HOLSHOUSER LEGISLATORS RETREAT

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THE hunt institute

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OVERVIEW: WHAT IS THE EDUCATION LANDSCAPE IN NORTH CAROLINA?

1,550,742 K-12 public school students	**↑ 6.2%** Expected enrollment change by 2027
2,655 Public schools	**115** Public school districts
450,162 Public postsecondary students	**49%** Enrolled in 2-year colleges
42.1% 2-year public college graduation rate (in 6 years)	**76.8%** 4-year public college graduation rate (in 6 years)

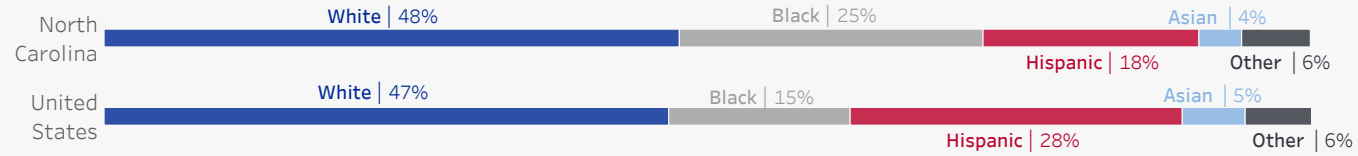
Data Resource

VALUE	CATEGORY	NATIONAL RANKING
$9,950	Per Pupil Expenditures	47
15:6	Student-Teacher Ratio	35
41%*	NAEP 4th Grade Math[1]	23
36%*	NAEP 4th Grade Reading	20
37%*	NAEP 8th Grade Math	21
33%*	NAEP 8th Grade Reading	27
86%	Public High School Graduation Rate[2]	22

**Represents the percent of students who scored at or above proficient on the National Assessment of Educational Progress (NAEP)*

Data Resource 1 Data Resource 2

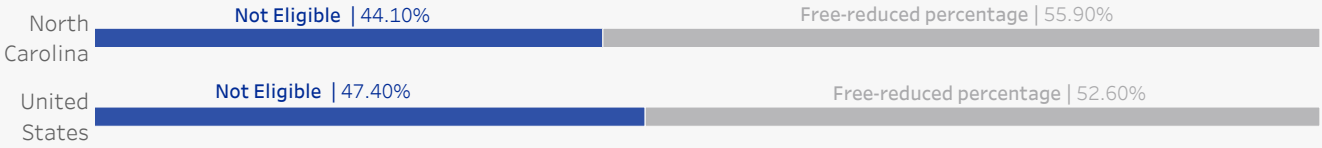
K-12 LEVEL OF FAMILY INCOME



Compared to the national average, North Carolina, has a higher proportion of students eligible for free- and reduced-price lunch, a common indicator of poverty in schools.

Data Resource

K-12 LEVEL OF FAMILY INCOME



North Carolina has fewer Hispanic students than the national average, but a higher share of Black students.

Data Resource

NORTH CAROLINA'S YOUNGEST LEARNERS | HEALTH, WELL-BEING, AND READINESS TO LEARN

Decades of research on brain science make one conclusion exceedingly clear: the years of early childhood matter – both for children themselves and for society at large. More than one million neural connections form every second during the earliest years of a child's life, reinforcing that 1) children are born learning, 2) measurable achievement gaps form as early as infancy, and 3) the environments in which children spend their earliest years dramatically influence their long-term success, both in school and in life.

Beyond cognitive development, these networks of neural connections develop **executive function skills essential for school achievement, the preparation and adaptability of our future workforce, and avoiding a wide range of population health problems.** Moreover, executive functioning is one of five key elements of school readiness as defined by the American Academy of Pediatrics.

FIGURE 1 | FIVE DOMAINS OF LEARNING FROM THE AMERICAN ACADEMY OF PEDIATRICS

Physical Well-Being And Sensory Motor Development	Social-Emotional Development	Approaches To Learning/ Executive Function	Language Development	General Knowledge And Cognition

Children who enter school ready to learn achieve more academically, and this academic success has been linked to improved social, economic, and later health outcomes. While much focus has been placed on developing children's cognitive, language, and literacy skills, it is equally important to develop children's executive function, self-regulation, and social-emotional skills.

