

Appendix A

Evaluation of the UNC System Laboratory Schools Initiative

November 2018 Report

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Introduction

In 2016, the North Carolina General Assembly (NCGA) passed legislation requiring the Board of Governors' (BOG) of the University of North Carolina (UNC) System, in consultation with constituent institutions' colleges of education (COE), to establish laboratory schools.¹ Laboratory schools are K-12 schools operated by a UNC System institution rather than by a local school district. The mission of UNC System laboratory schools is to improve student performance in local school administrative units with low-performing schools by providing an enhanced education program for students residing in those units and to provide exposure and training for teachers and principals to successfully address challenges existing in high-needs school settings.² Collectively, laboratory schools are committed to delivering high expectations to prepare students for college and life; ensuring students learn to read and communicate effectively; addressing the academic, social, and emotional needs of all students; and harnessing the benefits of partnerships to strengthen learning, teaching and school leadership.³ Laboratory schools serve every part of the University mission—teaching, research, and public service—and represent an innovative extension of the UNC System's presence in K-12 education.

Originally, eight UNC System institutions with high-quality educator preparation programs were to design and open their own laboratory schools by the 2018-19 school year; however, amendments to the enabling legislation now require nine UNC System institutions to open laboratory schools by the 2019-20 school year. East Carolina University (ECU) and Western Carolina University (WCU) opened their laboratory schools in the 2017-18 school year, while Appalachian State University, The University of North Carolina at Greensboro (UNCG), and the University of North Carolina Wilmington (UNCW) opened their laboratory schools in the 2018-19 school year. Four more laboratory schools are required to open in the 2019-20 school year.

UNC System laboratory schools must serve students in at least three contiguous grades in the K-8 grade range. The enabling legislation originally required the UNC System to establish laboratory schools in local school administrative units in which at least 25 percent of the schools were low-performing. An amendment to the enabling legislation allows the UNC System to exercise three waivers to establish laboratory schools in districts that do not meet this requirement. Students are eligible to attend a laboratory school if they reside in the local school administrative unit in which the laboratory school is located and either previously attended a low-performing school or failed to meet expected growth in the previous academic year.⁴ Laboratory schools present opportunities to support low-performing students, to implement new and research-based instructional strategies, to enhance the preparation experiences of pre-service educators, and to integrate the contributions of the university and community into the philosophy and practices of the school.

Commensurate with the innovative scope, vision, and commitments of laboratory schools, the UNC System issued a request for proposals to assess the performance and contributions of laboratory schools.

¹ N.C.G.S. §116-239.5(a).

² N.C.G.S. 116-239.5(b).

³ The University of North Carolina System. (n.d.) "UNC Laboratory Schools." Retrieved from <https://www.northcarolina.edu/unc-lab-schools>

⁴ In its partnership with Pitt County Schools, ECU has enrolled students into its laboratory school under the original statutory language, which directed UNC System institutions to admit students residing in the local school administrative unit in which the laboratory school is located who were enrolled in a low-performing school at the time of application *and* to give priority enrollment to students who did not meet expected growth in the prior year.

The UNC System selected the Education Policy Initiative at Carolina (EPIC)/Public Policy at UNC Chapel Hill and Public Impact, a non-profit research organization based in North Carolina, as the laboratory school evaluators (hereon referred to as the Evaluation Team). As commissioned, the Evaluation Team submits the following in-depth, annual review of the laboratory schools to the UNC System to provide a comprehensive understanding of laboratory school successes and shortcomings. In addition, the BOG will submit its own report focusing on the statutorily required laboratory school reporting elements: student enrollment and demographics, student admissions, student achievement and academic progress, outcomes for pre-service candidates in educator preparation programs, best practices of laboratory schools, and other information the BOG Subcommittee on Laboratory Schools considers appropriate.⁵ This in-depth report from the Evaluation Team will be attached to the UNC System BOG report as an appendix, to be submitted to the NCGA by November 15, 2018.

The following sections present the evaluation questions, detail the evaluation sample and data sources, describe the analysis methods, review the available findings, and summarize the initial takeaways and limitations of the laboratory schools evaluation commissioned by the UNC System. This report includes data and analyses that are available to the Evaluation Team by the summer and early fall of the reporting year. The Evaluation Team will include other data that are not available on this timeline in subsequent reports.

Evaluation Questions

To fulfill the evaluation objectives—to assess whether laboratory schools benefit students and pre-service educators and to understand why laboratory schools succeed or fall short of expectations—the Evaluation Team has specified a set of seven evaluation questions. These questions are “chronologically” ordered to tell the story of laboratory schools. That is, the evaluation questions start with a focus on how the laboratory schools were set up and operated, shift to assess impacts on students and educator preparation, and conclude by considering how the laboratory schools may develop in future years. This evaluation report primarily focuses on questions 1-3 and 5-6; subsequent reports will provide more results for questions 4-6 as additional data becomes available. The evaluation questions are as follows:

- (1) How have the UNC System and its constituent institutions set up laboratory schools to succeed?*
- (2) How do laboratory schools form and harness partnerships to benefit learning, teaching, and school leadership?*
- (3) Are laboratory schools successfully marketed and operated?*
- (4) Do laboratory schools improve the academic performance of students?*
- (5) Do laboratory schools benefit students’ social-emotional needs and engagement with school?*
- (6) Do the laboratory schools support and strengthen educator preparation?*
- (7) How have the UNC System and its constituent institutions set up laboratory schools to grow and sustain?*

⁵ N.C.G.S. §116-239.13 requires that the BOG Subcommittee on Laboratory Schools review and evaluate the educational effectiveness of the laboratory schools and report to the Joint Legislative Education Oversight Committee on these seven items by November 15 of each year.

Evaluation Sample

The majority of this in-depth evaluation report focuses on the two UNC System laboratory schools in operation during the 2017-18 school year: The ECU Community School⁶ and The Catamount School (WCU). The ECU Community School is co-located within the South Greenville Elementary School building in Pitt County. In 2017-18, the ECU Community School served students in grades 2-4; in 2018-19, the ECU Community School is serving students in grades K-5. The Catamount School is co-located within the Smoky Mountain High School building in Jackson County and serves students in grades 6-8.

This evaluation report also examines student enrollment and admissions at the three UNC System laboratory schools that opened in the 2018-19 school year: Appalachian State University Academy at Middle Fork (Appalachian Academy), the Moss Street Partnership School (UNCG), and the D. C. Virgo Preparatory Academy (UNCW). These three UNC System institutions are operating schools that were previously operated by the local school district. The Appalachian Academy is located in Forsyth County and serves students in grades K-5. The Moss Street Partnership School is located in Rockingham County and serves students in grades K-5. The D. C. Virgo Preparatory Academy is a year-round school in New Hanover County serving students in grades K-8.

Data Sources

To complete an in-depth review of the laboratory schools, the Evaluation Team will rely on five main data sources: (1) interviews with university and laboratory school leadership, personnel, and partners; (2) laboratory school status reports completed by UNC System COE; (3) administrative data on students, schools, and school personnel from the NCDPI; (4) survey responses from laboratory school students and families and from beginning teachers and their employers; and (5) administrative data from COE on educator preparation programs and pre-service candidates.

Much of the data for this evaluation report comes from interviews with university and laboratory school leadership, personnel, and partners. Additional data for this report come from student demographic information, official NCDPI reporting on student/school achievement,⁷ and surveys of laboratory school students and families. Subsequent reports will include rigorous analyses of administrative data from NCDPI and educator preparation programs as it becomes available. In the sections that follow, the Evaluation Team provides further detail on the data sources, including their alignment with the evaluation questions and the timing/availability of the data.

Laboratory School Interviews

For each UNC System laboratory school, the Evaluation Team will conduct interviews at two points in time during the evaluation. First, during the spring of a laboratory school's first-year of operation, the Evaluation Team will interview COE leadership and faculty, laboratory school personnel (e.g., teachers, principals, pre-service teachers), and laboratory school partners (within the local community and from across the university). These interviews will assist the Evaluation Team in understanding how the laboratory schools have been set up, with whom the laboratory schools are partnering, how the

⁶ ECU changed the name of its laboratory school from the ECU Laboratory School (during the 2017-18 school year) to the ECU Community School.

⁷ Please see <http://www.ncpublicschools.org/accountability/reporting/>.

laboratory schools are operated, and the relationships between educator preparation and the laboratory schools. The Evaluation Team conducted these interviews with ECU and WCU in late April and early May of 2018.

Second, during the last year of the laboratory school evaluation (2022), the Evaluation Team will conduct interviews at each laboratory school. These interviews will be scheduled with many of the same personnel as during the first phase of interviews and will allow the Evaluation Team to assess the development and growth of the laboratory schools.

In addition to interviews at each laboratory school site, the Evaluation Team conducted interviews in the spring/summer of 2018 with leadership at the UNC System Office and with two technical assistance providers to the laboratory schools—RTI International and the Friday Institute at North Carolina State University. These interviews focused on the planning, set up, and governance of laboratory schools (UNC System Office personnel and RTI International) and on assisting university and laboratory school personnel in developing local research agendas (Friday Institute). The Evaluation Team will conduct additional interviews with leadership at the UNC System Office, as needed, to understand the resources, support, and directives given to the constituent institutions operating laboratory schools.

Laboratory School Status Reports

To complement the interviews with university and laboratory school stakeholders, the Evaluation Team will collect status reports from the UNC System COE that are operating laboratory schools. These status reports include a set of pre-specified questions, to be completed by the COE dean or his/her designee, that allow UNC System institutions to describe: (1) the design of their laboratory school; (2) the marketing and management of their laboratory school; (3) key laboratory school partners and the services they provide; (4) the relationship between educator preparation and the laboratory school; and (5) challenges and successes in setting up and developing the laboratory school.

UNC System institutions will complete a status report in their last planning year prior to opening,⁸ and with two exceptions, during each year of operation. Those exceptions are the two instances when the Evaluation Team will conduct on-site interviews—the first year of laboratory school operation and the last year of the laboratory school evaluation.

Administrative Data from the NCDPI

The laboratory schools evaluation will use student, school, and school personnel data provided by the NCDPI. Student level data include demographics, absences, disciplinary incidents, and test scores on the state's EOG exams (in mathematics, reading, and science). With these data the Evaluation Team will assess the demographics and prior achievement of students attending laboratory schools, whether laboratory schools improve the test scores of students, and whether laboratory schools benefit students' engagement with school (as measured by attendance and behavior).

School level data come from the North Carolina School Report Cards and from school expenditures files. These data provide aggregate, school level information on student demographics, achievement, and

⁸ ECU and WCU opened their laboratory schools before the Evaluation Team began the evaluation, and thus, they did not complete a planning year status report. All other UNC System laboratory schools will complete this status report.

behavior; teacher credentials (e.g., experience, advanced degrees); and school spending. With these data the Evaluation Team will assess school level academic performance (e.g., performance composite, growth status) and laboratory school per-pupil expenditures, both overall, and broken down by spending categories.

School personnel data for teachers and administrators include their demographics, preparation/licensure, experience, credentials (e.g., advanced degrees or National Board Certification), and when available, measures of performance (e.g., Education Value-Added Assessment System (EVAAS) estimates). With these data, the Evaluation Team will assess the characteristics of the educators working in UNC System laboratory schools. Additionally, the Evaluation Team will link these school personnel files to data provided by UNC System institutions to follow pre-service candidates (teacher and school leader) into the public school workforce. This will allow the Evaluation Team to report on the workforce outcomes (e.g., employment in North Carolina public schools, teacher effectiveness, teacher retention) of UNC System graduates and to specifically assess the outcomes of early-career educators who had significant pre-service experiences in a laboratory school.

These NCDPI data are not available to the Evaluation Team for analysis until several months after the close of a school year (typically November). As a result, evaluation reports submitted in November will not include rigorous analyses and results from the most recently completed school year. Instead, these data will be included in subsequent reports.

Survey Responses

To evaluate the UNC System laboratory schools, the Evaluation Team will collect survey data from multiple sources. First, the Evaluation Team has contracted with Tripod Education Partners to administer a survey to laboratory school students.⁹ The Evaluation Team chose the Tripod student survey because of its established validity and reliability, the alignment between survey items and aims of the laboratory school evaluation, and its flexibility in allowing the Evaluation Team to customize questions. This survey assesses students' motivation for learning, engagement with school, and perceptions of school climate. The Evaluation Team administered this survey to students at the ECU Community School and The Catamount School in the spring of 2018 and will administer the survey to laboratory school students each spring.

