

Part III: Project Narrative

This proposal is a five-year \$3.9 million request to fund the implementation of the *North Carolina A&T Rural Teacher Residency Program*, a collaborative project between Randolph County Schools, Stokes County Schools, and the School of Education and College of Arts and Sciences at North Carolina Agricultural and Technical State University. This program addresses *Absolute Priority 2: Partnership Grants for the Establishment of Effective Teaching Residency Programs*, the *Competitive Preference Priority*, and the *Invitational Priority*.

Project Significance

Representatives from Randolph County Schools, Stokes County Schools, and the School of Education and College of Arts and Sciences at North Carolina A&T State University (NC A&T) have designed the *North Carolina A&T Rural Teacher Residency Program* to recruit, prepare, and license recent college graduates, paraprofessionals, and career changers who aspire to teach high-need subject areas in a high-need rural school in North Carolina. This program results from national, state, and local data on teacher preparation and teacher quality in high need content areas. At the national level, data from the report *Rising Above the Gathering Storm* as well as a challenge from President Obama's administration to increase the nation's number of highly-qualified teachers, particularly teachers in STEM disciplines and teachers of color, fuel the rationale for and design of this proposed project. Authors of *Rising Above the Gathering Storm* concluded: "Analyses of the teacher pool indicate that an increasing number do not major or minor in the discipline they teach ... About 30% of high school mathematics students and 60% of those enrolled in physical sciences have teachers who either did not major in the subject in college or are not certified to teach it" (Committee on Prospering in the Global Economy of the 21st Century, 2007, p. 94). Consequently, the U.S. President's Council of Advisors on Science

and Technology has recommended that the federal government provide support to recruit and prepare 100,000 new STEM middle and high school science and math teachers by 2021 (Schmidt, Houang, & Cogan, 2011).

Additionally, President Obama challenged educator preparation programs to produce more teachers of color during the *HBCU Teaching and Teacher Education Forum* in June 2009 hosted by the White House Initiative on Historically Black Colleges and Universities (HBCUs) and National Board for Professional Teaching Standards. This challenge resulted from data on the demography of the United States public school teaching workforce which is comprised of 83.5% White monolingual females, 6.9% Hispanic, and 6.7% African American (Ortiz, 2012). Because of these types of data, Irvine and Fenwick (2009) presented the following recommendations at the *HBCU Teaching and Teacher Education Forum* focused on the recruitment, preparation, induction, retention, and professional development of teachers in the new millennium along with the unique role HBCUs must play in this effort: (1) provide support and incentives to HBCUs to support innovative, research-based teacher education programs and provide monies for new teacher education initiatives, (2) assist HBCUs with the recruitment of both traditional and nontraditional students for teacher education, (3) support programs that are based in sound research and positive outcomes for learners that plan, implement, and evaluate alternative routes to teaching, and (4) support teacher education programs built on university-school district collaborations that focus on the induction and retention of novice teachers. To achieve these outcomes, Irvine and Fenwick advocated for providing HBCU-specific fiscal and physical resources to assist with the preparation of teachers who serve high-need schools. Ford (2012) concluded, “The United States public schools are more racially, ethnically, and linguistically diverse and different than ever before, yet the racial and ethnic demographics of

educators remain relatively unchanged or stable” (p. 392). If more highly qualified teachers of color are to be prepared across the nation to impact student achievement, there must be a greater emphasis on supporting HBCUs.

An assessment of teacher preparation in the state of North Carolina illustrates an urgent need to produce more high-quality teachers at an aggressive rate. A shortage of approximately 10,000 teachers is anticipated within the next five years. At present, educator preparation programs in North Carolina are not producing a sufficient supply of teachers at a rate necessary to offset this looming shortage. This deficit is driven by the enrollment decline of traditional undergraduate candidates in educator preparation programs and by the high teacher turnover rate in North Carolina’s public schools. Enrollment in educator preparation programs at the 15 state-supported institutions has dropped by 30% since 2010. Additionally, state legislators defunded the North Carolina Teaching Fellows Program, a state-supported initiative that historically produced a large percentage of the state’s teachers by supplying competitive scholarships to high-achieving high school students (Barth, Dillon, Hull, Higgins, 2016). These data indicate there is a need to attract, recruit, and prepare more teachers for the state’s K-12 public schools, particularly teachers of color and teachers committed to work in high-need schools. However, faculty in the School of Education at NC A&T like faculty at many other HBCUs across the nation have found it difficult to increase the number of persons enrolled in these programs without the fiscal support and incentives urged by Irvine and Fenwick (2009). Based on a recent analysis of the teacher-supply demand in the state by the North Carolina Department of Commerce, there will be 654 middle school teaching positions open on average annually, 835 high school teaching positions open on average annually, 420 special education teaching positions (Prekindergarten to 12th grade) open on average annually, and 1,420 elementary

education teaching positions open on average annually ([Project 8 Labs, 2016](#)). Given these needs, the time is ideal to implement a research-based teacher residency program designed to impact students in high-need public schools.

The state is also experiencing challenges with teacher retention in public schools, particularly high-need schools in urban and rural areas. The statewide teacher turnover rate in 2014-2015 was 14.8 percent, which is a 33 percent increase in five years (Barth, Dillon, Hull, Higgins, 2016). This turnover is unsurprising as underserved communities, particularly low-income and minority schools, have experienced high rates of turnover for over three decades (Ingersoll & Merrill, 2012). Consequently, students in “hard-to-staff schools” are frequently taught by the least experienced, least effective teachers (Borman & Dowling, 2008; Cotfelter, Ladd, Vigodr, & Wheeler, 2007). A popular solution to this problem has focused on recruiting large numbers of promising teachers into high-poverty schools; however, little attention is given to the systematic preparation necessary for these new teachers to understand the culture of underserved schools and communities where they will work prior to their employment in these hard-to-staff contexts. Even less attention is given to the systematic induction support necessary to retain teachers once employed in these districts (Ingersoll & May, 2011).

At the local level, the need to employ highly-qualified teachers of color and highly-qualified teachers exists in Stokes County Schools and Randolph County Schools, two rural public school districts in the Piedmont Triad region of North Carolina. The superintendent of Stokes County Schools defined “high-need subject areas” in his district as secondary science (grades 9-12), mathematics (grades 9-12), and special education (K-12). The superintendent of Randolph County Schools defined “high-need subject areas” in his district as secondary science (grades 9-12), mathematics (9-12), special education (K-12), and elementary education (K-5).

According to the Assistant Superintendent of Human Resources in Stokes County, the turnover data for elementary teachers during the 2015-16 academic year was close to 15% (see email message in Appendix J). According to the descriptions assigned by the Department of Education for each local education agency (LEA) in North Carolina used for federal reporting, Stokes and Randolph County Schools are identified as “Rural-Fringe” districts, which means the territory is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster. Table 1 illustrates the percentage of students in each demographic group in each district, and Table 2 shows the percentage of teachers by demographic group.

Table 1 Percentage of Students by Demographics

District	Male	Female	White	Black	Hispanic	American Indian	Asian	Pacific Islander
Randolph	52%	48%	77%	4%	14%	1%	1%	0%
Stokes	50%	50%	87%	4%	5%	0%	0%	0%
State	51%	49%	52%	26%	14%	1%	3%	0%

Table 2 Percentage of Teachers by Demographics

District	Male	Female	White	Black	Hispanic	American Indian	Asian	Pacific Islander
Randolph	20%	79%	96%	2%	1%	0%	0%	0%
Stokes	26%	74%	97%	2%	2%	1%	0%	0%
State	20%	79%	82%	14%	2%	1%	1%	0%

Appendix C shows additional data on the districts’ student poverty rates, lateral entry teacher percentage, and teacher turnover rates. Additionally, the 2016 North Carolina Teaching Work Conditions (TWC) Survey (<http://www.ncteachingconditions.org/results>) provides insight into why challenges to recruit and retain quality teachers exist in these two districts. Table 3 summarizes classroom teacher satisfaction on indicators from the TWC Survey.