EXECUTIVE FUNCTION AND SELF-REGULATION SKILLS

The brain holds the ability to retain and work with information, focus thinking, filter distractions, and switch gears. Research refers to this set of skills as **executive function and self-regulation - a set of skills that relies on three types of brain function: working memory, mental flexibility, and self-control**. Children are not born with these skills; rather, they are born with the potential to develop them. These functions are highly interrelated, therefore effective implementation of executive function skills requires them to operate in coordination with each other. Research has shown executive function skills help children in academic and lifelong success through four key areas:

Academic achievement: Executive function and self-regulation skills help children to remember and follow multi-step instructions, avoid distractions, control rash responses, adjust when rules change, persist at problem solving, and manage long-term assignments. For society, the outcome is a better educated population capable of meeting the challenges of the 21st century.

Positive behaviors: Executive function skills helps children develop other important skills, such as teamwork, leadership, decision-making, working toward goals, critical thinking, adaptability, and awareness of their and others' emotions. For society, positive behaviors help develop more stable communities and reduce crime.

Good health: Executive function and self-regulation skills help people make more positive life choices, as well as serving to prime individual's biological systems and coping skills to respond better to stress.

Successful workforce: Executive function skills increase the potential for economic success by providing the foundation for individuals to be better organized, able to solve problems, plan, and adjust to changing circumstances.

SOCIAL-EMOTIONAL LEARNING

Related strongly to executive function and self-regulation skills, social-emotional learning (SEL) refers to a wide range of skills, attitudes, and behaviors that can affect a student's success in school and life. Social development refers to a child's ability to create and sustain meaningful relationships with adults and other children. Emotional development is a child's ability to express, recognize, and manage his or her emotions, as well as respond appropriately to others' emotions.

Skills such as critical thinking, managing emotions, empathy, decision-making, and team work are all social-emotional skills, which impact educational achievement, employability, self-esteem, relationships, and community engagement.

Multiple studies have found that social-emotional skill development significantly impacts academic achievement. A meta-analysis of 213 school-based SEL programs involving more than 270,000 K-12 students found that sudents participating in these program improved academic performance with an 11-percentile-point gain in achievement compared to controls. The North Carolina Statewide Birth - Five Needs Assessment details social-emotional skills as a key developmental competency for children to be on track for school success, and must not be overlooked as a component of high-quality early childhood care and education services.

Accordingly, North Carolina has placed special emphasis on social-emotional skill development by making it a goal in its Early Childhood Action Plan.

BENEFITS OF SOCIAL-EMOTIONAL LEARNING?

- Better Oral Language Skill Development And Skills
- Fewer Behavior Problems
- Better Interpersonal Skills
- Greater Success In Elementary School And Beyond
- Better Physical Health
- Higher Lifetime Employment Outcomes And Higher Income

Policy Considerations

- How can North Carolina increase its support of non-academic skills for our youngest students?
- What actions can be taken to better align zero to five and K-3 programs?
- What changes can increase the quality of early learning opportunites?

READY TO READ | EMBEDDING EVIDENCE-BASED LITERACY INSTRUCTION ACROSS THE CONTINUUM

SCIENCE OF READING

The science of reading is a vast, interdisciplinary body of scientifically-based research about issues related to reading and writing. It provides a thorough understanding of the processes involved in reading, where challenges generally occur, and what preventative or remedial instruction are effective to address those challenges. North Carolina requires that elementary teacher preparation programs address the science of reading.

EARLY LITERACY INSTRUCTION & LATER ACADEMIC OUTCOMES

Early literacy proficiency is critical to improving educational disparities, especially among students of color. According to data from the most recent National Assessment of Educational Progress, there was a 27-point difference between white and Black students, a 21-point difference between white and Hispanic students, and a 26-point difference between white and Native American students in fourth grade literacy skills. Such achievement gaps between white students and students of color have detrimental effects on educational outcomes for all students. But foundational literacy skills can help to close achievement gaps throughout K-12 education and enhance opportunities for students of color.

Wolfpack WORKS

The College of Education at North Carolina State University supports beginning kindergarten through second grade teachers in 16 high-need school districts through its Wolfpack WORKS program. Teachers receive instruction, coaching, and support to implement evidence-based literacy instruction in their classroom. The program employs 20 literacy coaches who support over 200 teachers in 74 elementary schools serving over 3,600 students.

NC READ TO ACHIEVE

The Read to Achieve (RtA) program is a part of the Excellent Public Schools Act enacted in 2012. The North Carolina Department of Public Instruction (NCDPI) established the K-3 Literacy Division to implement the law which is intended to provide multiple supports for students who do not demonstrate reading proficiency by the end of the third grade. Under the RtA policy, students who do not demonstrate reading proficiency by the end of third grade are offered the supports including: an optional reading camp between third and fourth grade and supplemental tutoring and enhanced reading in the fourth grade.