Second, the Evaluation Team has contracted with Tripod Education Partners to administer a survey to parents of laboratory school students. This survey focuses on parents' satisfaction with the laboratory school, their perceptions of the laboratory school application process and set up, and their perceptions of school climate, services, and safety. The Evaluation Team administered this survey in the spring of 2018 to the parents of students attending the ECU Community School and The Catamount School. The Evaluation Team will administer this survey to laboratory school families each spring.

Finally, EPIC will continue to partner with NCDPI and the UNC System to administer two statewide surveys focused on the perceptions and practices of beginning teachers. In the spring of each school year, EPIC sends the *Recent Graduate Survey* to all first-year teachers in North Carolina public schools. This survey asks beginning teachers to reflect on the quality of their preparation and their opportunities to learn key teaching practices. At the same time, EPIC also sends the *Employer Survey* to all principals with a first-year teacher at their school. This survey asks the school principal to rate the performance of the first-year

⁹ This survey is currently administered to students attending laboratory schools only. The Evaluation Team is exploring the possibility of administering the survey to comparison sample students in future years.

teacher. With data from these surveys, the Evaluation Team will assess whether first-year teachers who had significant learning experiences in a laboratory school perceive their preparation to be of a higher quality and whether their school principals rate them as more effective. The Evaluation Team will incorporate these data into evaluation reports once enough pre-service candidates with laboratory school experiences are in the state's teaching workforce.

Administrative Data from Colleges of Education

To examine outcomes for pre-service teachers and school leaders who obtained clinical experience in laboratory schools, the Evaluation Team will use administrative data on pre-service candidates provided by UNC System COE. These candidate data will include demographics, measures of academic ability (e.g. grade point averages, SAT/ACT scores), licensure areas and licensure exam scores, time to graduation, edTPA scores, and indicators for having a significant learning experience in a laboratory school (e.g. student teaching, principal intern). With these data the Evaluation Team will examine the characteristics of candidates with significant experiences in laboratory schools (compared to peers with more traditional preparation experiences) and link administrative data from COE and NCDPI to track these candidates into the state's public schools. The Evaluation Team will begin to incorporate these administrative data from COE into subsequent reports as they becomes available.

Analysis Methods

Qualitative Data Analyses

To assess the UNC System laboratory schools, the Evaluation Team will analyze two types of qualitative data: interview transcripts and laboratory school responses to annual status reports. This evaluation report focuses on interview responses for the ECU Community School and The Catamount School.

The Evaluation Team designed interview protocols for use with various stakeholders involved in the design and implementation of laboratory schools (e.g., UNC System officials, College of Education faculty, laboratory school teachers). These interview protocols are organized around the seven laboratory school evaluation questions detailed above. From April through June 2018, the Evaluation Team conducted interviews with more than 50 laboratory school stakeholders at the UNC System Office, ECU and its laboratory school, WCU and its laboratory school, RTI International, and the Friday Institute. With the consent of participants, the Evaluation Team recorded these interviews and transcribed the dialogue.

To analyze the interview responses, the Evaluation Team conducted an initial review of the transcripts to identify key concepts and themes (e.g., school governance, partnerships, educator preparation) related to each of the evaluation questions. Using these key concepts and themes, the Evaluation Team developed a categorization scheme, aligned with the evaluation questions, to organize specific portions of the transcribed interview text. With this scheme the Evaluation Team reviewed all of the interview transcripts and coded responses based on the pre-identified concepts and themes. A final review and synthesis of the interview responses, based on the developed coding scheme, revealed the critical observations and findings that are included in this report.

Quantitative Data Analyses

The evaluation of the UNC System laboratory schools will use quantitative data from a host of sources: NCDPI, UNC System COE, and survey responses. With these data, the Evaluation Team will assess whether laboratory schools improve students' academic performance, engagement with school, and social-emotional outcomes; whether laboratory schools are successfully marketed and managed; and whether pre-service experiences in a laboratory school (e.g., student teaching) influence early-career educators. Given data availability, most of these analyses are not part of this evaluation report. Below, the Evaluation Team describes several guiding principles for how it will analyze and report quantitative data on laboratory schools. These principles are designed to help the Evaluation Team perform rigorous analyses and report data in meaningful ways.

First, the Evaluation Team will start the analysis process by reporting student and school outcomes without making any statistical adjustments. For example, the Evaluation Team may report the average end-of-grade mathematics scores of laboratory school students and other students in the host school district. While there are limitations to this approach and its ability to isolate the impacts of laboratory schools, it does have the advantage of presenting information in a transparent and understandable manner.

Second, when analyzing administrative data for laboratory schools, the Evaluation Team will present pooled results across all laboratory schools and separate results for each laboratory school. Pooling the data will provide a larger sample and return a summative measure of laboratory school effects. Separate, school-by-school analyses acknowledge the potential for variation in laboratory school impacts due to differences in set up, student demographics, partnerships, and goals across the schools. As a complement to these approaches, the Evaluation Team will also report pooled and school-specific results by the number of years the laboratory school has been open.

Third, given the unique sample of students attending laboratory schools—those who were previously low-performing and/or those coming from a low-performing school—reporting of raw, unadjusted student outcomes will not isolate the impact of laboratory schools. As such, the Evaluation Team will also use administrative data from NCDPI to identify comparison samples of students and schools that more closely resemble the laboratory school population. It is likely that the Evaluation Team will use propensity score matching to create these comparison samples; other statistical approaches may also be feasible and will be examined by the Evaluation Team.¹⁰ Findings from these matched analyses will be the preferred results.

Fourth, when examining the characteristics of pre-service candidates and tracking them into the public school workforce, the Evaluation Team will compare pre-service candidates who had significant learning experiences in laboratory schools (e.g., student teaching, principal intern) with pre-service candidates from the same university and licensure area that did not have laboratory school experiences. For example, comparing middle grades candidates who student taught at The Catamount School versus WCU middle grades candidates who student taught elsewhere. These analyses will not be causal but may suggest whether laboratory school experiences benefit early-career teachers.

¹⁰ Other approaches include comparing laboratory school students to (1) students attending other low-performing schools; (2) students who applied to laboratory schools but were unable to attend due to over-subscription (this does not currently exist); and (3) themselves in previous years before they attended the laboratory school.

Lastly, when analyzing administrative data from NCDPI, the Evaluation Team will estimate regression models that control for a rich set of individual and contextual characteristics. For example, when assessing student achievement, the Evaluation Team will use propensity score matching to identify an appropriate comparison sample and then control for individual student and school characteristics to more rigorously isolate the impact of laboratory schools on student performance. Likewise, when assessing outcomes for early career teachers who did versus those who did not have significant laboratory school experiences, the Evaluation Team will estimate a regression model controlling for teacher and school characteristics.

Findings

How have the UNC System and its constituent institutions set up laboratory schools to succeed?

Interviews conducted with key laboratory school stakeholders from April to June 2018 suggest that leadership at the UNC System and leadership and personnel at UNC System institutions engaged in three sets of activities to set up laboratory schools: (1) governance and implementation oversight; (2) laboratory school selection and approval; and (3) laboratory school planning and implementation. The sections below describe this work, with a focus on UNC System activities and the efforts of ECU and WCU, the first UNC System institutions to open laboratory schools.

Governance and Implementation Oversight

The legislation enabling laboratory schools outlined a “lean” governance framework to oversee the establishment of such schools within the UNC System. Specifically, the laboratory schools legislation directed the State Board of Education to approve the creation of laboratory schools¹¹ and required that a new BOG Subcommittee on Laboratory Schools oversee the establishment of the schools.¹² The chancellor of the affiliated UNC System institution is that laboratory school’s administrative head.¹³

To operationalize the enabling legislation, the UNC System Office created a cross-functional “Action Group” within the UNC System Office composed of experts in law, finance, human resources, K-12 education, educator preparation, and community interests. The UNC System Action Group was to facilitate the overall planning of the laboratory schools initiative and to work with UNC System institutions to identify and to address key processes for operating K-12 schools. The UNC System president engaged a former K-12 school educator and district superintendent with experience in North Carolina to lead the Action Group,¹⁴ who, in turn, engaged another former K-12 school and district administrator to help coordinate laboratory school implementation.¹⁵

The UNC System Action Group supported the UNC System president and the BOG in identifying UNC System institutions to operate laboratory schools and the BOG Subcommittee on Laboratory Schools in

¹¹ N.C.G.S. § 116-239.7(c)

¹² N.C.G.S. § 116-239.7(a)-(b)

¹³ N.C.G.S. §116-239.8. Originally, a UNC System institution’s Board of Trustees had oversight responsibilities; the legislation was amended in 2017 to name constituent institution chancellors as administrative heads of laboratory schools.

¹⁴ Sean Bulson served as a senior advisor to the president for Laboratory Schools and interim vice president of University and P12 Partnerships from November 2016-June 2018.

¹⁵ Albert Dupont has served as the UNC Laboratory Schools coordinator since November 2016. His position is part-time and time-limited.

establishing a process to review and approve laboratory school proposals. These proposals were submitted to the state superintendent and the State Board of Education for designation as a local education agency.¹⁶ Generally, chancellors of the UNC System institutions selected to operate a laboratory school have designated deans at their respective COE to lead the planning and implementation of their laboratory schools. Deans at the respective institutions created planning teams composed of COE faculty and administrators as well as staff and administrators across the spectrum of the institutions to design and operationalize the laboratory schools. The UNC System Action Group is providing technical assistance to and facilitating other implementation supports for the COE planning teams. These supports include technical assistance from RTI International consultants, who are assisting UNC System institutions in designing and planning their laboratory school mission and model, and Friday Institute researchers, who are assisting UNC System institutions in developing research-practice partnerships with their laboratory schools.

Laboratory School Selection and Approval

The legislation enabling laboratory schools gave the BOG latitude to select the UNC System institutions that would create laboratory schools, but called for the establishment of these schools in districts where at least 25 percent of the schools were identified as low-performing on the state's school performance rating system.¹⁷ The legislation specified only that the BOG, upon recommendation of the UNC System president, should select at least nine¹⁸ UNC System institutions with high-quality educator preparation programs to establish these schools.¹⁹ Based on the legislative criteria for locating laboratory schools, the UNC System Action Group identified 36 school districts eligible under the law to host laboratory schools. After cross-matching the 15 UNC System institutions with COEs against qualifying school districts in proximity and accounting for critical factors (e.g., number of faculty, amount of available research funding, geographic diversity²⁰), the UNC System identified a set of UNC System institutions well situated to support a laboratory school. These institutions were Appalachian State University, ECU, North Carolina Central University (NCCU), the University of North Carolina at Charlotte (UNCC), UNCG, the University of North Carolina at Pembroke (UNCP), UNCW, and WCU.²¹

An amendment to the enabling legislation, requested by the UNC System and enacted in June 2017, allows the BOG Subcommittee on Laboratory Schools to exercise three waivers to establish laboratory schools in

¹⁶ N.C.G.S. §116-239.7(c) as amended in 2017 provides that the subcommittee shall file a copy of each resolution to approve a laboratory school with the NCDPI and that upon receipt of the resolution and upon the recommendation of the superintendent of Public Instruction, the State Board of Education shall approve the creation of the laboratory school.

¹⁷ See N.C.G.S. §116-239.6(4)

¹⁸ The laboratory school enabling legislation originally mandated that the UNC BOG designate eight UNC System institutions to operate laboratory schools. The legislation was amended in June 2017 to increase the number to nine.

¹⁹ N.C.G.S. §116-239.5(a)

²⁰ As amended in June 2017, N.C.G.S. §116-239.7(a1) provides that the UNC Board of Governors' Subcommittee on Laboratory Schools should consider the location of each laboratory school to allow for geographically diverse distribution of laboratory schools throughout the state and a maximum of one laboratory school located in a qualifying school district.

²¹ The University of North Carolina System. "Proposed locations of UNC laboratory schools announced." Nov. 1, 2016. Retrieved from <https://www.northcarolina.edu/content/Proposed-locations-UNC-laboratory-schools-announced>

districts that do not meet the 25 percent low-performing schools criteria.²² The BOG Subcommittee on Laboratory Schools exercised two of those waivers for UNCG and UNCW, which, along with Appalachian State University, were approved in January 2018 to open laboratory schools in the 2018-19 school year.

