Collaboration:
The Key to Early Childhood Success in Rural North Carolina

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Early childhood is a critical time of development. Differences in each child's health, education, and environment create observable developmental outcomes even before their first birthdays. Those who fall behind early often stay behind, and children in rural North Carolina face increased challenges.

Early childhood is now widely accepted as a critical period of a child's development. Nobel Laureates, politicians of both parties, and even many in the general public all acknowledge the importance of the first five years [1-3].

We also know that young children thrive when they have healthy relationships with parents and others who care for them. Secure attachments with a parent or caregiver serve a well-documented role in supporting children as they approach each developmental milestone. Likewise, parents thrive when they live in communities that can provide economic opportunities and supportive services to help them care for their families.

There are many initiatives in place in North Carolina to address early childhood. Some focus on building the skills of parents and caregivers, such as the Positive Parenting Program (Triple P), Nurse-Family Partnership, and Parents as Teachers, to name a few. Some, such as KidsReadyNC, organized by the Institute for Emerging Issues at North Carolina State University, focus on the communities that families live in. Still others address the policies and practices that impact young children's outcomes, such as the Pritzker- and Zero To Three-funded Think Babies initiative, the state's legislatively mandated Birth-3rd Grade Interagency Council, and the NC Pathways to Grade-Level Reading initiative of the North Carolina Early Childhood Foundation and its partners. Smart Start, run through the North Carolina Partnership for Children and its local partnerships, strives to address all three levels, including the child's home and early education environment, the communities that families live in, and policies supportive of families with young children.

Our state is made up of a wide variety of people and places. For these and other early childhood efforts to be successful, we must look beyond the state level to see the differences in experiences for North Carolina families. Differences based on economic status and race or ethnicity are receiving much-needed attention. Children are affected by educational and health disparities long before they enter kindergarten and they experience these disparities throughout their lives [4].

Geography is another area of disparity. North Carolina includes several major up-and-coming urban centers separated by large swaths of rural communities. How does the type of community a child lives in affect her outcomes? Ultimately, we need to know how children's experiences differ by geography in order to best support our communities in creating nurturing environments for our youngest North Carolinians.

Rural Challenges Along the Path

In early childhood, the data point we often focus on is kindergarten readiness. Third grade reading proficiency is receiving much-needed attention, as children who cannot read well by the end of third grade are four times more likely to drop out of high school [5]. For this reason, in 2017 the North Carolina Rural Health Leadership Alliance (NCRHLA) work group on early childhood published the report Early Childhood in Rural North Carolina: Assessing Rural Communities on Pathways to Grade-Level Reading [6]. The NCRHLA work group examined a subset of measures from the NC Pathways to Grade-Level Reading initiative's Shared Measures of Success to Put North Carolina Children on the Pathway to Grade-Level Reading that research shows move the needle on third grade reading proficiency [7]. The measures help determine if children have high-quality learning environments, healthy starts in life and access to health care, and environments that are safe, nurturing, and support social-emotional development.

The report used the North Carolina Rural Economic Development Center's definition of rural as having an average population density of 250 individuals per square mile or less according to 2014 US Census population estimates. By this definition, the report examined data for 80 rural counties in North Carolina and 20 counties were grouped together as non-rural [6].

The analysis revealed little variance between rural and

non-rural counties in North Carolina along some measures, while other measures vary greatly—with children living in rural areas of the state usually faring worse (see Table 1).

The report found no difference between rural and non-rural counties when it came to low birth weight or what percent of young children in licensed child care were in high-quality (4/5-star) child care placements. Rural counties shone when it came to their low violent crime rate.

However, mothers in rural counties in North Carolina are less likely to receive prenatal care in the first trimester of pregnancy and less likely to have at least 12 years of education (ie, high school diploma or GED completion). They were also more likely to smoke while pregnant and experience parenthood in their teen years.

Children in rural counties are more likely to be living in poverty and to be uninsured than those in non-rural counties. They are also less likely to meet grade-level reading proficiency standards at the end of both first and second grades compared to children in non-rural counties and are more likely to be retained (ie, held back) in both kindergarten and first grade. It is worth noting that there are not clear retention policies in these lower grades, which may result in inconsistencies in retention standards and in reporting.

Collaboration is Key

As the data above show, there are some real challenges for young children growing up in rural areas. Both experience and common sense tell us that we are much more likely to address these challenges if we work together than if we try to improve them on our own. There are many approaches to goal-oriented collaboration such as collective impact, results-based accountability, and the theory of aligned contribution, among others. No matter the specific model, all focus on having a backbone organization that serves to shine light on a community need.