In 2018, the Friday Institute for Educational Innovation released a report on the outcomes of the RtA policy. They found that the program did not produce significant outcomes for students in the first two cohorts of the program and proposed a possible disconnect between the RtA policy and its implementation in school districts as one of the causes. They issued the following recommendations:

01. Provide financial and human capacity supports to improve implementation fidelity statewide.
02. Identify and scale up local-level implementations with strong evidence of success.
03. Transition from a social promotion mindset to a literacy development mindset that spans the education continuum leading up to and including the third grade.

Policy Considerations

- How can policymakers ensure the curriculum in educator preparation programs, literacy instruction in the classroom, and the science of reading are aligned?
- Are Educator Preparation Programs (EPPs) and Local Education Agencies (LEAs) collaborating to consistently ensure alignment between the needs and efforts of both parties?
- What changes are needed to increase student outcomes through the RtA program?

DATA-BASED DECISION-MAKING | BUILDING EDUCATION LONGITUDINAL DATA SYSTEMS TO INFORM POLICY

Empowering policymakers and practitioners with functional access to accurate data has the potential to change the way we deliver education. States across the country are currently seeking ways to build systems that effectively collect, compile, and analyze these data to answer complex questions.

LONGITUDINAL DATA DRIVING DECISION-MAKING

Most state agencies collect data independently of one another and typically do not have structures in place to coordinate between them. Though each agency has some capacity to use its own data to analyze performance, larger policy and practice questions require data from multiple agencies and over time.

NORTH CAROLINA'S EDUCATION LONGITUDINAL DATA SYSTEM

North Carolina's Education Longitudinal Data System (ELDS) was codified in NC General Statute 116E and is governed by the Government Data Analytics Center (GDAC), residing administratively in the NC DPI. While significant progress has been made in creating longitudinal data systems in North Carolina, connecting disparate data sources and ensuring consistency across systems has been a challenge, keeping the state from fully leveraging data to regularly inform policy and practice in a meaningful way.

NCICU	NC DPI
NC DHHS	NCCCS
UNC SYSTEM	NC COMMERCE

The ELDS captures data from the early childhood (NC Department of Health and Human Services), K-12 (DPI), and postsecondary sectors (the NC Community College System, the UNC System, and NC Independent Colleges and Universities), and also includes the workforce sector in the form of wage data from the NC Department of Commerce.

While a number of these sectors share data with other systems in the state, the ELDS serves to connect all of these systems, making it possible for research questions spanning multiple age spans. The North Carolina Education Cabinet has played an integral role creating and improving upon the ELDS through the ELDS Working Group. The working group allows the system partners to come together to provide each other with updates and problem solve any challenges. The rules governing the system are currently being developed and the system is not yet open to agencies or researchers.

LESSONS FROM OTHER STATES

- **Maryland** | In 2010, the centralized Maryland Longitudinal Data System (MLDS) was codified in state law. The MLDS Center is a unit independent of the state government and serves as the central repository of student and workforce data. The Center has a 12-member governing board, two advisory boards, and several full-time positions. The Governing Board sets the research agenda, focusing on students before and after transitions. Two advisory boards (Data Governance & Research and Policy) help manage the system and ensure outputs are meeting the needs of stakeholders. The MLDS Center provides outputs including dashboards, information briefs, center reports, and research reports that help improve the state's education system and guide decisions at all levels.
- **North Dakota** | North Dakota has a federated system, the Statewide Longitudinal Data System (SLDS), that was codified in state law in 2007. System users include superintendents, principals, school boards, teachers, parents, students, researchers, legislators, and universities. To support all users, North Dakota Data Stewards offer training sessions related to understanding and using the North Dakota SLDS. They also convene a research workgroup from all agency partners to develop a research agenda that benefits North Dakota education and workforce development.

Policy Considerations

- What investments in informational technology infrastructure at North Carolina's education systems are needed to support a functioning longitudinal data system?
- What governance structure will best serve the state's education longitudinal data system?
- What best practices can North Carolina learn from other states' data systems?

POSTSECONDARY ATTAINMENT | SUPPORTING ACCESS AND COMPLETION AMONG ADULT LEARNERS

The so-called "traditional" postsecondary student is generally understood to be an 18- to 21-year-old who enters higher education directly after high school. However, in today's higher education landscape, those traditional students comprise an ever smaller portion. Consequently, many higher education students are adult learners with challenges and needs quite different from their younger, "traditional" peers.