In November 2016, ECU and WCU were the first UNC System institutions formally approved to create laboratory schools and they opened their schools in the 2017-18 school year. As originally enacted, the legislation enabling laboratory schools directed UNC System institutions to consider eligible for admission any students residing in the local school administrative unit in which the laboratory school is located who were enrolled in a low-performing school at the time of application *and* to give priority enrollment to students who did not meet expected growth in the prior school year. Failure to meet expected growth could be measured by grades, observations, diagnostic and formative assessments, state assessments, or other factors, including reading on grade level. ECU built its partnership with Pitt County Schools around these original eligibility requirements that prioritized admission for low-performing students. The legislation was amended in 2017 to require laboratory schools to consider eligible for admission any students residing in the local school administrative unit in which the laboratory school is located who were enrolled in a low-performing school at the time of application *or* who did not meet expected growth in the previous school year. Other UNC System institutions are admitting students based on this amended definition of student eligibility.

Laboratory School Planning and Implementation

To develop systems and processes for implementing laboratory schools, UNC System stakeholders first had to become knowledgeable about K-12 operational policies and systems. As ECU and WCU began their school design and planning, the UNC System Action Group identified nearly 250 tasks, across school governance, operations, and finance that must be undertaken to open a laboratory school. The UNC System Action Group has periodically convened COE laboratory school planning teams, collectively and in cohorts by opening school year, to provide guidance and support on these numerous implementation steps. Below, the Evaluation Team highlights some of these key implementation steps and the common implementation challenges faced by ECU and WCU.

Designing the laboratory school model. The laboratory school legislation outlined some specifications regarding design and strategic focus of the schools. These specifications state that laboratory schools must: (1) serve students in at least three contiguous grade levels in the range of K-8;²³ (2) establish a standard course of study that sets forth the subjects to be taught and texts and other materials to be used in each grade to meet state student performance standards;²⁴ (3) conduct student assessments required by the State Board of Education;²⁵ (4) adopt a school calendar consisting of a minimum of 185 days or 1,025 hours of instruction covering at least nine calendar months;²⁶ and (5) establish policies and standards for academic performance, attendance, and student conduct that comply with state policy

²² As amended, N.C.G.S. §116-239.7(a2) provides that a chancellor may submit a proposal to locate a laboratory school in a school district that does not meet the 25 percent low performing schools criteria if the proposal demonstrates that the laboratory school shall primarily serve students who do not meet state expected growth goals.

²³ N.C.G.S. §116-239.6(4).

²⁴ N.C.G.S. §116-239.8(b)(2)(a)

²⁵ N.C.G.S. §116-239.8(b)(2)(b)

²⁶ N.C.G.S. §116-239.8(b)(2)(c)

requirements.²⁷ Further, the laboratory school legislation requires that at least 50 percent of laboratory school teachers hold teacher licenses.²⁸

The enabling legislation also allows the BOG Subcommittee on Laboratory Schools to develop standards applicable to all laboratory schools. UNC System institutions implementing laboratory schools are otherwise provided latitude to develop their own curriculum, assessments and instructional practices; school schedule; school staffing models (e.g., determining roles and job descriptions of staff); personnel evaluations; staff professional development; and budget.

Identifying facilities to house the laboratory school. The enabling legislation did not address siting within local school districts or provide facilities for laboratory school use. For ECU and WCU, determining the site of their respective laboratory schools depended on first determining what kind of school the community needed and the ideal location of such schools. ECU and WCU worked with local school districts to assess community educational needs and match those to potential school sites/locations. Both ECU and WCU needed to renovate school classrooms to ready them for use and align them with the requirements of their school model.

Setting up operational supports for the laboratory school. The enabling legislation directed the school district in which the laboratory school is located to provide transportation and food services for the laboratory school. Other operational issues the planning teams at ECU and WCU had to address included (1) the procurement of goods (e.g., curriculum supports, school supplies, books, furnishings, technology) and services (e.g., utilities, facilities maintenance, security, IT support); (2) compliance with State Board of Education data collection and reporting requirements; and (3) establishing systems and processes to manage tasks (e.g., budgeting, data collection and reporting, delegating management of such tasks to COE and university personnel).

Generating student enrollment. The enabling legislation specified the types of students who are eligible to enroll in laboratory schools and directed laboratory schools to enroll eligible students in the order in which applications are received and until the school's capacity limitations have been met.²⁹ As schools of choice, laboratory schools need to develop plans for generating enrollment and establishing systems to enroll students.

Developing required and relevant school policies. The enabling legislation specified that laboratory school employees are university employees.³⁰ This provision necessitated an analysis of university personnel and finance policies to determine how laboratory school staff would fit under existing employee classifications and compensation levels. In addition, the laboratory school legislation included directives regarding background checks of laboratory school employees and the development of policies to complete those checks. As UNC System institutions are allowed variances regarding some human resource policies (e.g., employee leave, inclement weather), ECU and WCU had to ensure that their laboratory school human resource policies aligned with their university policies.

²⁷ N.C.G.S. §116-239.8(b)(3)

²⁸ N.C.G.S. §116-239.10(3) requires that at least 50 percent of teachers employed by the constituent institution shall hold teacher licenses.

²⁹ This is the current statutory language; the original legislation required laboratory schools to enroll students who attended a low-performing school and to give enrollment priority to students who were also low-performing.

³⁰ N.C.G.S. §116-239.10

Further, the laboratory school legislation specified that UNC System institutions establish policies regarding compulsory attendance, exceptional children, and health and safety. Laboratory schools were also encouraged to coordinate evacuation and lockdown procedures with local and state law enforcement and with emergency management services. The planning of laboratory schools surfaced other state and federal policies and laws with which laboratory schools needed to comply.

Hiring staff. As laboratory school staff (e.g., teachers) are university employees, ECU and WCU had to execute hiring within existing university hiring processes and procedures. This necessitated the development, review, and posting of job descriptions and the establishment and execution of search committees, candidate review processes, and other hiring-related tasks.

Determining funding needs and available funds. ECU and WCU had to determine the total revenue they could expect based on projected enrollment, develop budgets for start-up and ongoing operational costs, create fiscal policies, and establish accounting procedures and internal controls to support laboratory school operation. Further, per the enabling legislation, laboratory school per-pupil funding is based on average daily membership (ADM), most of which is not allocated until after the school year has started. Although the UNC system provided ECU and WCU about \$110,000 in initial funding in fiscal year 2016-17 and \$260,000 additional funds in fiscal year 2017-18, both universities had to identify additional start-up funds from their own university budgets to support school design, implementation, and operations.

Community and partner engagement. The enabling legislation did not specifically address community and partner engagement. However, the need to engage in these tasks quickly arose as an extension of finance/revenue issues and school design planning. With enrollment providing the main source of recurring revenue, laboratory schools had to plan marketing strategies and hold community meetings to publicize laboratory schools and generate parent interest. College of Education planning teams also participated in meetings with local civic leaders and school boards to inform them of the laboratory schools. Likewise, laboratory school planning teams engaged campus organizations to form partnerships to help address school needs.

Common implementation challenges. Generally, ECU and WCU faced common implementation challenges arising from several critical dynamics. Despite these challenges, both the ECU Community School and The Catamount School opened, as scheduled, in August 2017.

1. *UNC System institutions have not traditionally operated K-12 schools.* The UNC System and its constituent institutions have historically engaged with K-12 education through educator preparation programs and research. Since UNC System institutions have not typically managed K-12 schools, ECU and WCU had to create an internal infrastructure to support management of their laboratory schools while designing and implementing them. In effect, ECU and WCU had to create new schools while also setting up their universities to be local education agencies. Further, UNC System policies and processes are not aligned with K-12 school operation. From vacation and sick leave to weather cancellation, data reporting, human resource management, finance systems, and school calendar, universities and K-12 schools operate differently. Implementation efforts have focused on identifying these differences and working within university procedures to comply with K-12 public school system requirements.
2. *Availability of school start-up funding.* The sufficiency of funding has had important implications for the facilities and staffing of the laboratory schools at ECU and WCU. The partnerships ECU and

WCU formed with Pitt and Jackson County Schools gave them access to facilities to house their schools (see the Partner discussion below). However, these limited spaces have, in turn, limited the ability of ECU and WCU to implement portions of their laboratory school designs. For instance, with limited space it has been challenging for ECU and WCU to fully integrate pre-service candidates and provide other student supports (e.g., counseling). In addition, with limited funding to hire teachers, ECU and WCU hired staff within weeks of school opening, well after the laboratory school designs were initially finalized and implementation activities were underway. Thus, critical opportunities to inculcate staff culture were delayed. Other costs that ECU and WCU have absorbed include faculty, staff, and administrator time to design laboratory school models and execute planning and implementation tasks (in addition to these faculty, staff, and administrators fulfilling their pre-existing job responsibilities).

3. *One-year implementation timeline.* Laboratory school planning leaders at the UNC System, ECU, and WCU had 13 months between the ratification of the laboratory schools enabling legislation in July 2016 to the opening of the ECU and WCU laboratory schools in August 2017. Interviewees commonly used the analogy of “building a plane while flying it” to describe the process of designing and implementing laboratory schools while also creating systems of implementation and operation supports.
4. *Needs of students.* With the arrival of students who were previously low-performing and/or who had attended a low-performing school, ECU and WCU needed to postpone the full implementation of their laboratory school models. In particular, ECU and WCU needed to postpone elements that would have engaged external partners to address non-academic factors that impede engagement and learning in the classroom. With a concentrated pool of their respective district’s high-need and low-performing students in their laboratory school classrooms, both ECU and WCU were faced with addressing basic and immediate student needs (e.g., food, clothing, school nurses and counseling services) and supporting laboratory school staff in managing classroom expectations and procedures.

How do laboratory schools form and harness partnerships to benefit learning, teaching, and school leadership?

The enabling legislation states that “each laboratory school shall expand student opportunities for educational success ... using the resources available to the constituent institution.”³¹ While this does not explicitly call for COE to engage with other university and community partners, the COE at ECU and WCU relied on partnerships with the local school district and other colleges and departments within their institutions to direct critical resources to the laboratory schools.

Interviews with key stakeholders suggest that, as implemented at ECU and WCU, four types of partners were integral to the development of laboratory schools: (1) host school districts; (2) other divisions of the university; (3) COE faculty; and (4) community partners. As ECU and WCU have learned, partnerships require coordination and management to develop and succeed. In the sections that follow, the Evaluation Team provides further details on these key laboratory school partnerships.

³¹ N.C.G.S. §116-239.5(c)

Host School Districts

Though the enabling legislation relies on the administrative structure of school districts as a framework for organizing the location, funding support,³² and student enrollment eligibility of laboratory schools, it does not specifically identify school districts as partners in the laboratory schools initiative. However, early in the planning process, UNC System leadership perceived district partnership as critical to the laboratory school model for two reasons: (1) school districts have control and access over K-12 school facilities, which the legislation enabling laboratory schools did not provide; and (2) working with a district partner would enhance opportunities for laboratory schools to disseminate best practices in improving educational outcomes for high-need students.

The ECU and WCU laboratory school planning teams also recognized the importance of engaging school district partners and, in interviews, personnel from both institutions identified their host school districts as their primary partners. Both COE were already working with the school districts to place pre-service candidates in clinical experiences and to access data for research. To avoid disruptions in their university-district relationships and to neutralize sensitivities that frequently arise with charter schools, ECU and WCU sought to engage their district partners from the start in the planning of the laboratory schools.

ECU's district partner, Pitt County Schools, and WCU's district partner, Jackson County Public Schools, have demonstrated a commitment to the laboratory schools. District leaders worked with the ECU and WCU planning teams to determine the educational needs of the community that laboratory schools help address. Each district partner has provided space within an existing school to host the laboratory school and is subcontracting various operational services (e.g., building maintenance, information technology) to laboratory schools. Some district teachers served on laboratory school curriculum planning teams, and district leaders also serve on the ECU and WCU laboratory school advisory boards.

The co-located laboratory schools at ECU and WCU are also taking small steps to forge partnerships with the district school in which they are located. For example, at The Catamount School, COE faculty have worked with a host high school classroom teacher and exceptional children administrator to create a model classroom, within the host high school, that incorporates some of the laboratory school's technology and adaptive classroom furnishings. In addition, the host high school's band director voluntarily led a band elective with laboratory school students while the host school's National Honor Society provided afterschool tutoring for laboratory school students. ECU Community School teachers are working with teachers at their host elementary school to develop joint school-based events and activities for students from both schools (e.g., Science Olympiad, Battle of the Books) for the 2018-19 school year.