Table 3 Teaching Work Conditions Survey Responses by School District

Indicator	Randolph County	Stokes County
Class sizes are reasonable such that teachers have the time available to meet the needs of all students.	52.1%	79.6%
Parents/guardians support teachers, contributing to student success.	77.5%	73.7%
Professional development is differentiated to meet individual needs of teachers.	70.6%	74.6%
Follow up is provided from professional development.	77.8%	77.1%
Professional development is evaluated and results are communicated to teachers.	70.0%	70.4%

The perceptions reported by classroom teachers in these districts may negatively impact their desire to remain in the classroom yet continue in K-12 education in different capacities. According to NCDPI's *Report to the North Carolina General Assembly: 2014-15 State of the Teaching Profession in North Carolina* (2015), 39.22% of teachers in Randolph County who left the classroom during the 2014-15 academic year remained in the education profession, and 50.88% of teachers in Stokes County who left the classroom during 2014-15 remained in the education profession. Teachers in these high-need school districts also reported that access to resources and lack of funding created a challenging work environment.

Because these school districts are high-need local education agencies, recruiting and retaining high quality educators is a challenge, which is reflected in students' learning performance on annual North Carolina End-of-Grade (EOGs) and End-of-Course (EOCs) tests. Third- to eighth-grade students complete EOGs in reading and mathematics at the end of each academic year. These tests are reported in levels ranging from 1 to 5 with those students scoring at Achievement Level 3 considered at or above grade level. Table 4 illustrates the percent of students who scored at Achievement Level 3 on the EOGs. High school students complete EOCs in English II, Math I, and Biology. These tests are reported in levels from 1 to 5 with those

students scoring at Achievement Level 3 considered at or above grade level. Table 5 captures the percentage of high school students who scored at Achievement Level 3 on the EOCs.

Table 4 Percentage of Student Proficiency by Group on North Carolina EOGs

District	All	Male	Female	White	Black	Hispanic	American Indian	Asian	ED	LEP	SD
Randolph	51.9	49.5	54.5	55.9	34.1	39.2	42.2	64.1	42.5	18.0	13.0
Stokes	57.3	55.4	59.3	58.3	39.6	50.0	37.5	93.3	47.9	18.1	26.6
State	56.3	54.4	58.3	68.7	37.3	44.8	41.0	77.3	41.6	23.1	21.1

ED=Economically Disadvantaged; LEP=Limited English Proficiency; SD=Students with Disabilities

Table 5 Percentage of Student Proficiency by Group on North Carolina EOCs

District	All	Male	Female	White	Black	Hispanic	American Indian	Asian	ED	LEP	SD
Randolph	54.6	50.8	59.0	58.5	30.6	42.0	48.0	74.2	42.4	7.8	13.4
Stokes	56.5	54.1	59.3	57.1	41.4	64.5	N/A	63.6	45.5	N/A	20.5
State	57.9	54.8	61.1	69.7	37.7	47.1	42.6	77.2	41.6	13.1	18.4

ED=Economically Disadvantaged; LEP=Limited English Proficiency; SD=Students with Disabilities

An assessment of the number of teachers with advanced degrees who work in these partner rural school districts also indicates a small percentage of classroom teachers with Master’s or doctoral degrees. Table 6 shows the percentage of teachers by school level with advanced degrees.

Table 6 Percentage of Teachers with Advanced Degrees

District	Elementary	Middle	High
Randolph	27%	21%	21%
Stokes	25%	19%	24%
State	31%	29%	27%

When these student performance and teacher demographic data are analyzed, a picture emerges that suggests several needs: the need to prepare more teachers with advanced certifications, the need to produce more teachers of color, the need to produce more teachers who possess the cultural competence to engage students with exceptionalities and students from socioeconomically and linguistically diverse backgrounds, and the need to retain more teachers via differentiated professional development that is relevant to their students’ lives.

Given this picture, NC A&T is situated to address these needs while concurrently addressing Irvine and Fenwick’s recommendations as well as the current presidential

administration's challenge to produce more quality teachers who can educate diverse populations of learners. NC A&T is a land-grant doctoral granting historically Black university in the southeastern United States and is the largest public HBCU in the nation. The university is a top producer of engineers of color, mathematicians of color, and scientists of color (<http://www.ncat.edu/about/rankings-recognition.html>). Table 7 illustrates the number of undergraduate students enrolled in STEM degree programs at NC A&T since 2009-10.

Table 7 Undergraduate STEM Majors at NC A&T since Fall 2009

Major	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014
Biology	306	359	398	383	428	428
Chemistry	87	86	85	79	69	69
Mathematics	44	46	44	34	32	32
Physics	34	42	39	46	38	38
Architectural Engineering	160	140	130	119	116	114
Civil Engineering	98	98	106	128	130	142
Electrical Engineering	215	199	180	153	147	169
Mechanical Engineering	232	214	208	224	251	297
Industrial Engineering	124	104	106	125	135	152
Chemical Engineering	90	81	67	72	84	88
Computer Science	209	195	194	183	176	169
Total	1599	1564	1557	1546	1606	1698

Large undergraduate STEM degree enrollments yield large numbers of graduates in these disciplines and related STEM disciplines. A number of these alumni remain in the geographic area sometimes working outside of their chosen field because competition for jobs in these disciplines is often very high in the 12-county Piedmont Triad region. This competition is one result of the region's 11 four-year institutions of higher education (i.e., Bennett College, North Carolina A&T, University of North Carolina at Greensboro, Elon University, Laurel University, High Point University, Greensboro College, Guilford College, Salem College, Winston-Salem State University, and Wake Forest University) that produce a baccalaureate degree-educated citizenry. NC A&T's existing MAT degree program infrastructure coupled with the college-educated population drawn from the 11 four-year institutions within a 40-mile radius provides an

ideal environment for recruiting, preparing, and licensing college graduates or paraprofessionals as highly qualified teachers in high-need content areas.

Improving Teaching and Learning

The *Rural Teacher Residency Program* represents a new approach to educator preparation at NC A&T and other institutions of higher education within the state. While the pass rate on licensure certification examinations at NC A&T is 100% (see Appendix J—2015 EPP Report) and the National Council on Teacher Quality ranked the graduate education preparation programs as a “Top Value” in North Carolina (see Appendix J), legislators and some K-12 principals argue does not fully meet the growing demand for teachers who have the necessary content knowledge, classroom management, and cultural competencies to serve diverse K-12 students. Santamaria (2009) argued that the single most pervasive difference and the most neglected difference in United States public schools is cultural difference. Kea and Trent (2013) posited that educator preparation programs must reposition “culture” at the center of its preparatory model, requiring that all teacher education candidates become culturally competent. Traditional teacher education programs generally rely on introducing candidates to educational theories then connecting them to concrete pedagogical practices within classrooms (abstract-to-concrete); moreover, the traditional approach prepares candidates to teach in a classroom with students who are “average” and “in the middle” using pedagogical practice that is not responsive to the learning, emotional, and social needs of ethnically and linguistically diverse students.

