWN-GRAHAM & MOGA BRYANT, 2018)

Efforts to develop North Carolina's talent pipeline must include strategies for reaching people of all ages and experiences. This paper explores opportunities for upskilling our existing workforce—that is, developing workers' skills to improve performance, allow for advancement to higher positions, and fill unmet employer needs—and developing the talents of people who should be but are not currently in the workforce. In particular, this brief explores the opportunity created by the hundreds of thousands of people in North Carolina's workforce who are non-completers. These residents have some postsecondary experience but no credentials. Strategies for helping workers upskill and non-completers attain a credential include work-based learning programs, "part-way home" programs that help individuals who have college credit return to school and finish their degree, and higher education programs that award credit for military experience.