Other Divisions of the University

The enabling legislation directs laboratory schools to leverage the resources of their affiliated UNC System institution. Early in their planning processes, ECU and WCU engaged colleges and departments outside of the COE to explore opportunities for their faculty and students to be involved in their laboratory schools. For example, WCU has memorandums of understanding (MOU) with the College of Health and Human Sciences, the Department of Human Services, and the College's McKee Psychological Services Clinic to provide services via graduate student interns, who perform comprehensive assessments and provide speech therapy, counseling, and other supports. The benefits are mutual: laboratory schools gain access to supports at low or no cost while other colleges, departments, and programs gain an opportunity to

³² N.C.G.S. §116-239.11

further the research or professional development of undergraduate and graduate students in an applied setting. These intra-institution partnerships reflect the perception of institution-wide ownership of the laboratory schools. At ECU and WCU, there is a sense that the laboratory school is not just the College of Education's school, but rather, the entire institution's school.

However, laboratory schools face capacity constraints on the number of programs and services that they can absorb from partners. In particular, space is an issue at the ECU Community School and The Catamount School. The ECU and WCU laboratory schools lack physical space and do not have extra classrooms or offices where partners can engage with students.

Aligning university and laboratory school schedules and calendars is also challenging. The daily university schedule does not always align with the laboratory school schedule. Seasonal breaks in the winter, spring, and summer do not match and this can create gaps in program or service provision. Laboratory schools lessened these scheduling challenges with university partners by forming relationships with external community partners.

College of Education Faculty Partners

The laboratory school legislation inherently involves COE faculty in the planning and implementation of the laboratory school. ECU and WCU COE faculty led the planning and implementation of laboratory schools and have helped the laboratory school teachers address the academic needs and well-being of students. Specifically, COE faculty have worked with laboratory school teachers and staff to plan lessons, demonstrate instructional strategies, co-teach lessons, and observe classroom teaching and provide feedback. These faculty recognize the reciprocal nature of their relationship with laboratory school teachers: COE rely on laboratory school staff to help realize their objectives for the laboratory school while laboratory school personnel receive hands-on guidance and support from experts. To maximize the benefits of this partnership and the opportunity for the laboratory school model to inform research on teaching and learning, the Friday Institute is working to cultivate research-practice partnerships between laboratory school staff and COE. These partnerships can help faculty better understand the realities of K-12 schooling and gain insights into problems of practice that inform how they approach research and the application of theory to schooling.

Community Partners

Both ECU and WCU envision cultivating relationships with organizations from their local community that provide services and resources to laboratory school students and their families. Though such relationships are not yet as established as those within the university, both laboratory schools have already engaged community partners to address basic student needs. For example, ECU worked with local churches to collect food to send home with students on weekends and before winter and spring breaks and is planning a more regular "weekend backpack buddy" program with certain churches for the 2018-19 school year. WCU brought community members into the classroom and students into the community on a frequent basis for enrichment activities.

Are laboratory schools successfully marketed and operated?

UNC System laboratory schools are a new type of public school in North Carolina. While it remains too early to determine how innovative and effective laboratory schools will be, interviews with key

stakeholders suggest that the ECU and WCU laboratory schools can be distinguished from other traditional public schools in the way that they are attempting to address the needs of the “whole child” and by leveraging university resources to do so. In the sections that follow, the Evaluation Team describes the marketing, enrollment, design, and management of laboratory schools and assesses parental perceptions of laboratory schools. At the conclusion of this report, the Evaluation Team provides snapshots of the ECU and WCU laboratory schools (Appendix B).

Marketing of Laboratory Schools

The marketing efforts of ECU and WCU were intended to generate enrollment and build community support for the laboratory schools. ECU held several parent meetings at the co-located school as well as informational sessions at community agencies that serve children within the attendance area of the ECU Community School. ECU conducted home visits to disseminate information about the new school and used social media and parent newsletters to share positive information about the school. WCU took a broad approach to marketing. WCU bought local newspaper advertisements and utilized local billboards and social media. From March through June 2017, WCU held open forums at each of the K-8 schools in Jackson County, two local libraries, WCU, and the Jackson County Public School Board. As ECU and WCU began these community outreach strategies, while simultaneously planning their school models, their early messaging efforts focused on the opportunity for students to attend a brand new school that was university-operated. As their respective school designs emerged, both schools were able to share more specific details about their school models. This helped to counterbalance the challenge in marketing schools that would, by virtue of state statute, concentrate hard-to-serve and low-performing students in one school. At WCU, an additional marketing challenge involved the decision of the Jackson County school board to not allow Catamount School students to participate in sports teams at their home school or on county-wide teams.

In their initial planning, both the ECU and WCU laboratory schools aimed to enroll 25 students per class (with one class per grade level). Enrollment data, shared in the following section, show that ECU met that goal while WCU enrolled fewer students than projected, particularly in the 8th grade. Throughout the 2017-18 school year, some families/students chose to withdraw from the laboratory schools, particularly from the ECU Community School. By the time the Evaluation Team conducted interviews in April and May 2018, there were approximately 18 students, per grade, at the ECU Community School. At The Catamount School there were approximately 20 students in the 6th and 7th grades, respectively, and 12 students in the 8th grade. College of Education faculty and laboratory school staff at ECU and WCU described this turnover as typical transience for low-income students and parental desire for more traditional school settings. An interviewee at ECU also questioned the appropriateness of 25 students per class, given the concentration of previously low-performing students in laboratory schools. Individual student needs, which were sometimes extreme, were often difficult to address in a class of 25 students. As a result, in the 2018-19 academic year, the ECU Community School focused on smaller class sizes.

Since the laboratory schools that opened in 2018-19 are operating a school that previously existed within the host district, rather than a co-located school within an existing school building, they planned to enroll many more students. In its initial planning, the Appalachian Academy proposed to enroll a total of 315 students, with 45 per grade in grades K-2 and 60 per grade in grades 3-5. The Moss Street Partnership School (UNCG) capped its enrollment at 450 students, with a target enrollment of 420 (70 per grade in grades K-5). Finally, the D. C. Virgo Preparatory Academy (UNCW) planned to enroll a total of 270 students, with 20 per grade in grades K-5 and 50 per grade in grades 6-8. Data in the right panel of Table 1 show

that all three schools were below these enrollment targets. In particular, enrollment was lower, relative to plans, in grades 3-5 at the Appalachian Academy, in 3rd grade at the Moss Street Partnership School, and in 3rd, 6th, and 8th grades at D. C. Virgo Preparatory Academy.

Characteristics of Students Enrolled in Laboratory Schools

Table 1 displays the characteristics of students enrolled in UNC System laboratory schools. Personnel at the laboratory schools pulled most of these data from the Principal's Monthly Report from the 20th day of the school year. The Evaluation Team requested these data from early in the school year to assess the initial population of laboratory school students and to allow for the reporting of 2018-19 enrollment data to the NCGA in November 2018.

Table 1 also presents data on how laboratory schools determined whether students were eligible to attend—previously attending/zoned to attend a low-performing school or previously low-performing themselves. Importantly, laboratory schools did not necessarily confirm both of these eligibility criteria. That is, if a student previously attended a low-performing school, the laboratory school may not have assessed whether the student was also low-performing him/herself. As a result, the data in Table 1 indicate how the laboratory school confirmed students' eligibility and not necessarily all the ways students qualified to attend a laboratory school.

The left panel of Table 1 displays student characteristics for the UNC System laboratory schools that were operational in 2017-18—the ECU Community School and The Catamount School. On the 20th day of the 2017-18 school year, the ECU Community School had 75 students enrolled, with 26 in 2nd grade, 23 in 3rd grade, and 26 in 4th grade. Sixty-four percent of these students were male, 96 percent were black, and 11 percent were classified as exceptional children (EC status). By comparison, 48 percent of the elementary grades students in Pitt County Schools are black. Consistent with ECU's commitment to the original legislation, all of the ECU Community School students were previously low-performing *and* had previously attended a low-performing school.

On the 20th day of the 2017-18 school year, The Catamount School had 57 enrolled students, with 21 in 6th grade, 23 in 7th grade, and 13 in 8th grade. Fifty-eight percent of these students were male, 88 percent were white, and nearly 18 percent were classified as exceptional children. By comparison, 72 percent of the 6th, 7th, and 8th grade students in Jackson County Schools are white. A large majority of these students (84 percent) qualified to attend The Catamount School based on their own prior performance in school; the remaining 16 percent qualified based on their previous attendance at a low-performing school.

The right panel of Table 1 displays student characteristics for the UNC System laboratory schools that are operational in 2018-19. As of the 20th day of the 2018-19 school year, the ECU Community School has 85 enrolled students, with 14 in kindergarten, 15 in 1st grade, 8 in 2nd grade, 16 in 3rd grade, 18 in 4th grade, and 14 in 5th grade. Fifty-four percent of these students are male, 98 percent are black, and 12 percent are classified as exceptional children. As in 2017-18, all of these students were eligible to attend the ECU Community School based on their own prior performance and previously attending (or being zoned to attend) a low-performing school.

As of the 20th day of the 2018-19 school year, The Catamount School has 56 enrolled students, with 9 in 6th grade, 24 in 7th grade, and 23 in 8th grade. Sixty-one percent of these students are male, 77 percent are white, and 20 percent are classified as exceptional. Eighty-nine percent of these students qualified to

attend The Catamount School based on their own prior performance; 18 percent were eligible to attend based on their previous attendance at a low-performing school.

As of the 20th day of the 2018-19 academic year, the Appalachian Academy has 282 enrolled students, with 40 in kindergarten, 39 in 1st grade, 55 in 2nd grade, 51 in 3rd grade, 47 in 4th grade, and 50 in 5th grade. Forty-nine percent of these students are male, 47 percent are black, 37 percent are Hispanic, and 11 percent are classified as exceptional children. By comparison, 29 percent of the elementary grades students in Winston-Salem Forsyth Schools are black and 28 percent are Hispanic. The Appalachian Academy admitted 99 percent of these students based on their previous attendance at a low-performing school or being zoned to attend a low-performing school.

Table 1: Student Enrollment in UNC System Laboratory Schools—20th Day of the School Year

	2017-18		2018-19				
	Laboratory Schools		Laboratory Schools				
	ECU	WCU	ECU	WCU	ASU	UNCG	UNCW
Total Enrollment	75	57	85	56	282	389	243
Enrollment: Kindergarten	---	---	14	---	40	63	20
Enrollment: 1 st Grade	---	---	15	---	39	79	15
Enrollment: 2 nd Grade	26	---	8	---	55	65	22
Enrollment: 3 rd Grade	23	---	16	---	51	47	13
Enrollment: 4 th Grade	26	---	18	---	47	72	25
Enrollment: 5 th Grade	---	---	14	---	50	63	28
Enrollment: 6 th Grade	---	21	---	9	---	---	38
Enrollment: 7 th Grade	---	23	---	24	---	---	47
Enrollment: 8 th Grade	---	13	---	23	---	---	35
Male	64.0%	57.9%	54.1%	60.7%	48.9%	56.0%	56.0%
White	2.7%	87.7%	2.4%	76.8%	11.0%	20.3%	6.2%
Black	96.0%	1.8%	97.7%	0.0%	46.8%	58.6%	86.4%
Multiracial	1.3%	7.0%	0.0%	14.3%	2.5%	10.0%	2.1%
Hispanic	0.0%	1.8%	0.0%	3.6%	37.2%	11.1%	5.4%
Asian	0.0%	1.8%	0.0%	0.0%	1.8%	0.0%	0.0%
American Indian	0.0%	0.0%	0.0%	5.4%	0.7%	0.0%	0.0%
EC Status	10.7%	17.5%	11.8%	19.6%	10.6%	16.5%	13.2%
Previously Attended or Zoned to Attend a Low-Performing School	100.0%	15.8%	100.0%	17.9%	98.9%	95.1%	97.1%
Previously Low-Performing Students	100.0%	84.2%	100.0%	89.3%	1.1%	4.9%	2.9%

Note: The left panel of this table displays characteristics of the students enrolled at the UNC System laboratory schools in the 2017-18 school year; the right panel displays characteristics of the students enrolled at the UNC System laboratory schools in the 2018-19 school year. Most of the data in this table comes from the Principal's Monthly Report from the 20th day of the school year.

As of the 20th day of the 2018-19 academic year, the Moss Street Partnership School has 389 enrolled students, with 63 in kindergarten, 79 in 1st grade, 65 in 2nd grade, 47 in 3rd grade, 72 in 4th grade, and 63 in 5th grade. Fifty-six percent of these students are male, 59 percent are black, and 16 percent are classified as exceptional children. By comparison, 20 percent of the elementary grades students in Rockingham County Schools are black. UNCG admitted 95 percent of these students based on their previous attendance at a low-performing school or being zoned to attend a low-performing school.