FIGURE 3 | FACTS ABOUT TODAY'S HIGHER EDUCATION STUDENTS

37% *are 25 or older*

64% *work, and* **40%** *of them work full time*

49% *are financially independent from their parents*

24% *have children or other dependents*

57% *live independently – away from their parents or campus housing*

Source

In the year following the official launch of North Carolina's ambitious postsecondary attainment goal of adding two million North Carolinians with a high-quality degree or credential by 2030, the state's attainment goal has been codified by the NC General Assembly and Governor Cooper. In order to meet our goal, the state must increase the number of adults who attain a high-quality degree or credential.

UNIQUE CHALLENGES FACED BY ADULT LEARNERS

Adult learners face a number of barriers to earning high-quality certificates and degrees.

For example, many adult learners are ***not familiar*** with recent developments in higher education and new learning models that have emerged in recent years. While traditional students are more familiar with online course offerings and "brick and modem" learning models that blend online and classroom learning, adult learners may need additional support navigating these options.

Because adult learners are also likely to be in the workforce in some capacity, they often need ***flexible learning options*** to succeed in higher education. Such options include a wide selection of courses that are available on nights and weekends and relevant to their degree pathway. Another flexible option that can benefit adult learners is the adoption of a non-traditional academic calendar – including rolling enrollment processes and competency-based graduation models.

Since older learners are also more likely to be parents, a lack of child care services that are conveniently located near Institutions of Higher Education (IHE) campuses can be another. A national study of on-campus child care options found that only 27 percent of public IHEs in North Carolina offer such programs – a ranking that tied the state for the third-lowest rate in the country.

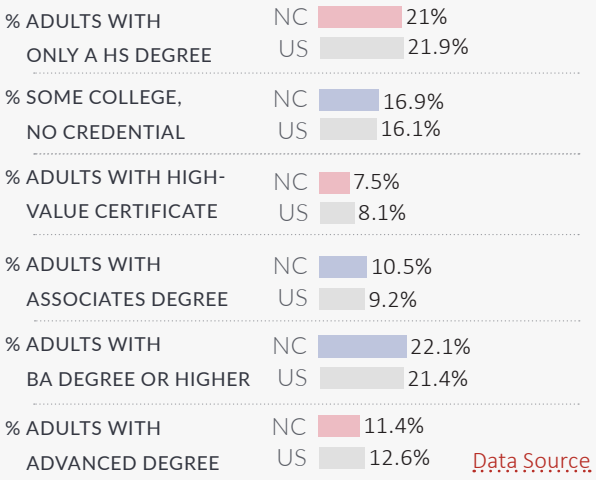
Most often, adults with some college but no degree that seek to resume their postsecondary education re-enroll in community colleges or pursue online programs to complete their degree. When continuing their education, these students typically remain in the same state, but re-enroll in a different institution than the one where they began their education.

NORTH CAROLINA'S SOME COLLEGE, NO DEGREE STUDENTS

To achieve myFutureNC's goal, stakeholders must strategically target adult learners. In particular, the state must support the over 840,000 North Carolinians ages 25-64 who have attended college but have not completed a degree or credential. This population alone far surpasses the approximately 700,000 additional adults with a postsecondary credential needed to meet North Carolina's attainment goal.

In North Carolina and in neighboring states, initiatives are already underway to support adults with some college and no degree, including the following:

FIGURE 4 | EDUCATIONAL ATTAINMENT RATES (2014-2018 ESTIMATES)



- In 2017, Catawba County Board of Commissioners created K-64 partners with local schools and businesses to increase opportunities for career development, training, and employment for students and professionals of all ages. By working with employers to craft new pathways to credentialing, K-64 provides adult learners with opportunities to earn specialized (stackable), nationally recognized (portable) credentials to help increase their career adaptability.
- In 2018, Governor Cooper launched the Finish Line Grants program to help students complete their community college program. Through the program, community college students who have completed at least 50 percent of their program are eligible for up to $1,000 per semester to help pay for course materials, housing, child care, or other financial emergencies. In the 2018-19 school year, the program awarded 1,700 Finish Line Grants totaling over $1.1 million.
- The Tennessee Reconnect Program provides grants for students 25 and older to earn an associate degree or technical certificate free of tuition or fees. Funded by the Tennessee Lottery, the state provides a last-dollar scholarship that covers tuition and fees beyond any gift aid (grants and scholarships) that an eligible student receives. As a result of the program, early evidence suggests the number of adults returning to community college has increased by 50 percent and the number of first-time enrollees has almost doubled.