In North Carolina, we also have many inspiring examples of local rural communities that are working together to improve outcomes for our young children and their families. Here we highlight three Smart Start communities across our state (see Figure 1).

Bertie County

Located in northeastern North Carolina, Bertie County has a population of approximately 20,000 and in 2016 was nearly two-thirds African American [8].

In 2012, Bertie County applied for and was selected to participate in the Transformation Zone, a key project of North Carolina's Race to the Top - Early Learning Challenge grant. The Transformation Zone targeted four rural, economically distressed counties driven to ultimately ensure that children in these high need areas enter kindergarten with school-readiness skills similar to children in other parts of the state [9]. The Transformation Zone infused a variety of evidence-based services into targeted communities. The work was heavily grounded in implementation science, beginning with supported community based planning and utilizing implementation teams and individualized coaching throughout the project.

The Albemarle Smart Start Partnership (now known as Albemarle Alliance for Children and Families, Inc.), which provides early childhood funding and services to Bertie County, served as the lead organization for the Transformation Zone in Bertie County. In the process, they brought together representatives from the local school

TABLE 1.

Findings from Early Childhood in Rural North Carolina: Assessing Rural Communities on Pathways to Grade-Level Reading (2017)

Select measures from: Shared Measures of Success to Put North Carolina Children on the Pathway to Grade-Level Reading	Rural	Non-Rural
Health and Development on Track Beginning at Birth		
Low Birth weight (<2500 grams)*	9.0%	9.0%
Prenatal Care, First Trimester	69.0%	70.2%
Pregnant Smokers	14.3%	7.6%
Teen Birth Rate (Per 1,000)	37.2	23.6
Uninsured Children: Ages 0-19	5.1%	4.3%
High-Quality Birth-to-Eight Learning and Education		
Enrollment in 4/5-star child care*	73.0%	74.0%
Kindergarten Retention	5.2%	3.5%
First Grade Retention	4.8%	2.9%
First Grade Reading Proficiency	45.9%	51.0%
Second Grade Reading Proficiency	49.8%	53.3%
Supported and Supportive Families and Communities/ Community Conditions		
Maternal Education (<12 years)	18.1%	14.1%
Violent Crime Rate (per 100,000)	277.8	409.4
Poverty: Children Ages 0-5	34.2%	24.7%

*No statistically significant difference.
Data years range from 2011 to 2016. A complete list of data sources and years can be found in the report.
Source. North Carolina Rural Health Leadership Alliance [6].

FIGURE 1.
Map of Case Study Counties
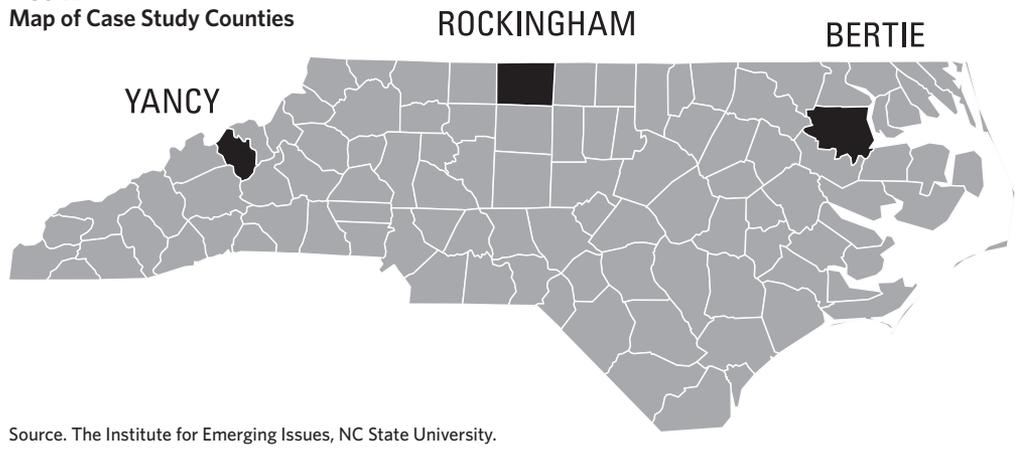
Source. The Institute for Emerging Issues, NC State University.