Finally, as the 20th day of the 2018-19 academic year, the D. C. Virgo Preparatory Academy has 243 enrolled students, with 20 in kindergarten, 15 in 1st grade, 22 in 2nd grade, 13 in 3rd grade, 25 in 4th grade, 28 in 5th grade, 38 in 6th grade, 47 in 7th grade, and 35 in 8th grade. Fifty-six percent of these students are male, 86 percent are black, and 13 percent are classified as exceptional children. By comparison, 20 percent of the elementary and middle grades students in New Hanover County Schools are black. UNCW admitted 97 percent of these students based on their previous attendance at a low-performing school or being zoned to attend a low-performing school.

School Design

The legislation enabling laboratory schools sets out defining characteristics of laboratory schools that distinguish them from other North Carolina public schools. Specifically, laboratory schools are set up to serve students who are low-performing or attended a low-performing school (rated D or F under the state school rating system), transform and improve teacher and school leader preparation, and operate under the governance of the UNC System.

Within this framework, stakeholders at ECU and WCU reported similar goals for laboratory schools. These goals include (1) ensuring that students attending laboratory schools are well-served; (2) contributing to the field of education by improving approaches to instruct students and prepare future educators; and (3) improving K-12 student outcomes by identifying and modeling best practices that other North Carolina schools can adopt. In particular, the laboratory schools aimed to demonstrate the range of options that may have success with low-performing student populations.

Though laboratory schools are intended to be a new kind of North Carolina public school, in some ways the ECU and WCU laboratory schools look the same as traditional district schools. Both are located in wings of existing, traditional district schools, have one teacher per class, follow school calendars aligned with the host school district, and administer state standardized assessments at the end of the school year. However, insights and perspectives gained from interviews with university faculty and laboratory school personnel suggest that two critical distinctions exist between the ECU and WCU laboratory schools and traditional district schools: (1) the laboratory schools' adoption of a "whole child" approach; and (2) the ways that each laboratory school has leveraged the resources of their constituent UNC System institution to address the needs of the whole child.

The whole child approach is premised on the notion that each child deserves to be healthy, safe, engaged, supported, and challenged at school, and accordingly, values the development of physical, social, emotional, and cognitive skills.³³ Because social and emotional wellness affects academic performance, the whole child theory predicts that improved academic performance will ensue when schools first address students' social and emotional needs, especially those that are trauma-induced.

³³ See "Whole Child." ASCD. Retrieved from <http://www.ascd.org/whole-child.aspx>

To execute the whole child approach, both ECU and WCU selectively hired teaching staffs who had significant prior experience with and a passion for teaching high-need students. To assist the teachers in their work with students, ECU and WCU COE faculty support the teachers' instructional needs through cooperative planning and teaching, observing lesson implementation, modeling lessons, and providing feedback. Both ECU and WCU engaged partners from within their respective institutions to provide professional development to laboratory school teachers that helps them understand the issues that affect their students and supports to help the teachers meet students' academic, physical, and social-emotional needs. For example, both ECU and WCU have had graduate students in psychology and counseling programs lead professional development sessions for laboratory school staff and provide counseling support to laboratory school students.

Both schools have "adaptive" learning environments with flexible seating. Classroom furnishings are intended to support student movement, independence, and visual and tactile engagement. Whiteboard tables allow for interactive instruction and portable, upright whiteboards help create divided spaces within single classrooms. Both schools feature technology, including iPads or laptops, and touch screen Smartboards intended to support individualized learning. The ECU Community School includes a STEM/innovation lab (referred to as the Discovery Lab by teachers) with equipment including 3D printers and microscopes to promote hands-on learning and experimentation. The Catamount School promotes individualized learning through 1:1 devices (laptops) and student electives and clubs such as student government, art club, First Lego League, drama, band/chorus, and fitness.

Staff in both laboratory schools prioritize building relationships with students that engender acceptance and trust. Teachers reported focusing on understanding the individual student and his or her strengths, as well as the circumstances that may have impeded his or her learning. Discipline is focused on understanding what has led or contributed to a child's behavior and addressing those issues as much as the offending behavior itself. Though discipline issues create distractions in the classroom and can take several minutes for teachers to address and return to instruction, staff at both the ECU and WCU laboratory schools think it is important for children to have a different discipline experience than they had in other classrooms. So, rather than sanctions, ECU Community School students may take counseling breaks with the school nurse; Catamount School students may seek counseling with interning graduate psychology students.

Both schools envisioned providing more comprehensive student supports than either fully realized in 2017-18. ECU envisioned an integrated health model, which would leverage university resources (e.g., medical school, dental school) to serve the physical, social-emotional, and mental health needs of laboratory school students *and* their families. Examples of such services include vision checkups, health and wellness physicals, immunizations, dental screenings, and counseling. Once school started and the ECU COE faculty and laboratory school staff better understood the daily subsistence challenges their students faced, they shifted to organizing initiatives such as a weekend food backpack program and a winter clothing drive to help meet basic student needs.

WCU envisioned implementing a "Community of Care" model at its laboratory school. The Community of Care model would center on a team of COE staff and community-based professionals that coordinate supports to holistically address the academic, physical, and social-emotional needs of students. In WCU's Community of Care model, school staff would identify student issues and partners on the Community of Care team would provide input and brainstorm intervention strategies for the school to try. However, the first months of school revealed the full scope of functional and operational issues requiring attention, and

as such, WCU has not fully implemented its original, broader conception of the Community of Care model. Rather, WCU focused on meeting the needs of the whole child within the academic program executed at the school. The originally planned, comprehensive Community of Care model is still being developed. Both ECU and WCU plan to pursue full realization of these whole child elements in their second-year of school operation.

School Management

The management of the ECU and WCU laboratory schools is evolving. Both ECU and WCU adopted a school staffing model with a principal, lead teachers (in 2017-18, ECU had one full-time teacher per classroom for a total of three full-time teachers; WCU had one full-time teacher per core subject area for a total of four full-time teachers), and one or two support staff. ECU and WCU hired principals several months in advance of the school opening; teachers at both schools were hired in August, within weeks of the start of the school year.

With few exceptions, the teachers at both laboratory schools returned to teach in 2018-19. At the ECU Community School, the extended day coordinator/PE teacher resigned in June 2018 due to personal concerns. At The Catamount School, a WCU COE faculty member had requested a one-year teaching appointment for 2017-18 (in mathematics). That faculty member is continuing to teach Math I in 2018-19 and will also serve as the curriculum liaison between the COE and The Catamount School. A new teacher was hired to teach 6th-8th grade math. However, both ECU and WCU replaced their laboratory school principals between the 2017-18 and 2018-19 school years. ECU and WCU did not simply hire school principals and then back away from school operations. Rather, COE faculty at both universities remained involved in managing their laboratory schools—with the school principal reporting to and evaluated by a member of the COE faculty. This frequent involvement allowed COE faculty to better assess the qualifications that a successful laboratory school principal should have, including experience running a K-12 school, vision and flexibility to manage the overlay of university culture and systems on K-12 schooling, and an ability to manage communications on both sides of the university and laboratory school partnership, including with district leaders, parents, and faculty. Serving as the principal of the ECU or WCU laboratory schools was demanding and, ultimately, both institutions decided to seek principals whose skillsets and experiences more directly aligned with the unique needs of laboratory schools.

Operationally, the first semester at the ECU and WCU laboratory schools was demanding for school staff and COE faculty. Because laboratory school teachers were hired within weeks of school opening, they had to acclimate to the curriculum and adjust to laboratory school policies and practices as they were also working to acclimate new students in a new school setting and solidifying new relationships among themselves and with COE faculty. College of Education faculty had to adjust and adapt implementation plans to meet the day-to-day realities of K-12 schooling and the needs of students.

The first semester of the 2017-18 school year also revealed the full impact of the ECU and WCU laboratory schools being co-located within existing district school buildings. Though that arrangement helps reduce facility costs and simplifies management—both schools contract with the district for facilities maintenance and other supports—these leased areas have limited space, which limits the activities the schools can undertake. Each school comprises a wing of its host school, essentially a hallway with classrooms on either side. With one classroom per grade and a space for administrative activities, there is little extra space to address the needs of the whole child (e.g., counseling services) or for laboratory school personnel or pre-service candidates to meet and work. Consequently, the laboratory schools

improvise and deal with crowding. For example, the ECU Community School frequently used its hallway for physical education or recess. The Catamount School is co-located in a district facility with two multi-purpose rooms/gymnasiums, which gives the host school flexibility to allow the laboratory school to use one gym in the morning or during recess. Pre-service teachers and counselors are hard-pressed to find space to work with students in one-on-one or in small group settings, and when sections of pre-service classes are in laboratory school classrooms for observation, laboratory school teachers adjust to the “chaos.” Space limitations thus constrain the number of pre-service candidates that ECU and WCU may reasonably place at the laboratory school and the ways they may work with students.

Parent Perceptions of the Laboratory Schools

To assess parent perceptions of the UNC System laboratory schools, the Evaluation Team contracted with Tripod Education Partners to administer a parent survey in April/May 2018. The ECU and WCU laboratory schools placed links to the anonymous survey on their school websites and used established channels of communication with families to encourage parents to complete the survey. Overall, parents of 17 Catamount School students completed the survey; the parents of only one ECU Community School student completed the survey.³⁴ As such, the data below focus on parent survey responses for The Catamount School, with particular attention given to parents’ motivations for applying, perceptions of the application process and school operations, and satisfaction with the laboratory school.

An open-ended survey item asked parents to reflect on why they wanted their child to attend the laboratory school. In the responses of Catamount School parents, three inter-related themes emerged: (1) smaller class sizes and a smaller school environment; (2) the opportunity for their child to receive more hands-on, individualized instruction that meets his/her unique needs; and (3) the qualifications and innovative teaching of Catamount School teachers. Very few parents explicitly cited the involvement of WCU as a reason to apply.

Regarding the marketing and application process, Catamount School parents indicated that recruitment meetings, word-of-mouth and information from friends, and advertisements in local media were the most frequent ways in which they found out about the laboratory school. Nearly 90 percent of the Catamount School parent respondents felt the school did a good or very good job in explaining the application and enrollment process; likewise, approximately 94 percent of parent respondents indicated that it was easy or very easy to apply to and enroll their child at The Catamount School.

The top panel of Table 2 displays parents’ perceptions of how good The Catamount School was in improving students’ academic knowledge and meeting students’ needs and interests. Overall, nearly two-thirds of parent respondents felt that the school was ‘quite good’ or ‘very good’ in improving their child’s reading ability and mathematics knowledge; approximately 70 and 94 percent of respondents answered similarly for improving their child’s knowledge of science and social studies. Over 76 percent of respondents indicated that The Catamount School was quite good or very good in meeting their child’s individual interests and needs.

³⁴ One reason why response rates differ markedly between ECU and WCU is that WCU encouraged parents to complete the survey during a parent event at the school. The Evaluation Team will work with laboratory schools in 2018-19 (and future years) to identify and implement practices that encourage parental response.

Table 2: Parent Perceptions of The Catamount School

How good is your child's school...	# of Responses	Not Good at All	Slightly Good	Somewhat Good	Quite Good	Very Good
At improving his/her reading ability	17	11.8%	0.0%	23.5%	23.5%	41.2%
At improving his/her knowledge of math	17	5.9%	5.9%	23.5%	23.5%	41.2%
At improving his/her knowledge of science	17	5.9%	0.0%	23.5%	5.9%	64.7%
At improving his/her knowledge of social studies	17	5.9%	0.0%	0.0%	17.7%	76.5%
At meeting his/her individual interests and needs	17	11.8%	0.0%	11.8%	35.3%	41.2%
How satisfied are you with...	# of Responses	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
The way the school supports your child's academic growth	17	5.9%	5.9%	17.7%	17.7%	52.9%
The way the school supports your child's social and emotional growth	17	0.0%	11.8%	5.9%	11.8%	70.6%
The way the school supports your child's physical health and development	17	11.8%	0.0%	11.8%	23.5%	52.9%
The order and discipline at your child's school	17	5.9%	11.8%	5.9%	47.1%	29.4%
The ways your school communicates with you?	17	5.9%	5.9%	5.9%	17.7%	64.7%
The way the school's staff interacts with you?	17	0.0%	11.8%	11.8%	5.9%	70.6%
The opportunities to be a partner with the school in your child's education?	17	0.0%	5.9%	11.8%	11.8%	70.6%

Note: This table displays the survey responses of parents who have a child attending The Catamount School.