Implementing the *Rural Teacher Residency Program* will change the landscape of educator preparation at NC A&T and will have far-reaching statewide systemic implications for educator preparation programs. This program interweaves into coursework and K-12 school field experiences six salient characteristics of culturally relevant teaching encouraged by Villegas and

Lucas (2002)—(1) sociocultural consciousness, (2) an affirming attitude toward students from culturally and linguistically diverse backgrounds, (3) a commitment to act as agents of change, (4) Constructivist views of learning, (5) learning about students' lives, past experiences, home and community culture, and (6) culturally relevant pedagogical practices. Infusing these principles into preparatory curricula for STEM education and special education will produce classroom teachers who have a strong grasp of their content knowledge and who value and leverage diversity within the instructional process. NC A&T is positioned to develop a replicable model that can be adapted by other Colleges of Education to prepare K-12 teachers who improve the academic achievement of diverse students in rural and high-need schools.

Quality of the Project Design

Over a five-year period, the *Rural Teacher Residency Program* will recruit, select, prepare, and induct 30 individuals who possess baccalaureate degrees in approved disciplines, a minimum cumulative grade point average (GPA) of 3.00 or higher, and a desire to improve the academic achievement of K-12 students in high-need rural schools. To respond to the teacher shortage in Randolph County Schools and Stokes County Schools, participants will seek a MAT degree that leads to an initial and an advanced North Carolina teaching license in special education (grades K-12), secondary chemistry education (grades 9-12), secondary biology education (grades 9-12), or secondary mathematics education (grades 9-12). Principal Investigators (PIs) will employ a strategic recruitment process that identifies recent college or university graduates who did not major in education, mid-career professionals from outside the field of education who possess strong content knowledge or a record of professional accomplishment, and paraprofessionals within the classroom who do not possess teaching certification. The educational preparatory component of the program will span 14 months

complete with coursework and an 11-month teacher residency where participants will receive a living stipend to work alongside a licensed Master teacher within their respective specialty area.

This program is grounded in a conceptual framework based on (1) Culturally Relevant Pedagogy (CRP), (2) Inquiry-Based Learning (IBL), and (3) Teacher Content Knowledge and Content Pedagogical Skills. When combined, these three areas contribute to the quality and effectiveness of a classroom teacher in a high-need school. When preparing teachers for high need schools, it is important that they have the ability to connect students' daily real world experiences to the content they teach. Because teachers in high-need schools often face a number of obstacles including inequality, poverty, low-test scores, and high rates of absenteeism (Foote, 2005), individuals prepared to teach in these environments must possess deep content knowledge but they must also engage in transformative experiences that necessitate they understand cultural matters, diversity, and social justice. Given this context, CRP is a requisite component of any educator preparation program that prepares teachers for high-need public schools. According to Ladson-Billings (1995), CRP is grounded in collective empowerment and rests on three propositions: (1) K-12 students must experience academic success, (2) K-12 students must develop cultural competence, and (3) K-12 students must develop a critical consciousness through which they use their academic knowledge to challenge the status quo. "CRP works to identify and address power relations, linking the classroom as a community both inside and outside the school, and extending the home-to-school connections" (Patchen & Cox-Petersen, 2008, p. 995). Ladson-Billings demonstrates how classroom teachers who utilize CRP are able to engage students from culturally and linguistically diverse backgrounds in content that they initially perceive as incomprehensible. Her research suggests that there is an explicit need for educator preparation programs to produce classroom teachers who are skilled and adept with

using CRP to positively impact student learning. Implementing a teacher residency program grounded intentionally in this ideology will add to the research findings on CRP and student achievement particularly in rural high-need schools; moreover, a teacher residency program rooted in CRP provides a context for PIs to examine the impact this approach has on teacher education candidates in educator preparation programs.

A critical aspect of this preparatory model for Teacher Residents is the explicit examination of and exposure to CRP in rural communities. As Slama (2004) articulated, “rural Americans have some cultural differences from urban Americans. Some of these differences affect attitudes toward [educational] services and make it more difficult to use our services, as well as for us to deliver them” (p. 6). While Ladson-Billings’ definition of CRP emphasizes the importance of developing one’s cultural competence across various cultural perspectives, the *Rural Teaching Residency Program* will immerse participants in understanding, appreciating, and using cultural norms found in rural communities as a vehicle to establish and cultivate relationships with families, community, and educational peers. Developing a classroom teacher’s cultural competence in rural schools requires that they pay attention to demographic factors, presentation and body language, and terminology (Slama, 2004).

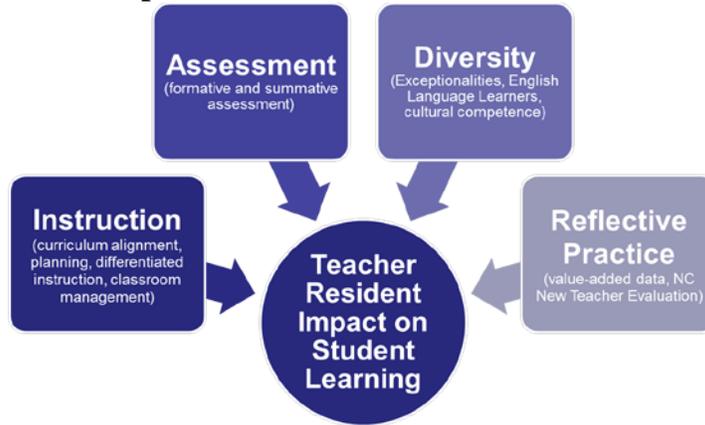
Research on CRP in urban schools demonstrates its positive impact on student learning. Educational research shows that K-12 students experience academic success in STEM disciplines when teachers use CRP to contextualize science and mathematics content. Research has illustrated that minority students engage successfully in challenging mathematical tasks when teachers make explicit connections to other cultural practices such as technology (Conant, Rosebery, Warren, & Hudicourt-Barnes, 2001; Leonard, Davis, and Sidler, 2005), sports and games (Nasir, 2005, 2002), and music (Albert, 2000). Johnson’s longitudinal case study (2010)

on science professional development grounded in CRP resulted in a more effective instructional environment for Hispanic students in an urban-centered school district with high-need schools. “Researchers agree that culturally relevant science instruction harnessing knowledge, experiences, and culture of diverse populations is a crucial component of reforming [STEM] education” (Johnson, 2010, p. 172). The majority of mathematics and science teachers in K-12 public schools have not been prepared to address diversity within their classrooms; however, successful STEM teachers have extensive content knowledge within their discipline coupled with comprehensive knowledge of diverse populations that they use to bridge connections between school, home, and community (Lee & Fradd, 1998). As Pfundt and Duit (1991) acknowledged, CRP is far less prevalent than Constructivism in STEM education research because it presents challenges for teachers; yet, this instructional approach holds significant potential for engaging students in high-need schools (Lee, 2004; Luykx, Cuevas, Lambert, & Lee, 2004). Current research on CRP in STEM education is primarily conceptual and presented in the form of critical discussions rather than as empirical studies that elicit data (Johnson, 2010, p. 995) so there is a need to examine this pedagogy more critically in teacher preparation and induction programs. Moreover, research on culturally relevant pedagogy in high need content areas in rural schools is invisible in existing research literature.

Teachers should also strive to engage learners in content via IBL. This pedagogical approach refers to the process of investigating problems or phenomena through questioning, observing, or experimenting to collect data for analysis and interpretation. Research has found IBL positively impacts K-12 student achievement in STEM subjects. Wirkala and Kuhn (2011) conducted a controlled experimental study of IBL on the academic achievement of 6th-grade students at an alternative urban public middle school. These students showed better long-term

retention of content information and a better ability to apply content information compared to their peers. Similarly, Geier et al. (2008) investigated the impact of inquiry-based science curricula on the standardized test outcomes of two cohorts of 7th and 8th grade students in Detroit Public Schools compared with the remainder of the district population. The 7th and 8th grade students who participated in the inquiry-based science curricula showed increases in science content and process skills and significantly higher pass rates on statewide tests. While these data are promising, little data have been reported on the impact of IBL in rural schools. Ramnarain (2014) found that teachers in urban, suburban, township and rural schools all have a positive perception of inquiry-based learning; however, township and rural teachers believed a didactic approach was more effective than learners doing inquiry compared to suburban and urban teachers who favored an inquiry-based approach. The lack of resources and the limited exposure to inquiry of learners at rural schools constrained the implementation of inquiry-based learning.