district, county board of commissioners, Head Start, faith-based leaders, rural health leaders, the health department, and businesses, among others, to form a leadership team to guide the project. Early on they engaged in a community needs and assets assessment that incorporated county level data and community feedback. The collaboration agreed to prioritize early education and early literacy as a result of what they learned through this process [10]. During the project, participating families increased how often they read to their young children as well as techniques they used to engage their children in reading [11]. Another perceived success for the project was addressing behavioral issues among young children through Triple P. Parents were able to seek out assistance from various agencies that were trained to address behavior issues with young children before they became school ready. These would all be considered "early wins" that could ultimately help contribute to a community wide goal of kindergarten-readiness (oral communication, Bobbi Holley, Director of Early Learning and North Carolina Pre-K, Bertie County Schools, August 21, 2018).

As federal funding ended, the county commission elected to put financial support toward the project to continue the work. This helped to assist the stakeholders in staying involved with the families and visible in the community. Out of this initiative, Better Beginnings for Bertie's Children was formed. The main purpose of the group is to link children and families to services available to them throughout the county.

Rockingham County

Rockingham County is in north central North Carolina, just above Greensboro. Its population of just over 90,000 is largely white with about one-quarter of residents identifying as people of color [9].

In 2010 Rockingham County was ranked 71 out of 100 North Carolina counties on the Robert Wood Johnson Foundation-sponsored county health rankings [12]. These rankings sparked concern among many in the county who began to collaborate on how to address issues of care for their most vulnerable residents. The Kate B. Reynolds Charitable Trust

was also a key partner, providing support and funding for targeted projects [13]. The Rockingham County Partnership for Children (RCPC) used funds from the Trust to bring Nurse-Family Partnership (NFP)—an evidence-based home-visiting initiative for high-need pregnant women, new mothers, and their young children—to the county. The RCPC spearheaded planning groups with partner organizations to lay the groundwork for NFP and ensure strong implementation. After several years of implementation, the project has experienced a notable increase in the number of new mothers who are choosing to breastfeed. The efforts in Rockingham County caught the attention of the Robert Wood Johnson Foundation which featured the county in a video highlighting what communities can do to improve their health [13].

These efforts also helped prime Rockingham County for selection as a KidsReadyNC community. Selected in March 2018 as one of four North Carolina communities participating in the KidsReadyNC initiative, Rockingham County is now engaged in a multi-year, collaborative effort specifically targeting the social-emotional health of young children as a means to boost kindergarten readiness and third grade reading proficiency. A leadership team, including representatives from RCPC, Head Start, a community foundation, and the faith community, is now engaging public and private stakeholders. These include families, early childhood educators, elementary school teachers and administrators, mental health providers, law enforcement, and juvenile justice officials. In addition to raising community awareness around the importance of social-emotional health, the group is focused on ensuring that families have access to services and natural supports that improve child resiliency.

Yancey County

Tucked into the Blue Ridge Mountains, Yancey County is in far Western North Carolina, bordering Tennessee. The county is predominantly white and sparsely populated, with fewer than 18,000 residents [9].

The Yancey Alliance for Young Children (YAY) is a partnership of community residents and stakeholders who work

together to ensure young children in the county grow up in an environment that supports their healthy development. YAY grew out of an effort that was inspired by the First 2000 Days campaign focusing on the critical importance of the early years in a child's development as well as the need for a community response toward adverse childhood experiences (ACEs) and the long-term effects of early trauma.

One of YAY's first steps was to embark on a multi-pronged resource mapping process. This was a community needs and assets assessment that included demographic data and a survey of community organizations as well as focus groups and interviews with key community members and families. These data in turn inform their comprehensive action plan including evidence-based strategies. Collaborative work groups are putting the plan into action, addressing issues ranging from early care and education, to child health, to parent education. The action plan includes evaluation and feedback loops to inform the work along the way [14].

The Blue Ridge Partnership for Children, a founding member of YAY, serves as the backbone organization and provides administrative support to the effort, engaging new partners, setting meetings, hosting trainings, and ensuring clear communication channels among participants. Yancey's collaborative efforts have already reaped early benefits including school and child care staff training on ACEs, new early childhood programs, and increased planning with the school system such as developing its district Every Student Succeeds Act plan that provides an equal opportunity for all students, regardless of income, race, or need for special education or language supports [14]. Another early win was collaborating to spend their entire child care subsidy allocation, which had been reverted back to the state in previous years. They were also able to request restoration of some previous funds.