Regarding students' academic growth, social-emotional growth, and physical health and development, approximately 71, 82, and 76 percent of parent respondents, respectively, were satisfied or very satisfied with The Catamount School. Seventy-two percent of parent respondents were satisfied or very satisfied with the order and discipline at The Catamount School—although a much lower percentage reported being very satisfied. Lastly, regarding communication and opportunities for parent involvement, 82 percent of respondents were satisfied or very satisfied with school communication; 76 and 82 percent of respondents, respectively, answered similarly for the way The Catamount School staff interacts with them and for their opportunities to partner with The Catamount School in their child's education.

Table 3: Parent Perceptions of The Catamount School

When you think about the school your child previously attended compared with the school your child attends now, which school does a better job with...	# of Responses	Previous school was better	Schools are about the same	Current school is better
Managing the behavior of students	17	11.8%	23.5%	64.7%
Helping your child learn	17	5.9%	17.7%	76.5%
Communicating with you	17	5.9%	29.4%	64.7%
Involving you in your child’s education and the life of the school	17	0.0%	23.5%	76.5%
Providing extracurricular activities	17	29.4%	29.4%	41.2%

Note: This table displays the survey responses of parents who have a child attending The Catamount School.

Finally, a set of survey items asked parents to compare the laboratory school to the school their child previously attended. Nearly two-thirds of parent respondents believed The Catamount School was better at managing student behavior and communicating with parents than the previous school. Over 75 percent of parent respondents felt that The Catamount School did a better job at helping their child learn and involving families in the child’s education. A lower percentage of respondents (41 percent) believed that The Catamount School was better at providing extracurricular activities to students.

Do laboratory schools improve the academic performance of students?

The enabling laboratory schools legislation requires the reporting of student achievement data, including school performance grades, student achievement scores, and student growth at each laboratory school to the Joint Legislative Education Oversight Committee. These achievement data are based on student proficiency and growth on state assessments (end-of-grade exams for laboratory schools). Proficiency measures whether students pass state assessments while growth tracks the gains students make on those assessments.

While student-level achievement data is not yet available to the Evaluation Team, NCDPI has publicly released summative student and school performance data. Table 4 displays these data for the two UNC System laboratory schools—the ECU Community School and The Catamount School—in operation in the 2017-18 school year. The top panel of Table 4 displays these data overall; the middle and bottom panels of Table 4 report these data for reading and mathematics separately.

Overall, the ECU Community School met expected growth but had a performance score of 16 and a performance grade of ‘F’. The apparent disparity between the growth status and performance grade is due to the achievement score (proficiency rate on end-of-grade exams) at the ECU Community School, which was 1.6 (on a 0-100 scale) and accounts for 80 percent of the school performance score/grade. The performance data for the ECU Community School are very similar in reading and mathematics. However, North Carolina did not report an official math growth score or status for the ECU Community School in 2017-18. This is because the ECU Community School had too few students for whom a mathematics growth score could be estimated.

Overall, The Catamount School earned a performance score of 57 and a performance grade of 'C'. The proficiency rate (achievement score) on End-of-Grade exams at The Catamount School was nearly 55 percent but the school did not meet expected growth in 2017-18. The performance data for The Catamount School differ across reading and mathematics. In reading, the school did not meet expected growth but had a performance grade of 'C' and an achievement score of nearly 65. In mathematics, the school met expected growth but had a performance grade of 'D' and an achievement score of 45.³⁵

Table 4: Student Achievement at Laboratory Schools

	Overall Performance Grade	Overall Performance Score	Overall Achievement Score	Overall Growth Score	Overall Growth Status
ECU Community School	F	16	1.6	74.6	Met
The Catamount School	C	57	54.9	65.2	Not Met
	Reading Performance Grade	Reading Performance Score	Reading Achievement Score	Reading Growth Score	Reading Growth Status
ECU Community School	F	15	<5	76.5	Met
The Catamount School	C	65	64.7	67.0	Not Met
	Math Performance Grade	Math Performance Score	Math Achievement Score	Math Growth Score	Math Growth Status
ECU Community School	F	3	<5	Not Reported	Not Reported
The Catamount School	D	50	45.1	71.4	Met

Note: Performance Grades range from A-F and are based on the Performance Score (Performance Scores of 85-100=A; 70-84=B; 55-69=C; 40-54=D; and 0-39=F). Performance Scores are a weighted average of the Achievement Score (80 percent) and the Growth Score (20 percent). For the ECU Community School and The Catamount School, the Achievement Score is the proficiency rate on End-of-Grade exams. The Growth Status is based, in part, on the Growth Score, and indicates whether there was sufficient statistical evidence to say that the school exceeded, met, or did not meet expected growth. North Carolina calculates these values across subject-areas and for mathematics and reading separately.

In addition to these data, the enabling legislation also requires the reporting of student academic progress in each laboratory school, as measured against the previous school year and against other schools in the district and statewide. Making these comparisons in a rigorous and comprehensive fashion requires student-level achievement data from NCDPI. These data, which become available in October/November, are not available to the Evaluation Team in sufficient time to process, manage, and analyze for a November 2018 report. As a result, subsequent laboratory school reports will include results from these analyses.

Do laboratory schools benefit students' social-emotional needs and engagement with school?

To assess how laboratory schools influence students' social-emotional and school engagement outcomes, the Evaluation Team will use two sources of data: administrative data on attendance and disciplinary

³⁵ Fifty-eight percent of the 8th grade students at The Catamount School took Math I and 71 percent of those students earned high school credit. All 8th grade students at The Catamount School learned both the 8th grade science curriculum and the 9th grade Earth and Environmental Science curriculum. Ninety-two percent of The Catamount School 8th grade students earned high school credit for Earth and Environmental Science.

incidents from the NCDPI and responses from the Tripod student survey. Data on attendance and disciplinary incidents are not available from the NCDPI until late in the calendar year, and thus, are not part of this report. The section below details the survey responses of students attending the ECU Community School³⁶ and The Catamount School. Survey items focused on students' motivation for learning, engagement with school, and perceptions of the school climate. These survey responses provide valuable insights into how laboratory school students perceive their schools. However, the differences between students attending the ECU Community School and The Catamount School—in terms of grade-level and prior educational experiences—suggest that student responses for each school should be considered independently rather than comparatively.

Student Perceptions of the Laboratory Schools

The top panel of Table 5 presents student responses to survey items focused on motivation for school and enjoyment of/engagement with school. Generally, students from both laboratory schools responded favorably to these items. For example, at the ECU Community School, 93 percent of students responded that they mostly or always tried to learn as much as they could; 87 percent answered similarly that they cared about the things they learned in school. At The Catamount School, 86 percent of students responded that they mostly or always did their best quality work; 80 percent answered similarly that they tried to learn as much as they could at The Catamount School.

The bottom panel of Table 5 displays student responses to survey items focused on school climate. At both laboratory schools, the highest percentage of mostly or always yes responses—77 percent at the ECU Community School and 69 percent at The Catamount School—was for the item 'adults in this school care about my health and happiness.' Conversely, students at each school were least likely to say that the school felt like a safe place: approximately 58 percent felt the school was mostly or always safe. The responses in Table 5 are valuable, in isolation, but would benefit in future years from a comparison with similar students attending low-performing schools.

³⁶ The online administration of the Tripod student survey is available beginning in grade 3. As such, the Evaluation Team had 3rd and 4th graders at the ECU Laboratory School complete the survey (2nd graders did not). In future years, the Evaluation Team will use a combination of paper-based surveys (grades K-2) and online surveys so that all laboratory school students are surveyed.

Table 5: Student Perceptions of the Laboratory Schools

		# of Responses	No Never	Mostly Not	Maybe Sometimes	Mostly Yes	Yes Always
<i>Motivation and Enjoyment/Engagement with School</i>							
<i>In this school I try to learn as much as I can</i>	ECU	29	0.0%	3.5%	3.5%	17.2%	75.9%
	WCU	51	0.0%	0.0%	19.6%	37.3%	43.1%
<i>I care about the things we learn in school</i>	ECU	31	0.0%	3.2%	9.7%	22.6%	64.5%
	WCU	51	2.0%	5.9%	27.5%	29.4%	35.3%
<i>I have done my best quality work in this school</i>	ECU	31	0.0%	0.0%	29.0%	29.0%	41.9%
	WCU	51	0.0%	0.0%	13.7%	51.0%	35.3%
<i>This school is a happy place for me to be</i>	ECU	31	6.5%	6.5%	9.7%	22.6%	54.8%
	WCU	51	3.9%	5.9%	25.5%	19.6%	45.1%
<i>School Climate</i>							
<i>This school feels like a safe place to me</i>	ECU	31	6.5%	12.9%	22.6%	6.5%	51.6%
	WCU	51	2.0%	5.9%	33.3%	17.7%	41.2%
<i>In this school I am treated fairly</i>	ECU	31	9.7%	6.5%	16.1%	22.6%	45.2%
	WCU	51	0.0%	5.9%	27.5%	31.4%	35.3%
<i>Adults in this school care about my health and happiness</i>	ECU	31	3.2%	6.5%	12.9%	22.6%	54.8%
	WCU	51	2.0%	3.9%	25.5%	29.4%	39.2%
<i>I feel like I belong at this school</i>	ECU	31	6.5%	9.7%	12.9%	16.1%	54.8%
	WCU	51	5.9%	7.8%	17.7%	27.5%	41.2%

Note: This table displays the survey responses of ECU Laboratory School and Catamount School students.

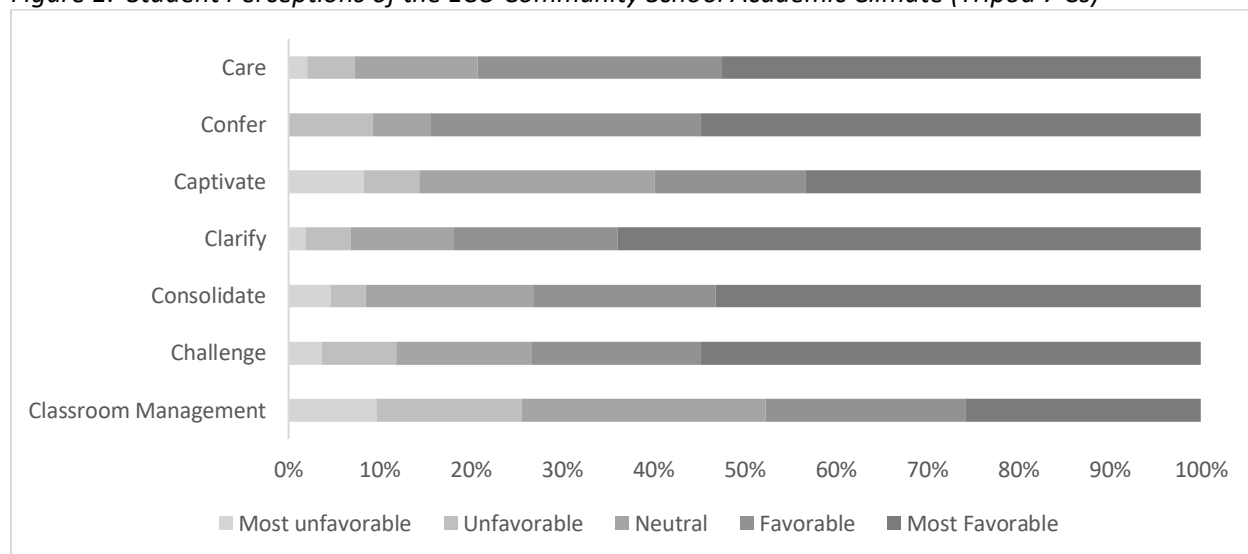
The Tripod student survey is best known for assessing the academic climate of classrooms and schools through survey items on the 7 Cs—Care, Confer, Captivate, Clarify, Consolidate, Challenge, and Classroom Management. Essentially, these are survey items that allow students to rate their academic climate along seven distinct dimensions. In Figures 1 and 2, the Evaluation Team presents summative 7 Cs data for the ECU and WCU laboratory schools.³⁷ For the ECU Community School (Figure 1), the combined percentage of favorable and most favorable ratings is typically greater than 70 percent and ranges from a low of 48 percent for Classroom Management to a high of 84 percent for Confer. This suggests that ECU Community School teachers struggled most with classroom management but excelled at having students speak up and share their thoughts and ideas. Data show that ECU Community School teachers were also strong at clarifying student understanding and caring for students.