The *Rural Teacher Residency* program will also create and implement a Professional Development Academy (PDA) that will consist of licensed, experienced educators who will serve as “Instructional Coaches” (ICs) in the areas of secondary mathematics, secondary science, and special education. ICs will work full-time within the partner high-need schools and will collaborate with university faculty in the College of Arts and Sciences and the School of Education to support Teacher Residents, assist Master teachers, and support the work of the school’s curriculum and induction staff. ICs will coordinate training and activities while concurrently providing assistance with the infusion and integration of CRP and IBL into their content pedagogy. Figure 1 provides a framework that will guide the professional development of the ICs who will help each Teacher Resident develop his or her content knowledge, content pedagogy, and cultural competence.

Figure 1 Professional Development Framework for Teacher Residents

The *Rural Teacher Residency Program* is founded upon research-verified teacher residency models. Research on the Boston Teacher Residency program (Papay et al., 2012) focused on data between 2005 and 2011 found that teachers prepared through the residency program had a retention rate of 75% in the fifth-year of teaching compared to a retention rate of 51% in the fifth-year for non-TRP prepared teachers. Silva, McKie, and Gleason’s brief (2015) showed ED IES’s analysis of retention rates of TRP and non-TRP prepared classroom teachers within their first or second year of teaching during the 2011-12 academic year. This study found that 82% of TRP teachers were retained in the same school district compared to 72% of non-TRP teachers between Spring 2012 to Fall 2013. The study also found that TRP-prepared teachers had a statistically significant higher district-retention rate (81%) compared to 66% of non-TRP prepared teachers. The National Education Association (NEA) supported TRPs in its *NEA Teacher Residencies Report* (2014): “The NEA is committed to having all students receive access to excellent, profession-ready teachers and, toward that end, the NEA believes that every teacher should be trained in a teacher residency” (p. 4). Given this consideration, the *Rural Teaching Residency Program* will prepare classroom teachers to provide quality instruction to students in rural communities. To achieve this vision, program partners have articulated the following measurable goals and objectives:

Goal 1: Recruit 30 high-achieving candidates who possess baccalaureate degrees into a program designed to help them obtain a teaching license in a high-need specialty area and a Masters of Arts in Teaching degree in a teacher residency program.			
Objective	Activities	Process Results	Measurable Outcomes
1.1 Form a Rural Teacher Residency Recruitment Council composed of representatives from each partnering entity	<ul style="list-style-type: none"> ☞ Identify representatives from the School of Education, College of Arts and Sciences, Randolph County Schools, and Stokes County Schools to serve on the Recruitment Council ☞ Initiate training sessions that align recruitment activity to employment hiring procedures of the partner school district ☞ Initiate quarterly Council meetings with representation from all partners 	By March 2017, Council formed with the first meeting planned for April/May 2017	Formation of a Recruitment Council with at least one representative from each partner entity that meets four times annually.
1.2 Disseminate program information through social, electronic, print, and commercial media	<ul style="list-style-type: none"> ☞ Develop a Facebook page, Twitter account, and web-based material targeting individuals who meet specific admissions criteria ☞ Launch a website for the <i>Rural Teacher Residency Program</i> ☞ Air commercials on university radio (WNAA 90.1) and local radio ☞ Produce a television commercial that will air on local channels ☞ Publish recruitment advertisements in local print and online newspaper 	By February 2017, the following social media initiatives launched: (1) North Carolina A&T Rural Teacher Residency website, (2) North Carolina A&T Rural Teacher Residency Facebook and Twitter page, (3) recruitment ads in local newspapers, on local television, and on local radio.	Produce commercial and social media recruitment advertisements with a significant “Return on Investment” based on MAT application submissions.
1.3 Recruit and enroll individuals who possess a baccalaureate degree with a minimum cumulative GPA of 3.00 each academic year.	<ul style="list-style-type: none"> ☞ Attain on a continuous basis a spreadsheet of recent STEM graduates from the Registrar’s Office of local institutions to identify and recruit prospective participants 	By May 2017, 10 participants for the first of three subsequent cohorts selected and enrolled for initial licensure coursework.	Enroll 30 individuals over a five-year period (cohorts of 10 candidates) who earn an initial teaching license, an advanced teaching license, and a Master of Arts in Teaching degree

Goal 2: Engage selected Teacher Residents in a 14-month full-time teacher residency preparatory curriculum and professional development program that enhances their content knowledge, develops their expertise in inquiry-based learning, and cultivates their culturally relevant pedagogical skills with students and families in rural communities.			
Objective	Activities	Process Results	Outcome Results
2.1 Implement a 14-month full-time teacher residency program that leads to an initial teaching license, an advanced teaching license, and a Master’s degree	<ul style="list-style-type: none"> ☞ Condense the current 30-hour MAT degree program to 14 months ☞ Redesign methods and clinical practice courses for a residency approach ☞ Deliver MAT courses in 14-months 	By May 2017, 14-month teacher residency MAT degree program launched for first of three subsequent cohorts	The MAT Secondary Math, MAT Secondary Biology, MAT Secondary Chemistry, MAT Special Education, and MAT Elementary Education degree programs restructured for 14-month degree conferral.
2.2 Engage Teacher Residents in experiences that emphasize diversity and culturally relevant pedagogy particularly relative to rural populations	<ul style="list-style-type: none"> ☞ Immerse Teacher Residents in introspective activities where they examine their biases and their potential impact on teaching. ☞ Teacher Residents complete an 11-month residency experience where they complete 640 hours of “immersion” in a classroom in a rural high-need school prior to the full-time clinical practice. ☞ Implement an Instructional Leadership Symposium with a focus on cultural competence and culturally relevant pedagogy for Teacher Residents and educators in partner high-need rural schools. 	By August 2017, initial cohort of Teacher Residents placed in rural high-need schools alongside a Master teacher for a period of 11 months	100% of Teacher Residents participate in culturally and linguistically diverse experiences in P-12 public schools.
2.3 Create an instructional support team for each member of the Teacher Resident cohort	<ul style="list-style-type: none"> ☞ Select qualified mentors for each participant during the residency ☞ Hire six full-time “Instructional Coaches” to coordinate mentors and to provide on-site full-time instructional support 	By May 2017, six Instructional Coaches hired as full-time on-site instructional support for Teacher Residents	P-12 teachers identified to serve as mentors to each student and six instructional coaches employed to work in partner public schools on a full-time basis