Conclusion

Each rural community in North Carolina is unique. Just as much variance exists among rural communities as is present when comparing rural communities to their non-rural counterparts. Rural communities have their own sets of assets to build on, and not all interventions and processes will work the same way in each location. Data and collaboration are essential pieces of the rural early childhood success equation, allowing stakeholders to understand and navigate these assets and gaps and determine the best pathways forward for their children. It is also important to highlight evidence-based programs and other best practices that are having success in rural areas so that other communities, funders, and policymakers can learn what is working and what efforts can—and should—be scaled statewide. North Carolina has a rich history of early childhood collaboration and innovation at the state level, and local communities are increasingly recognizing the benefits of local collaboration to best meet their own needs and build on their strengths. *NCMJ*

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References
1. The Heckman Equation. The Heckman Equation website. https://heckmanequation.org/the-heckman-equation/. Accessed August 16, 2018.
2. Harvard University Center on the Developing Child. Brain Architecture. https://developingchild.harvard.edu/science/key-concepts/brain-architecture/. Accessed August 16, 2018.
3. ZERO TO THREE, The Robert Wood Johnson Foundation, PerryUndem, GMMB. Voters' Attitudes Towards Emotional Development in Young Children and Infants, Survey Findings, September 2017. https://www.rwjf.org/content/dam/farm/reports/surveys_and_polls/2017/rwjf442011. Accessed August 16, 2018.
4. Heckman J. Four Big Benefits of Investing in Early Childhood Development. Chicago, IL: The Heckman Equation; 2017. https://heckmanequation.org/assets/2017/01/F_Heckman_FourBenefitsInvestingECDevelopment_022615.pdf. Accessed August 16, 2018.
5. Annie E. Casey Foundation. Double Jeopardy: How Third Grade Reading Skills and Poverty Influence High School Graduation. http://www.aecf.org/resources/double-jeopardy/. Accessed August 16, 2018.
6. North Carolina Rural Health Leadership Alliance. Early Childhood in Rural North Carolina: Assessing Rural Communities on Pathways to Grade-Level Reading. Cary, NC: Foundation for Health Leadership & Innovation; 2017. https://foundationhli.org/wp-content/uploads/2017/12/NCRHLA-report-11.pdf. Accessed August 15, 2018.
7. North Carolina Pathways to Grade-Level Reading Initiative. Shared Measures of Success to Put North Carolina Children on the Pathway to Grade-Level Reading. Raleigh, NC: North Carolina Early Childhood Foundation; 2018. https://files.buildthefoundation.org/wp-content/uploads/2018/03/Pathways-Measures-Book.pdf. Accessed August 16, 2018.
8. 2012-2016 American Community Survey 5-Year Estimates, Demographic and Housing Estimates. Suitland, MD: US Census Bureau; 2012-2016; https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml. Accessed August 14, 2018.
9. US Department of Education. Race to the Top—Early Learning Challenge, North Carolina Application for Initial Funding. Washington, DC: US Department of Education; 2011. https://files.nc.gov/ncelc/documents/files/rtt_grant_application_0.pdf. Accessed September 14, 2018.
10. North Carolina's Race to the Top Early Learning Challenge. Celebrating Success, Sustaining Momentum: Improving School Readiness in Eastern NC. Raleigh, NC: North Carolina's Race to the Top Early Learning Challenge; 2016. https://files.nc.gov/ncelc/transformation_zone_final_2016_webinar_final_nopics.pdf. Accessed August 16, 2018.
11. The Program Evaluation Group. Early Literacy in the Transformation Zone Final Report, October 2016. Raleigh, NC: North Carolina Partnership for Children; 2016.
12. Robert Wood Johnson Foundation. County Health Rankings - Nurse Family Partnership: Q&A with Elly Yost. Robert Wood Johnson Foundation website. https://www.rwjf.org/en/blog/2014/03/county_health_rankin3.html. Accessed August 14, 2018.
13. Kate B. Reynolds Charitable Trust. Rockingham County. Kate B. Reynolds Charitable Trust website. http://kbr.org/content/rockingham-county. Accessed August 14, 2018.
14. Simpson JW. Yancey Alliance for Young Children. Collective Impact in a Rural Community. Burnsville, NC: Yancey Alliance for Young Children; 2018. https://iei.ncsu.edu/iei2016/wp-content/uploads/2018/02/Working-across-organizations-2-of-3.pdf. Accessed August 14, 2018.