For The Catamount School (Figure 2), the combined percentage of favorable and most favorable ratings is often greater than 66 percent and ranges from a low of 35 percent for Classroom Management to a

³⁷ Appendix C includes a list of all the 7 Cs survey items.

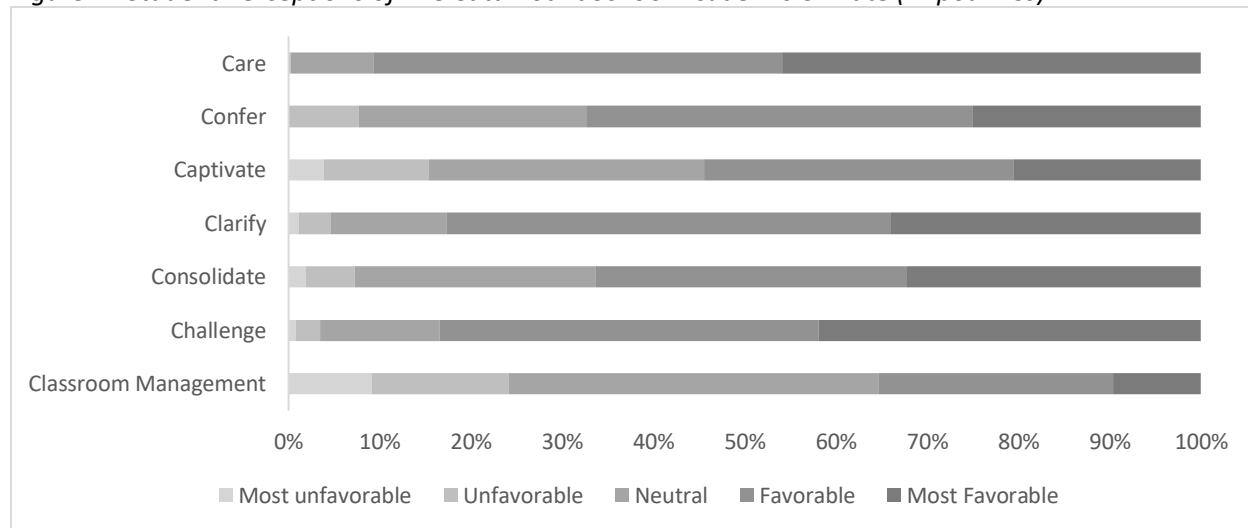
high of 89 percent for Care. This indicates that Catamount School teachers struggled most with classroom management, while excelling at making sure students know they are cared for and valued. Figure 2 indicates that Catamount School teachers were also skilled at clarifying student understanding and challenging students to think and work hard.

Figure 1: Student Perceptions of the ECU Community School Academic Climate (Tripod 7 Cs)



Note: This figure displays aggregate 7 Cs data for the ECU Laboratory School. All of the Tripod 7 Cs survey items are shown in Appendix C.

Figure 2: Student Perceptions of The Catamount School Academic Climate (Tripod 7 Cs)



Note: This figure displays aggregate 7 Cs data for The Catamount School. All of the Tripod 7 Cs survey items are shown in Appendix C.

Finally, as with the Tripod parent survey, Table 6 presents responses to survey items asking students to compare their laboratory school to the school they previously attended. At each laboratory school a small percentage of students (approximately 6 to 12 percent) felt that their previous school was better at the specified task. Approximately 75 percent of students reported that their laboratory school was better at helping them learn more. Student responses suggest that The Catamount School was also relatively strong at having caring teachers—this is also shown in the 7 Cs data in Figure 2—while the ECU Community School was relatively strong at managing student behavior (compared to the previous school).

Table 6: Student Perceptions of the Laboratory Schools

When you think about your old school compared to the school you attend now, which school does a better job with the following...		# of Responses	Previous school was better	Schools are about the same	Current school is better
<i>Managing the behavior of students</i>	ECU	32	9.4%	25.0%	65.6%
	WCU	51	7.8%	35.3%	56.9%
<i>Having teachers that really care about you</i>	ECU	32	12.5%	28.1%	59.4%
	WCU	51	5.9%	25.5%	68.6%
<i>Helping you learn more</i>	ECU	32	6.3%	21.9%	71.9%
	WCU	51	5.9%	17.7%	76.5%

Note: This table displays the survey responses of ECU Laboratory School and Catamount School students.

Do the laboratory schools support and strengthen educator preparation?

Laboratory schools offer COE opportunities to innovate and improve their teacher and school leader preparation programs. The legislation enabling laboratory schools specifies that the mission of a laboratory school shall be “to provide exposure and training for teachers and principals to successfully address challenges existing in high-needs school settings” and to “provide an opportunity for research demonstration, student support, and expansion of the teaching experience.”³⁸ After only one year of operation, it remains to be seen whether laboratory schools transform and improve educator preparation. However, interviews with key stakeholders conducted from April to June 2018 suggest that engaging university educator preparation programs in K-12 schooling has some clear effects:

- Providing a new and unique opportunity for COE faculty and pre-service candidates to be exposed to the challenges of improving outcomes for high-need students.
- Providing a unique opportunity for COE faculty to understand the practical realities of teaching in and leading K-12 public schools and better connect research to problems of practice.
- Providing an infusion of university resources into laboratory schools, including people and services.

In the sections that follow, the Evaluation Team describes the relationship between the laboratory schools and pre-service candidates and between laboratory schools and COE faculty. Future evaluation reports will begin to track pre-service candidates who had significant laboratory school experiences into the public school workforce in North Carolina.

Pre-service Candidates

Like many COE, the educator preparation programs at ECU and WCU integrate pre-service candidates into K-12 schools through early field experiences or practicums and a two-semester student teaching experience. These early field experiences provide pre-service candidates the opportunity to observe instruction, work one-on-one with students, and assist classroom teachers. The first semester of student

³⁸ N.C.G.S. §116-239.5(b)

teaching typically involves “Intern 1s” spending 1-2 days, per week, at the K-12 school; during the second semester, “Intern 2s” are on site every day and take full control of classroom instruction.

Practicum assignments. The ECU and WCU COE assigned select course sections to practicum opportunities at their respective laboratory schools. At ECU, one section of junior year pre-service candidates (approximately 18-20) enrolled in a K-2 ELA and mathematics course made regular visits to the laboratory school with their course instructor to observe the 2nd grade class. In the spring semester, when these juniors focused on grades 3-5 ELA and mathematics coursework, they worked with students in the laboratory school’s 3rd and 4th grade classes. Laboratory school classrooms at ECU have cameras connected back to the university, allowing pre-service candidates to observe real-time and video-recorded lessons from the laboratory school.

At WCU, middle grades licensure candidates observed laboratory school classes and worked one-on-one with students in small groups at the direction of the laboratory school teachers. In the fall, this effort comprised two groups of middle grades majors—13 juniors and 15 seniors. Eleven health and physical education candidates enrolled in a behavior management and pedagogy practicum also observed and lead physical education classes at The Catamount School.

Interviewees indicated that COE do not usually have the ability to fully coordinate practicum experiences. However, by operating the laboratory school, COE faculty are able to collaborate and coordinate with laboratory school teachers in ways that are hard to achieve in typical practicums.

Student teaching experiences. ECU and WCU were highly selective in their student teaching assignments at laboratory schools. The limited number of classrooms and teachers, coupled with sensitivity for laboratory school teachers starting their first semesters in a new type of school, pushed COE to select high caliber interns to serve in laboratory schools in their inaugural year. In addition, ECU created an “off-cycle” internship so that laboratory school teachers could work with public school students for one semester before also closely supervising pre-service candidates. Typically, pre-service candidates do fall/spring student teaching cycles, but instead, the ECU Community School hosted Intern 1s in spring 2018 and those same candidates, as Intern 2s, in fall 2018.

College of Education faculty hand-picked prospective student teachers who had several common characteristics: (1) high levels of performance in preparation coursework; (2) engagement with an area of study relevant to the laboratory school model (e.g., middle grades for The Catamount School); (3) advanced skills in lesson planning and content knowledge; and (4) the commitment, flexibility, and resilience to serve in a high-needs school setting. ECU placed three pre-service candidates into the laboratory school for the Intern 1 semester (spring 2018). WCU placed three middle grades candidates who did both their Intern 1 and 2 semesters at the laboratory school. WCU also placed 11 Intern 1 health and physical education candidates at The Catamount School (six in the fall and five in the spring). Three of these health and physical education candidates completed their Intern 2 (full-time student teaching) placement at The Catamount School in spring 2018.

Interviewees suggested that the working relationships between COE faculty and laboratory school staff strengthened the student teaching experience. Because laboratory school teachers are in closer communication with COE faculty, they know what they are expecting interns to gain in the classroom and are able to give interns better feedback on lesson plans, assessments, and interactions with students. Citing requests by interns to volunteer, help teachers, and return to the laboratory school after their

internship was complete, ECU faculty speculated that the university's partnership with the laboratory school engendered in interns a stronger sense of ownership and accountability. This encouraged them to more comfortably and confidently engage with the laboratory school teachers supervising them.

Middle grades Intern 2s at WCU (completing their full-time student teaching) reflected on their laboratory school experiences as highly valuable. They reported that they felt more prepared and ready to work with high-need and/or low-performing students and had developed and honed classroom management and relationship building skills. These interns also expressed increased flexibility regarding their expectations in their post-graduation placements both in terms of how to approach challenges ("there's not one set way, you have to have a million different ways of doing things...") and mindset about school fit ("it is not whether the school is right for me, but what can I do for this school").

College of Education Faculty

ECU and WCU COE faculty have had various opportunities to engage in the planning and implementation of laboratory schools. These opportunities include: (1) designing the laboratory school model and implementation plan; (2) developing curriculum; (3) working with laboratory school teachers to plan and model lessons, observe classroom teaching practices, and provide feedback; (4) working with faculty in other programs, departments, and colleges to develop and coordinate undergraduate and graduate-level internships at the laboratory school; and (5) supervising practicum students and student teachers at the laboratory schools. In addition, WCU COE faculty members had instructional responsibilities at The Catamount School. A faculty member in the COE had the majority of her faculty responsibilities reassigned for the 2017-18 school year so that she could become the laboratory school's mathematics teacher; a WCU health and physical education professor supervised physical education at the laboratory school.

Interviewees reported that this level of university "ownership" created more direct lines of communication between COE faculty and laboratory schools. For example, ECU COE faculty teaching pre-service candidates in a methods course have asked laboratory school teachers to model specific teaching methods. In addition, laboratory school teachers can more effectively guide and supervise pre-service candidates because they are better aware of the content COE faculty have taught those candidates and the expectations faculty have set for those candidates.

Through their engagement in the laboratory schools—working directly with teachers, observing classrooms with pre-service candidates, teaching laboratory school students—COE faculty are gaining increased awareness of the realities of school. This has implications for their instruction to pre-service candidates and how they structure the clinical experiences of pre-service candidates. WCU's experience with health and physical education interns at the laboratory school offers an illustration of the "laboratory" nature of first year operations. In the fall semester, health and physical education pre-service candidates, under the supervision of a health and physical education COE faculty member, led the morning PE session at The Catamount School. Intern 1 health and physical education candidates led PE three days a week and a behavior management and pedagogy practicum class led PE the other two days a week. Health and physical education faculty realized that it was challenging for interns and practicum students to implement lessons while also dealing with behavior management issues. "Trying to teach behavior management while the candidates were executing behavior management" proved challenging not only for health and physical education candidates but for the faculty as well. For the spring semester, WCU adopted a more scaffolded approach. An Intern 2 (full-time student teacher) led PE classes three days a week; two Intern 1s worked with the Intern 2 and delivered the PE instruction, with the support of

the Intern 2, the other two days. Two days a week, practicum students observed Intern 1s and 2s onsite and then debriefed their observations back at WCU. Health and physical education faculty believe this scaffolded approach will better equip pre-service candidates to address behavior management issues during their internship experiences.

Laboratory schools are intended to give COE faculty insights into the day-to-day realities of schooling that inform how they approach their own research and the instruction and supervision of pre-service candidates. In particular, the UNC System laboratory schools may help COE faculty better understand what is necessary to address the needs of high-need, low-performing students. As of yet, however, the scaling effect of the laboratory schools is unknown. Questions remain as to how COE faculty will take what they learn from the laboratory school experience and apply it back to their university classrooms or share it in ways that have benefits across their COE and at UNC System institutions that are not operating a laboratory school.