Goal 3: Provide Teacher Residents ongoing induction support during their novice teaching years to positively impact the academic outcomes of rural public school students.			
Objective	Activities	Process Results	Outcome Results
3.1 Assist each Teacher Resident with employment search and placement after completion of the initial teaching license.	<ul style="list-style-type: none"> ☞ Host employment workshops with public school Human Resource representatives ☞ Partner with the Master of School Administration program to implement “mock interviews” with Teacher Residents prior to actual school interviews ☞ Partner with Career Services to enhance the resumes and cover letters of each Teacher Resident and conduct workshops focused on employment attainment 	By May/June 2018, initial cohort of Teacher Residents engaged in activities to secure full-time employment as a Beginning Teacher (BT) with subsequent cohorts following the same model	Provide 100% of the Teacher Residents with support services that assist with employment attainment in a rural high-need school preferably in the school where the residency experience was performed.
3.2 Conduct quarterly needs assessments of the new Teachers of Record to design induction professional services	<ul style="list-style-type: none"> ☞ Work with school partners to assess gaps in the knowledge and skills of new Teachers of Record ☞ Engage instructional coaches and the district’s induction support office to design and deliver responsive professional development 	Beginning with the initial cohort of employed BTs, a 9-month review of each person’s performance and his/her students’ performance will occur	Each quarter, a written needs assessment report constructed that offers recommendations for induction and support services
3.3 Collaborate with state-trained mentors assigned to new Teachers of Record to develop an annual <i>Individualized Professional Development Plan (iPDP)</i> designed to ensure retention within the classroom for a minimum of three consecutive years	<ul style="list-style-type: none"> ☞ Identify state-supported mentors assigned to new Teachers of Record ☞ Construct an annual <i>iPDP</i> that identifies conferences, professional development, and professional organizations that strengthen new teachers’ knowledge and skills ☞ Coaches and mentors monitor, assess, and revise the annual <i>iPDP</i> based on classroom performance 	By September 2018, an <i>iPDP</i> developed for each member of the initial cohort of BTs; ongoing for subsequent cohorts (i.e., September 2019 and September 2020)	100% of new Teachers of Record will construct an <i>iPDP</i> to personalize induction support services and on-site coaching throughout each academic year.

Goal 4: Engage in collaborative continuous improvement efforts to positively impact the learning outcomes of the students taught by the Teacher Residents in the selected high-need rural schools.			
Objective	Activities	Process Results	Outcome Results
4.1 Create an Advisory Board composed of representatives from each partner entity to examine program performance every six months	<ul style="list-style-type: none"> ☞ Identify and select appropriate representatives from partner institutions ☞ Establish a meeting calendar to accommodate meetings ☞ Construct agenda topics that center on recruitment, program structure, residency and induction, candidate performance, and K-12 student academic performance 	By May 2017, Council formed with the first meetings planned for July 2017 and January 2018	Formation of an Advisory Board with at least one representative from each partner entity that meets two times annually.
4.2 Collect nine-week data on teaching performance of new Teachers of Record from school administrators	<ul style="list-style-type: none"> ☞ Analyze K-12 student data from formative nine-week benchmarks to focus instructional coaching ☞ Analyze teacher data from nine-week new teacher evaluation observations to focus professional development 	School executives complete evaluations to provide insight on the strengths and weaknesses of the new Teacher of Record	All school-based administrators provide input on the performance of the new Teachers of Record from the Urban Teacher Residency Program each year
4.3 Publish a program newsletter quarterly to share best practices.	<ul style="list-style-type: none"> ☞ Solicit program stakeholders (Teacher Residents, new Teachers of Record, Master teachers, program staff, university faculty, and school partners) for newsletter submissions. ☞ Publish a quarterly newsletter to communicate program developments, upcoming events, training opportunities, and current educational trends. 	<p>Project staff will solicit and select newsletter submissions quarterly of each Funding Year</p> <p>Project staff will plan, create and publish a quarterly newsletter each Funding Year</p>	Each quarter, program stakeholders will be more informed of program developments, opportunities, current education trends, and best practices.

The Structure of the Rural Teacher Residency Program

This program will operate in the rural school districts of Randolph County and Stokes County. In each Funding Year, Teacher Residents will enroll in a 14-month residency program designed to fulfill requirements for state teaching certification and a Master of Arts in Teaching degree from NC A&T. More importantly, this program is structured to immerse candidates in culturally relevant pedagogy, inquiry-based learning, and deep content knowledge. The program is structured into the following four distinct phases: *Phase I: The Professional Learning Community*, *Phase II: The Residential Apprenticeship*, *Phase III: The Teacher Scholar*, and *Phase IV: Collaborative Induction and Support Services*. This structure utilizes a developmental approach that will enhance the content knowledge of the Teacher Resident and sharpen his or her content pedagogical skills. The program also includes continuous, systematic data collection and analysis procedures used as formative assessments to improve program implementation. Substantively, the program curriculum ensures that Teacher Residents who complete licensure and Master's requirements will have the ability to use research and data to improve classroom instruction, use research-based instruction to improve K-12 student academic outcomes, and meet the needs of culturally and linguistically diverse students in high-need rural schools.

To promote the Teacher Resident's growth as an effective educator in a high-need rural school, this program aligns with the *21st Century North Carolina Professional Teaching Standards*. These standards state that (1) teachers demonstrate leadership, (2) teachers establish a respectful environment for a diverse population of students, (3) teachers know the content they teach, (4) teachers facilitate learning for their students, and (5) teachers reflect on their practice. Throughout the residency clinical experience, participants will construct authentic assessments, or "Electronic Evidences" (EEs), to illustrate their ability to meet these standards by applying

what has been learned in meaningful and responsive ways, focusing specifically on six critical areas: (1) breadth of content knowledge, (2) depth of content knowledge, (3) content pedagogical knowledge, (4) content pedagogical skills, (5) positive impact on student learning, and (6) collaboration and leadership. Constructing these evidences will ensure that the clinical experience is focused, that it enhances the Teacher Resident’s understanding of content within the classroom as articulated by the specialty area professional organizations, and that it deepens his or her ability to use content pedagogy to situate content into the lives of students regardless of level of learning, experiences, or exceptionality. These evidences will require the Teacher Resident to apply what has been learned in authentic, meaningful, and responsive ways.

Prior to enrollment in Phase I of the program, a prospective Teacher Resident must complete a rigorous competitive selection process administered collectively by representatives from each partner institution. Table 8 details the criteria required for prospective candidates:

Table 8 Selection Criteria for Rural Teacher Residency Program

Required Submission	Dimension Area*
<ul style="list-style-type: none"> • Application for graduate admissions at NC A&T. • Undergraduate transcript from an accredited four-year college or university that illustrates a minimum 3.00 GPA and a minimum of 24 credit hours within the content area in which the person seeks an initial teaching license. • Two-page personal statement that articulates why the individual wants to teach in a rural school and explains how the residency program prepares him or her for this context. • Three letters of recommendation that attest to the prospective candidate’s personal qualities and attributes. • Complete an interview process with partner public school partners and university personnel • Authentic teaching task assessment where prospective candidates are given scenarios that progress in difficulty level where they must demonstrate critical thinking, patience, and persistence • Complete a content knowledge pre-assessment to demonstrate his or her grasp of basic content area concepts. 	<ul style="list-style-type: none"> • CK • CK, CPS • CK, CPS, DIS • CK, CPS, DIS • CK, DIS • CK, CPS, DIS • CK, CPS

Note: “CK” refers to “content knowledge,” “CPS” refers to “content pedagogical skills,” and “DIS” refers to “dispositions”

Using a panel with multiple assessors, this approach will elicit data from which representatives from each partner institution can triangulate to select individuals who best fit high-need schools in rural communities. Applicants who are selected to participate will enter Phase I.

Phase I: Professional Learning Community

Phase I of the *Rural Teacher Residency Program* will create a cohort-based professional learning community among Teacher Residents. The overarching goal of this phase is to develop each Teacher Resident’s knowledge and understanding of the teaching profession while concurrently connecting theories of learning to instructional planning, student assessment, and culturally relevant literacy. Table 9 articulates the intended learning outcomes for this phase and the key performance assessments that each Teacher Resident will produce to demonstrate their content knowledge, content pedagogical skills, and professional dispositions.