Policy Considerations

- How can North Carolina ensure that citizens have equitable access to postsecondary education and workforce training?
- How can policymakers and educators effectively engage adult learners in North Carolina's efforts to increase educational attainment?
- What resources and support systems can the state leverage to ensure adult learners can persist through college and attain a credential?

AN UPDATE ON THE STATE OF EDUCATION IN NORTH CAROLINA

ADDRESSING BASIC STUDENT NEEDS

For nearly a year, the outbreak of COVID-19 has caused physical, mental, and financial stress for students and families throughout the United States. Policymakers must consider the effects the pandemic has had on the mental health and well-being of their constituents and identify ways to provide adequate supports for students and families.

Social Emotional Learning and Mental Health

The Collaborative for Academic, Social, and Emotional Learning (CASEL) defines **social-emotional skills** as: self-awareness; self-management; social awareness; relationship skills; and responsible decision-making. These competencies, in turn, provide a foundation for better adjustment and academic performance as reflected in more positive social behaviors, fewer conduct problems, less emotional distress, and improved test scores and grades.

Learning does not happen in isolation; students must be ready to learn when they arrive at class, whether in-person or online. Yet, many students have experienced severe trauma since the onset of COVID-19 that makes learning difficult. This is especially true of low-income students, many of whom are students of color. According to one estimate, two to three times as many students will experience social-emotional or behavioral concerns as a result of the pandemic.

Any academic strategies to address learning loss are therefore more likely to be effective if they also address students' social-emotional learning. Some best practices include ensuring students have opportunities to develop strong relationships with a trusting adult, partnering with community-based organizations to address non-academic needs like food and housing security, training teachers on trauma-informed instruction, and making social workers, psychologists, and counselors available to students as they work through the trauma of the previous year.

Food Insecurity

The United States Department of Agriculture defines food insecurity as a state of limited or uncertain access to adequate food. North Carolina has the 10th highest rate of food insecurity in the nation and nearly 25 percent of children in the state face hunger on a regular basis.

Since the onset of the COVID-19 pandemic, food insecurity has worsened. National rates of food insecurity in households with children doubled from May to October 2020, with communities of color being most affected. As a result, schools have played an even more prominent role providing food and nourishment for children and families. Schools serve as meal-distribution sites and the NC DPI also provided Pandemic-EBT to all families with children eligible for Free and Reduced Lunch. The USDA recently approved the state's plan to distribute P-EBT during the 2020-2021 school year.

BARRIERS TO ACCESS AND INSTRUCTION

Technology and Access

Evidence finds that as many as one-in-four teens in households with an annual income under $30,000 lack access to a home computer. Without access to the tools and resources required to successfully engage and participate in online learning, many students will fall behind academically, further widening the pre-existing achievement gap. As COVID-19 continues to require more schools to continue online learning, vulnerable students will likely continue to fall behind; therefore, it is imperative that educators and policymakers prioritize the equitable digital inclusion for all students.

In fact, research suggests that English learners are more likely to need technological devices and internet access. Multilingual families might face technical issues due to a digital literacy divide that affects many immigrant and low-income communities. Hotline and drive-up technical support in various languages can provide multilingual families a reliable support system for students. Investments in digital resources would provide English learners with online learning tools to benefit their academic learning, however, districts should also push for the distribution of technology-free learning tools such as books, learning packets, and educational games which can be distributed through the mail.

Broadband Connectivity

Broadband connectivity – including both physical access and the quality and reliability of an internet connection – is increasingly critical to economic opportunity, education, civic engagement, and employment.

States have done remarkable work in recent years to ensure that schools are connected to wireless internet, as 99 percent of K-12 schools in the United States are now on scalable connections. These developments integrate internet and technological resources to enhance learning in the classroom.

Many students lack internet access outside the classroom, however, especially low-income and rural students. As learning moved online in response to the COVID-19 pandemic, this digital divide between those who have internet access and those who do not depended existing inequities and exacerbated the challenges many students already faced.

School closures made electronic devices and access to high-speed broadband a basic, fundamental necessity for students to transition to distance learning. **Access to adequate broadband will also help students receive remote learning and quality instructional content, which can aid in combating the pace of learning loss.** Beyond the impacts on student learning, the digital divide also impacts postsecondary attainment and workforce pipelines. Three best practices for bridging the digital divide include: affordable broadband availability, access to digital skills training, and affordable equipment.