How have the UNC System and its constituent institutions set up laboratory schools to grow and sustain?

The legislation enabling laboratory schools sets up a process whereby the BOG Subcommittee on Laboratory Schools may extend or dissolve operation of laboratory schools every five years.³⁹ If laboratory schools are successful within a five-year term, they will have helped ameliorate the conditions that qualify their establishment. If those conditions persist, the on-going operation of laboratory schools will likely depend on the capacity of UNC System institutions to continue running them.

That capacity is a function of operational capability (i.e., the UNC System institutions' knowledge and skills to effectively run the schools) and financial sustainability. As previously discussed, the UNC System, in accordance with statutes, has established a decentralized system of implementation supports. The UNC System has worked to support planning and operational teams on each campus, and it is the desire that, ultimately, these supports will ensure that UNC System institutions will each have the operational capacity to independently run their laboratory schools. Regarding financial sustainability, the UNC System received an initial allotment of \$1 million in non-recurring funds to support the implementation of nine laboratory schools. ECU, WCU, Appalachian State University, UNCG, and UNCW have supplemented their share of UNC System funds with money from their own university budgets to support start-up and implementation activities. In 2018, the UNC System requested and received \$2 million in recurring allocations (over four years). This will provide each laboratory school additional start-up (if applicable) and operating funds. Theoretically, funds from the UNC System, coupled with initial infusions of money from the constituent institution and on-going state, federal, and local funds based on student enrollment, will provide sufficient financial resources to sustain laboratory school operations. Whether this is the case and whether laboratory schools could eventually sustain on per-pupil funding alone are open questions for future years of the evaluation.

Growth of the laboratory schools can be measured in literal enrollment increases—e.g., as the ECU Community School expands from grades 2-4 to grades K-5—and in the ways laboratory schools are able

³⁹ N.C.G.S. §116-239.7(b)(3) provides that a laboratory school term of operation is five years at the end of which the laboratory school may be dissolved if either the district in which a laboratory school is located has fewer than 25 percent low-performing schools or the purposes of a waiver have been met. At the end of five years, a laboratory school may dissolve if the circumstances qualifying its establishment no longer exist. If dissolved, the Subcommittee must designate "additional constituent institutions with educator preparation programs to establish a laboratory school."

to refine and improve their practices through research and evidence. The Friday Institute is beginning to lay the foundation for this evidence-based growth through their work with laboratory schools and COE to create research-practice partnerships. As with financial sustainability, whether these research partnerships fully develop and help COE and laboratory schools improve their practices remains an open question.

Summary

It is too early to know how effective the UNC System laboratory schools will be and what their operation will mean to the learning of low-performing students, pre-service candidates, and in-service educators. These answers will become clearer with time, as more laboratory schools open, these schools have an opportunity to refine and disseminate their practices, and the Evaluation Team is able to rigorously assess administrative data on students and educators.

The Evaluation Team finds that the UNC System laboratory schools are, as intended, enrolling students who are low-performing or previously attended a low-performing school. Generally, enrollment at the laboratory schools is slightly below their target enrollment numbers. Achievement data reveal reasons for optimism—the ECU Community School met expected growth, The Catamount School earned a ‘C’ performance grade and had multiple 8th grade students receive high school course credits—but also areas for significant improvement. Future reports will include rigorous analyses of achievement data and academic progress at laboratory schools.

The ECU and WCU COE have started to integrate pre-service teacher candidates into their laboratory schools through observation, practicums, and student teaching. Further, student and parent survey responses suggest general satisfaction with the ECU and WCU laboratory schools. Student survey responses indicate that a majority of students (approximately 75 percent) believe their laboratory school helps them learn more than their previous schooling experiences and that laboratory school teachers really care about them. This connects to the intention of the ECU and WCU laboratory schools to serve the whole child and to provide individualized instruction and supports. Students at both laboratory schools also expressed some concern about teachers’ ability to manage classroom behavior. Of the parents who completed surveys, Catamount School parents expressed satisfaction with how well the laboratory school supports their child’s academic, social-emotional, and physical development. Seventy-five percent of these parent respondents believed that The Catamount School did a better job at helping their child learn and involving families in learning than previous schooling experiences for their child. A limitation to these survey results, particularly for students, is a lack of a comparison sample.

In summary, this November 2018 evaluation report highlights how the UNC System has supported the planning and implementation of laboratory schools and of how ECU and WCU, the first cohort of COEs to open laboratory schools, have planned for and operated them. This story highlights tasks that needed to be completed, challenges faced in the planning and implementation process, and successes for the laboratory schools. Many of these challenges are common to the year one laboratory schools: (1) a relatively short timeframe in which to plan for and be ready to open a school; (2) the need to acquire a wealth of new knowledge (about operating a K-12 school *and* a school district) and to align the sometimes disparate human resources, finance, and data reporting practices of K-12 and higher education; (3) the availability of start-up funding and how that shaped the planning and implementation decisions of ECU and WCU (e.g., in selecting sites for their laboratory schools); and (4) the multi-faceted and intensive needs of laboratory school students and how those needs pushed ECU and WCU to adapt portions of their

planning. Given opportunities to learn from the UNC System and from ECU and WCU, the second cohort of laboratory schools—operated by Appalachian State University, UNCG, and UNCW—should be better prepared to address these challenges. Cohort two schools will likely face new challenges unique to their laboratory school designs, especially since the second cohort involves schools that were previously operated by the school district but are not co-located in an existing school.

In the coming year, the Evaluation Team will focus on understanding the story of these year two laboratory schools, examining how year one laboratory schools learn and adapt, and exploring the design and planning of the third and last cohort of laboratory schools. The Evaluation Team will also begin to rigorously assess administrative data on student achievement and engagement in school. As laboratory schools roll out and grow and administrative data becomes available, the Evaluation Team anticipates gaining a fuller understanding of whether and how laboratory schools are meeting intended objectives.

Appendix B

Laboratory School Snapshots

The ECU Community School

The ECU Community School is an elementary school co-located on the campus of South Greenville Elementary in Greenville, North Carolina. The ECU Community School served grades 2-4 (one class per grade) in the 2017-18 school year and expanded in the 2018-19 school year to include grades K-5 (one class per grade). The ECU Community School operates on the Pitt County Schools calendar but offers a mandatory extended day program from 2:30-5:00 pm.

In its first year of operation, the laboratory school's staff included a principal, three lead teachers, and an extended day teacher. The school also employed an administrative assistant, school nurse, and two teaching assistants. For the 2018-19 school year, ECU added three lead teachers and a full-time social worker and full-time counselor to provide social-emotional and mental health support and services. This allows counselor education and social work interns to be supervised in the laboratory school. ECU has also worked with the College of Health and Human Performance to develop strategies to address the academic, social, and emotional needs of entering kindergarten students.

The ECU Community School embraces a child and strength-based learning focus. It uses a standards-based report card to assess development of specific skills and level of mastery. The extended day program allows the school to address physical education and health activities while also providing students a structured time for attending to homework. Likewise, it provides teachers an opportunity for additional learning time, as needed, with individual students.

As one component of its integrated health strategy, the ECU Community School features a dedicated classroom space as a health room managed by a "Health Navigator." This Health Navigator is a full-time nurse (employed through a contract position jointly supported by ECU and Pitt County Schools) employed to triage all the physical, emotional, and mental health issues among the laboratory school students. Graduate students in psychology also staff the health room, providing counseling services to students who feel overwhelmed and need to take a break from instruction. As another component of the integrated health strategy, the ECU COE connected with other ECU colleges/departments to provide professional development supports to laboratory school teachers on out-of-school issues that impact a student's ability to learn and engage. For example, given the impact of family social capital on children's readiness to learn, graduate students specializing in marriage and family therapy have led professional development sessions for teachers.

The ECU Community School typically has a formal event each month when parents are invited to the school to learn about what their children are learning (e.g., curriculum night) or to experience it themselves (e.g., student-led living wax museum or students teaching their parents) or just to have fun with their children and their teachers (e.g., Bingo night). ECU Community School teachers, who plan these events, noted the importance of building trust with parents, many of whom did not have a positive schooling experience.

The Catamount School

WCU's laboratory school, The Catamount School, is co-located on the campus of Smoky Mountain High School in Sylva, North Carolina. It occupies one wing of the main high school building. Stemming from its prior work with Jackson County Public Schools (JCPS) to establish freshman academies, WCU opened The Catamount School as a mechanism to support students' transition to high school. The Catamount School has one classroom, per grade, for grades 6-8. It operates on the JCPS calendar and has both a facilities lease and instructional technology lease with JCPS. The Catamount School is the only middle school in JCPS, which otherwise includes grades 6-8 in K-8 schools.

In its inaugural year, The Catamount School staff included a principal; four content teachers, including a WCU COE faculty member who requested a full-time, one-year placement as a math teacher in the school; and an exceptional children teacher. The Catamount School also has contracted a part-time school nurse, a PowerSchool/data manager, and a full-time enrichment coordinator. A WCU Health and Physical Education (HPE) fixed-term instructor also dedicates a portion of workload to The Catamount School overseeing the PE program. A WCU College of Education faculty member serves as the school's administrator of exceptional children's services, but does not carry a teaching load at The Catamount School. Beginning in spring 2019, the WCU COE and College of Health and Human Sciences will have a joint Health Services Coordinator position who will serve at The Catamount School and supervise practicum nursing candidates while also teaching an introductory nursing course. The College of Health and Human Sciences has received a grant that will pay the contracted services for The Catamount School nurse and connect community care resources to the school in upcoming years.

The Catamount School offers a problem-centered, flexible learning environment, incorporating personalized and digital learning strategies, and has a flexible schedule, which allows teachers time for targeted interventions with individual students. All 8th graders take earth and environmental science, for which they can earn high school credit. Eighth grade students may also take Math I, also for high school credit. The Catamount School is the only school in JCPS offering earth and environmental science to 8th graders for high school credit and the only school offering 8th graders the opportunity to earn up to two high school credits.

Every student at The Catamount School starts each day in physical education (PE) class and ends each day in enrichment class. Based on research showing that physical activity prior to learning boosts engagement and reduces anxiety, all WCU laboratory school students engage in daily PE led by WCU HPE majors. Enrichment at the end of the day features a revolving program of activities intended to engage various student interests and talents and is the school's mechanism for incorporating elements of extracurricular programs that it currently does not have the capacity to offer. The end-of-day enrichment period provides additional time for teachers to conduct formative assessments and targeted interventions, as needed, with individual students. Enrichment programs to date have included electives focused on art, theater arts, music, and team sports; clubs focused on exploring international cultures, STEM, and other student interests. The school's enrichment coordinator works with partners from departments within the College of Education and Allied Professions (e.g., Department of Human Services, Department of Psychology) and other WCU colleges (e.g., College of Fine and Performing Arts), student groups, and community organizations who volunteer to conduct enrichment programs at the laboratory school.

Family engagement at The Catamount School is "not where [school staff] want it to be" but the school has an active PTA and a core group of parent volunteers who chaperone field trips, provide office support, and watch the students so teachers can take breaks.

Appendix C

Tripod 7 C's Survey Items

Care

- My teacher is nice to me when I ask questions.
- My teacher in this class makes me feel that he/she really cares about me.
- I like the way my teacher treats me when I need help.

Confer

- My teacher wants us to share our thoughts.
- Students speak up and share their idea about class work.

Captivate

- In this class, learning is slow, boring, and not much fun. Do you agree?*
- School work is interesting.
- I like the ways that we learn things in this class.

Clarify

- My teacher checks to make sure we understand what he/she is teaching us.
- When he/she is teaching us, my teacher asks us whether we understand.
- My teacher knows when the class understands and when we do not.
- In this class we learn to correct our mistakes.
- My teacher is very good at explaining things.

Consolidate

- My teacher takes time to help us remember what we learn.
- To help us remember, my teacher talks about things we already learned.
- My teacher takes the time to summarize what we learn each day.
- In this class we learn a lot almost every day.

Challenge

- In our class it is okay to stop trying.*
- When something is hard for someone, my teacher still makes them try.
- My teacher makes everybody work hard.
- My teacher makes us think hard about things we read.
- My teacher makes us explain our answers—why we think what we think.

Classroom Management

- Our class stays busy and does not waste time.
- My classmates behave the way my teacher wants them to.
- Students behave so badly in this class that it slows down our learning.*
- Everybody knows what they should be doing in this class.

Survey items with a * are negatively worded items; the Evaluation Team reverse coded them for analyses