Table 9 Learning Outcomes and Key Assessments for Phase I

Learning Outcomes	Key Performance Assessments
(1) Residents will demonstrate ethical professional behaviors that classroom teachers exhibit within and outside the classroom. (2) Residents will identify, define, and utilize theories of learning to compose their Philosophy of Teaching. (3) Residents will express orally and in writing how the nine forms of diversity present within a classroom, school, and community can promote the development of an engaging learning environment. (4) Residents will conduct contextual analyses to identify specific resources within classrooms, schools, and communities that they can use to meet the needs of individual learners within a specific rural community. (5) Residents will use culturally relevant reading materials in their classroom instruction to engage learners in the subject area content.	<ul style="list-style-type: none"> • Field experience and Teacher Resident class observations • Philosophy of Teaching • Educator preparation interview • Contextual analysis (EE 3 Content Pedagogical evidence) • Teacher Resident classroom observation rubrics

A key element of this phase is the Teacher Resident’s ability to identify, select, and integrate into instructional planning culturally relevant texts that accentuate the subject matter within the respective discipline. Culturally relevant literacy allows the classroom teacher to personalize

instruction and create an inclusive learning environment, which is often beneficial for students who have disabilities, who speak English as a second language, and who may struggle academically. In addition to integrating culturally relevant literacy, Teacher Residents must also establish and maintain a 3.00 GPA. Electronic Evidence 3 Content Pedagogical documentation requires Teacher Residents to produce a “depth of content knowledge” evidence comprised of the Philosophy of Teaching, a Contextual Analysis of the classroom, school, and community.

Phase I begins in May when Teacher Residents complete a mandatory orientation session. During this session, partners provide an overview of the program and its guiding policies and procedures. Teacher Residents must sign a promissory agreement that details the responsibilities of the Teacher Residents and articulate a “repayment upon default” clause, which states the participant agrees to repay to the University any fiscal support received should s/he fail to meet any condition, requirement, or obligation described by the agreement. These conditions include teaching full-time in a high-need school served by the partner high-need LEA for at least three consecutive years immediately after completion of the residency program and provide a certificate from the LEA in which the Teacher Resident is employed at the beginning and completion of each year of service. The agreement will also detail repayment options, timelines, and penalties if default occurs. During this phase, Teacher Residents will complete coursework in theories of learning, content area literacy, and students with exceptionalities. Theories of learning will orient participants to the theoretical frameworks that guide instruction and management in classroom settings. The content area literacy course will emphasize the infusion of culturally relevant literature as a tool to engage culturally and linguistically diverse students as well as a means to work with struggling learners who have persistent reading problems. Learning how to select culturally relevant texts in one’s content area and developing the skills to teach

comprehension using these texts is an intentional component of this course. Teacher Residents also learn to personalize instruction based into the classifications of student exceptionalities.

Phase II: The Residential Apprenticeship

In Phase II, Teacher Residents begin the 11-month full-time residency experience (August to June) in a pre-approved high-need rural school in either Randolph County Schools or Stokes County Schools. Teacher Residents who agree with the terms of the program will receive a one-year living stipend during this component of the program. The goals of the residency are twofold: (1) to partner the Teacher Resident with a Master teacher who will expose him or her to quality instruction with culturally and linguistically diverse learners in a rural school and (2) to engage the Teacher Resident in intermittently increasing full-time teaching guided by the Master teacher and university-related instructional support. Table 10 articulates the learning outcomes for this phase and the key assessments that each Teacher Resident will produce to demonstrate his or her content knowledge, content pedagogical skills, and professional dispositions.

Table 10 Learning Outcomes and Key Assessments for Phase II

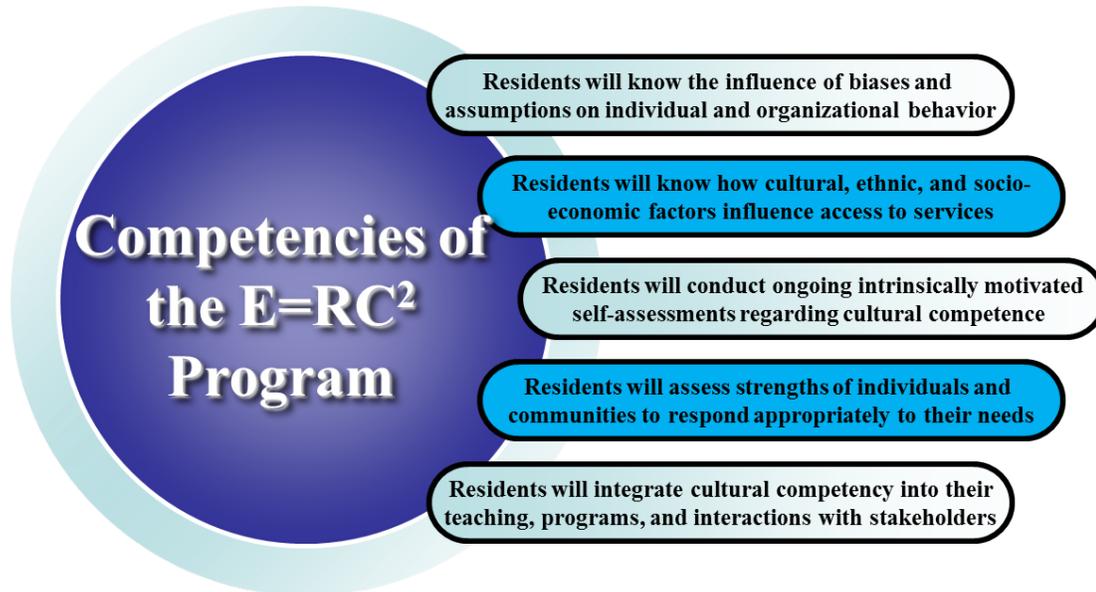
Learning Outcomes	Key Performance Assessments
(1) Residents examine and use multiple indicators to collect, analyze, interpret, and reflect upon student data to inform instructional planning, classroom management, and other educational decisions. (2) Residents facilitate instruction by using their knowledge of the learner to create engaging learning environments. (3) Residents use research-based pedagogical practice to provide quality instruction within the content area that aligns with and supports the North Carolina Common Core and Essential Standards. (4) Teacher Residents design professional development opportunities for colleagues, parents, and community partners to build knowledge and collaboration. (5) Teacher Residents actively seek professional development conferences and workshops external to the partner institutions to enhance their own content knowledge and content pedagogical skills.	<ul style="list-style-type: none"> • Differentiated Instruction Evidence (EE 5 Impact on student learning evidence) • Teacher Resident classroom observation (EE 4 Certification of Capacity) • Teacher Resident classroom observation • Professional organization memberships; attendance at conferences or workshops • Educator preparation interview

In this phase, Teacher Residents complete coursework in classroom assessment and evaluation and general methods of teaching where they must produce these key assessments at a level of proficiency. They must also maintain a 3.00 GPA and successfully pass the state's licensure examination for their content area to receive a recommendation for an initial teaching license.

This phase of the residential apprenticeship has two segments: (1) the participant observation period and (2) the teaching period. The participant observation period (August to December) allows the Teacher Resident to work full-time in a classroom four days per week (Monday through Thursday) with an assigned Master teacher in the appropriate subject area. The Master teacher's primary responsibilities are to model best practice, provide the Teacher Resident with ongoing and substantive opportunities to work with students, supervise the Teacher Resident, and explain the thought process behind various decisions made in the classroom. The Teacher Resident's responsibilities include observing instruction; working with K-12 students in one-to-one, small-group, and whole-class settings; examining and analyzing student academic achievement data; attending parent-teacher conferences; participating in professional development workshops; and other relevant duties as assigned by the Master teacher. PIs will use the fifth day of the week (Friday) to implement a unique program named **E=RC²** (Equity via Rural Cultural Competence). This initiative will focus explicitly on orienting and immersing Teacher Residents in cultural competencies in rural schools while concurrently aligning these ideas with content, content pedagogy, and assessment practices. The integration of technology in high-poverty contexts and ways to engage students who speak English as a second language will also serve as key focal points for examination during this ongoing weekly seminar series. Figure 2 provides a competency-based framework that will guide the work of the **E=RC²** program that will intentionally require residents to examine their personal biases regarding rural

communities and to research strengths of their specific rural community that they can leverage as classroom teachers to engage students.