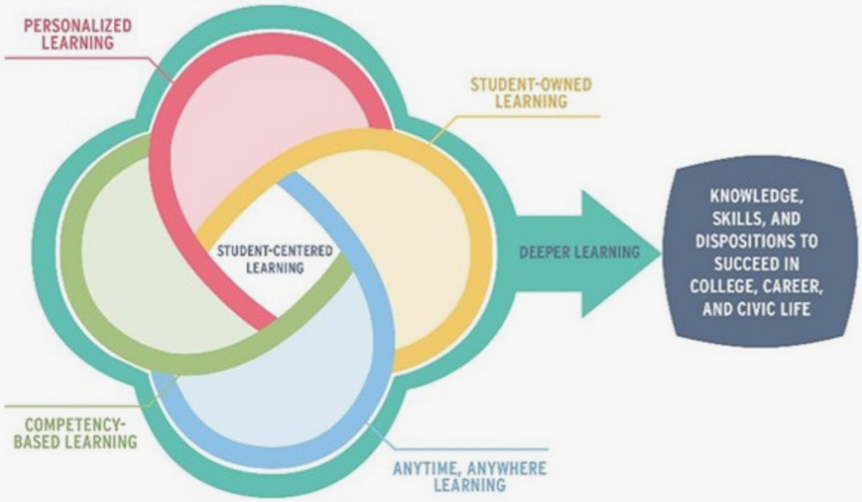
OPPORTUNITIES FOR INNOVATION

The COVID-19 pandemic has thoroughly disrupted how we educate students, highlighting deeply rooted educational inequities and forcing educators to reexamine many of their core practices. But this challenging time also presents states and districts an opportunity to rethink how they support student learning, both inside and outside of physical buildings.

Curriculum and Teaching Strategies

As defined by the Measuring Success through Competency-Based Learning Alliance, **Competency-Based Education (CBE)** is "a flexible and engaging learning environment in which progression is based on mastery of explicit learning objectives, or competencies, as demonstrated through evidence of student learning, rather than the time spent in a course/topic." Learning is not connected to seat time in a CBE model, so students can advance through content at their own pace based on demonstrated mastery of a clearly defined set of measurable competencies. CBE provides students greater flexibility to adjust when and how quickly they learn based on their interests, needs, and ability.

FIGURE 5 | THE STUDENTS AT THE CENTER FRAMEWORK



Source: Malia Krauss, S., Steinberg, A. (2020). Supporting states & districts to implement student- centered and deeper learning practices. JFF.

Culturally Responsive Teaching (CRT) is a pedagogy that recognizes the importance of including students' cultural references in all aspects of learning. It responds to and celebrates students' cultures to make curriculum more accessible – and hence, more equitable – to more students. Some of the practices that define CRT include: positive perspectives on families, communication of high expectations, student-centered instruction, culturally mediated instruction, diverse texts and curricula, and teachers as facilitators.

Supporting Student Transitions Across the Continuum

On average, only 81 percent of North Carolina students in virtual learning environments regularly attend synchronous learning, while 89 percent of students in brick-and-mortar environments do so. Additionally, nearly one percent of North Carolina's 1.5 million public school students are unaccounted for, meaning that these students are experiencing a severe disruption to their education as they are not attending school. As a result, learning loss continues to be a critical focus for policymakers as the 20-21 school year continues.

Transitional grades, such as from pre-K to kindergarten, elementary to middle school, middle to high school, and high school to postsecondary, are of particular concern because students will return to school next year performing significantly behind where they would normally be. For students going through institutional transitions, significant supports are necessary to ensure they are prepared to achieve on grade level.

One solution is to **implement bridge programs**, aimed at supporting those transitions. Traditionally, bridge programs have supported first-year undergraduates as they enter to college by providing academic enrichment, community building, academic advising, experiential learning activities, and training in academic management skills over a four- to six-week period. However, schools and districts could similarly adapt bridge programs to meet the needs of P-12 students, including those most at risk of dropping out.

Policy Considerations

- How do we address the historical inequities school closures and virtual learning have exacerbated, such as, access to technology, support at home, and access to nutrition?
- How can North Carolina ensure that all EPPs are consistently incorporating culturally responsive and sustaining pedagogy to prepare all teachers to serve an increasingly diverse student population?
- How can policymakers balance the immediate needs of students and educators while still prioritizing the long-term investments needed to build key infrastructure?
- What partnerships can policymakers leverage to reduce the barriers to access and instruction for all students?