Figure 2 E=RC² Program Competencies



Content for this program will be grounded in the five culturally responsive pedagogical themes espoused by Brown-Jeffy and Cooper (2011)—(1) identity and achievement, (2) teaching the whole child, (3) developmental appropriateness, (4) equity and excellence, and (5) student teacher relationships. These themes drive the preparation of classroom teachers who develop the knowledge and skills to engage culturally and linguistically diverse students from general education and special education populations.

During the spring session of the residency experience (January to June), Teacher Residents will find their own voice and instructional persona by teaching full-time each day within the Master teacher's classroom for the entirety of the term. The intent of this experience is to have the Teacher Resident experience the daily rigors of a classroom teacher while supported by the direct supervision and guidance of the Master teacher and instructional coach. Throughout this experience, Teacher Residents will utilize what they have learned about instructional

planning, classroom management, content pedagogy, and students with exceptionalities to provide effective instruction. Using formative and diagnostic assessments, Teacher Residents will illustrate their impact on student learning and engage in reflective practice to articulate their decision-making processes and to identify improvements they would make in their instructional delivery (e.g., planning, implementation, assessment, evaluation). Teacher Residents will also meet with other residents within the cohort, a University faculty member, and their respective Master teachers one day per week to debrief about their experience. These sessions will cover a variety of topics including content pedagogy, professional dispositions in education, and other relevant professional development topics. More importantly, residents will work with one another to reflect and discuss unexpected issues they encounter, and they will collaborate with one another as professional colleagues to think through the instructional process by learning to plan vertically and horizontally as a way to engage their students. To assess the progress of participants toward these intended outcomes, each participant must meet specified benchmarks and produce concrete evidences (e.g., leadership and collaboration evidence, Praxis II scores). At the conclusion of the phase, participants will apply for their initial teaching license and seek employment as a new Teacher of Record in one of the partner school districts.

The success of the Teacher Residency relies primarily on the role of the Master teacher who will work with the resident. Representatives from NC A&T and administrators from the partner school district will use agreed-upon criteria to select appropriate individuals for each resident. These criteria will include but are not limited to: (1) a current licensed classroom teacher within a high-need rural school; (2) a minimum of five years teaching; (3) the overall minimum rating of “Accomplished” on the most recent annual North Carolina Teacher Evaluation conducted by a school administrator that documents professional competence, strong

content knowledge, effective pedagogical and classroom management skills, appropriate use of formative and diagnostic assessment data to evaluate student learning and improve instruction, collegial collaboration, and high student achievement; (4) effective oral and written communication skills; (5) positive attitude and high moral character; (6) interpersonal skills; (7) leadership within the current school; (8) activism or volunteerism within the community.

Phase III: The Teacher Scholar

At the conclusion of the residency experience, participants will transition into Phase III. The goal of this phase is to develop the Teacher Resident into an investigator who uses action research. The resident will engage in active research on an educational issue that impacts the teaching and learning of K-12 students in rural classrooms. This research topic should be driven by existing scholarship as well as by residents’ experiences during the Teacher Residency phase and the questions or concerns that emerged during this time period. Each resident will produce an action research proposal and enact the process of data collection, data analysis, and dissemination of findings via a presentation. Table 11 articulates the intended learning outcomes for this phase and the key assessments that each Teacher Resident will produce to demonstrate their content knowledge, content pedagogical skills, or professional dispositions.

Table 11 Learning Outcomes and Key Assessments for Phase III

Learning Outcomes	Key Performance Assessment
(1) Teacher Residents seek empirical- and practitioner-based research to deepen content knowledge and enhance content pedagogical skills. (2) Teacher Residents design significant and timely research based on current scholarship and local data relative to student performance data, teacher performance data, or local community data. (3) Teacher Residents implement action research to investigate ‘researchable’ questions and submit proposals to disseminate findings of the inquiry to professional peers.	<ul style="list-style-type: none"> ● Teacher Scholar Action Research Proposal ● Teacher Scholar Action Research Proposal ● Teacher Scholar Action Research Paper and Manuscript Proposals

Berry, Daughtrey, and Wieder’s research (2010) on teacher leadership and teacher retention undergird this phase. They concluded K-12 classroom teachers are more likely to remain in the profession if they view the classroom and school as contexts to test hypotheses that may improve these environments. Additionally, they asserted that teachers are also more likely to remain in the profession if they assume leadership within their school and the profession. Conducting research and sharing practices with colleagues is a beneficial way to assume teacher leadership.

Phase IV: Induction Support and Services

The overarching intent of this phase is to provide structured and systematic induction support to Teacher Residents employed as new Teachers of Record, or Beginning Teachers (BTs), in high-need rural schools. Induction support will aid with the retention of the new teachers as well as improve their instructional quality. Table 12 articulates the intended learning outcomes for this phase and the key assessments that each Teacher Resident will produce to demonstrate their content knowledge, content pedagogical skills, and professional dispositions.

Table 12 Learning Outcomes and Key Assessments for Phase IV

Learning Outcomes	Key Performance Assessment
(1) New Teachers of Record, mentors, and school executives participate in teaching and learning seminars that respond to the needs of rural school faculty to improve K-12 student achievement. (2) Mentors receive formal training and frequent coaching on collaborative lesson planning, lesson modeling, and facilitating reflective practice from qualified educators to improve their ability to support new teachers. (3) New Teachers of Record receive individualized coaching throughout the induction period from a collaborative team of mentor, University faculty, Master teachers, and district curriculum and induction staff. (4) New Teachers of Record develop an individualized professional development plan that benchmarks progress and requires joining a discipline-specific professional organization and a general professional organization.	<ul style="list-style-type: none"> ● Attendance and participation in ongoing workshops and seminars on rural student learners. ● Instructional coaches (ICs) provide ongoing professional development with Mentor teachers ● Ongoing classroom observations from ICs and Mentor teachers with direct feedback ● Individualized Professional Development Plans with ongoing checks from ICs and Mentor teachers

BTs will receive focused induction and professional development services that will help improve their capacity to teach students in rural communities. PIs will employ a two-year phased induction model to support new teacher development. *“Year I: Successfully Navigating the First Year of Teaching”* will be a series of workshops and seminars focused on building the knowledge, skills, and resources that participants need to negotiate the profession. All BTs will receive mentors as required by North Carolina. Instructional coaches from the Professional Development Academy will work closely with these mentors throughout the initial three years of the BT’s teaching experience. Prior to the start of the school year, BTs will participate in a four-day induction orientation workshop designed for new classroom teachers facilitated in collaboration with the partner school districts and university personnel. During this orientation, BTs will meet their school-assigned mentor teacher who will work cooperatively with ICs from the Professional Development Academy. BTs and their mentor teachers will develop an individualized Professional Development Plan (iPDP) that will establish professional goals for the academic year. These goals will include targeted and personalized professional development, school leadership opportunities, membership in professional organizations, and attendance at a discipline-specific conference. Additionally, BTs will become acquainted with the following: (a) district- and school-level policies and procedures, (b) the North Carolina Teacher Evaluation Process with an introduction to the evaluation rubric and a detailed explanation of this process, (c) the Code of Ethics, (d) the Exceptional Children’s program including the appropriate use of restraint of students, (e) student services, and (f) state and local curriculum guidelines.

Throughout the school year, each partner school district requires that BTs attend mandatory two-hour monthly meetings where veteran teachers, mentor teachers, instructional coaches, and university personnel facilitate sessions that focus on classroom-, school-, and

profession-related issues. These topics include but are not limited to: curriculum pacing, classroom management, dealing with intrusive “helicopter” parents, PowerSchool assessment system, addressing the needs of exceptional children, and coping with stress. BTs will also receive direct guidance and assistance with collecting, analyzing, and using student data to inform their instructional practice.

Alongside these district-operated induction services, the *Rural Teacher Residency Program* will provide supplemental services that further support the employed BTs. An emphasis on culturally relevant pedagogy and inquiry-based learning will remain at the forefront of the induction support during the first year of employment. Instructional coaches (ICs) will observe each BT at least once per month and engage him or her in reflective practice to assess areas for improvement, questioning and exploring ways to integrate culturally relevant pedagogy and inquiry-based learning. Every nine weeks, ICs will assist each BT with analyzing their students’ performance data and assist the BT with reflecting on ways to adjust classroom practice or management to improve student achievement. Additionally, ICs will provide instructional demonstrations and model lessons on the integration of culturally relevant pedagogy and inquiry-based learning for BTs to observe, monitor, and improve their instructional practice.

During the spring of the first year of full-time employment and during the subsequent summer after the first full year of full-time employment, BTs will participate in two important induction conferences designed specifically for new classroom teachers. Each spring, BTs will participate in the *Educational Equity and Excellence Conference* held at NC A&T. This one-day conference will focus specifically on enhancing participants’ content knowledge and content pedagogy for high-need school populations via inquiry-based teaching and culturally relevant pedagogy. This conference will create opportunities for K-12 teachers to engage researchers and

scholars in conversation on current topics within their disciplines that align with central concepts in the Common Core standards. More importantly, BTs will present their action research conducted in Phase III of this initiative to peers and colleagues from their school district and from other local school districts. The PIs will open this conference to novice K-12 teachers in Randolph County Schools and Stokes County Schools as well as to senior-level pre-service teacher education candidates at NC A&T. Additionally, the PIs will invite high school seniors in the North Carolina A&T's Early STEM College and Middle College as a way to build a teacher recruitment pipeline for high-need subjects.

The second professional development session for BTs that is part of their induction process is the summer-based "Beginning Teacher Summit," which will become part of a collaborative partnership between NC A&T and the Educator Effectiveness Division of the North Carolina Department of Public Instruction. The BT Summit will be a day-long professional development conference composed of a series of workshops and sessions specifically designed to address the needs of novice teachers. The day will include breakout sessions with multiple choices for attendees and conclude with an inspirational keynote speaker. Participants will gain knowledge on classroom management strategies and instructional strategies to increase student engagement. Throughout their first year of employment, BTs will be expected to maintain a journal that captures their feelings and perceptions, which will allow the instructional support team to assess and respond to their needs.

In "*Year II: Integrating Culturally Relevant Pedagogy and Inquiry-Based Learning into the Classroom as a Teacher Scholar*" of induction services, support services will continue to focus on the pedagogical skills of BTs to engage students and improve achievement. Professional development workshops and mentoring sessions will further immerse new teachers in the skill of

instructional planning via culturally relevant pedagogy, inquiry-based learning, and differentiated instruction. BTs will continue to refine their ability to use cultural competence that shapes inquiry-based instruction and experiential learning. However, this component of the program will have two intentional foci: (1) an intentional focus on the integration of technology, social media, and apps in the instruction of millennial students and (2) teacher leadership through scholarship. Of particular importance during the second year of the BT's experience will be the infusion of technology into the high-need low income rural school classroom. The primary question of focus will be, ***“How can I use the technological resources available to me to engage my students while simultaneously assessing their content knowledge and skill attainment?”*** BTs will have the opportunity to learn how to use data to enhance instruction and will develop an understanding of how to make digital teaching and learning part of the classroom experience. From this inquiry, BTs will be required to facilitate a workshop at a professional conference where they share an aspect of what they have implemented in their classroom relative to culturally relevant pedagogy, inquiry-based learning, technological integration, or some other aspect of their teaching. Their presentation must be supported by student learning data. BTs will be encouraged to attend a conference local to the Piedmont Triad region (e.g., North Carolina Closing the Achievement Gap Conference, North Carolina Council for Exceptional Children's Conference). Throughout their second year of employment, BTs will be expected to maintain a journal that captures their feelings and perceptions, which will allow the instructional support team to assess and respond to their needs.

Collaboration and Maximizing Project Services

Successful implementation of the *Rural Teacher Residency Program* is contingent upon the collaborative integration of existing resources and funds with newly awarded funds from the

Teacher Quality Partnership. Throughout the program, partners from Randolph County Schools, Stokes County Schools, the School of Education, and the College of Arts and Sciences have communicated regularly to determine how funds from existing sources could be integrated to implement the project. Representatives from the partner institutions have identified several existing programs and services that could be used to enhance the proposed project's quality. The university has identified personnel, technology, and supplies that could be used to assist with project administration. Content area faculty and faculty within the Department of Curriculum and Instruction will design and tailor professional development workshops and support services to focus on instructional planning that improves the content pedagogy of Teacher Residents, BTs, and Master teachers. Additionally, faculty and graduate candidates in the Master of School Administration will provide training and development on leadership for teachers and school administrators. Staff from the Center for Behavioral Health and Wellness, a community-focused evidenced-based, and culturally competent focused behavioral health service unit housed within the School of Education, will provide professional development workshops to BTs, Master teachers, and other school district personnel on a variety of topics related to youth mental health, mental health first aid, and trauma-informed community engagement practices.

The two partner school districts also identified various existing resources that will improve the program's effectiveness. The existing Division of Induction Support is a natural space to assist new Teachers of Record with their development as classroom teachers. Randolph County Schools and Stokes County Schools will use academic coaches and program administrators to work with members of the PDA, university faculty, and mentor teachers. Teacher Residents will also take advantage of training sessions, seminars, and other professional development opportunities afforded new teachers within the district throughout the academic

year. Supported by these existing sources in conjunction with grant-funded services, Teacher Residents will enhance their pedagogical skills, leadership prowess, and content knowledge to develop into master teachers in their respective schools.

Although the PIs will integrate existing resources from the partner institutions, the majority of the fiscal support necessary to implement this project will derive from the Teacher Quality Partnership award. The PIs will be accountable for ensuring that grant funds are expended in justifiable, allowable, and allocable ways to achieve the proposed goals and objectives of the program. The PIs will closely monitor the use of the grant funds awarded to the partnership to implement a quality program. The majority of the funding awarded will go directly toward Teacher Resident preparation (coursework-related costs and the living wage stipend). Other funds will be used to provide induction services to Beginning Teachers and support services to Master teachers. The PIs will ensure that funds focus on preparing high-quality teachers to effectively and positively impact student learning in high-need rural schools.

To deliver a quality program, a portion of the funding will be used to employ a project staff member who will provide daily oversight and management of the program operations. A portion of funding will be used to employ Instructional Coaches (ICs). These ICs will work closely with Teacher Residents during the preparation process and with mentor and novice teachers in high-needs schools to design personalized responsive professional development activities. Funds will also be used to support Teacher Residents during their employment period as new Teachers of Record by supporting their membership in professional organizations, supporting travel to professional conferences, and purchasing classroom supplies to support inquiry-based learning activities. The PIs are committed to the ethical and legal use of funds to implement a quality teacher residency program.

The organizations involved in this collaborative partnership have committed to utilizing and sharing available human and fiscal resources to achieve the goals of the proposed program. Randolph County Schools and Stokes County Schools have committed to provide high-need schools and Master teachers who will work daily with Teacher Residents. In addition to providing authentic learning environments for Teacher Residents, partners have committed to participate in induction and support services that will impact new Teachers of Record, Teacher Residents, Master teachers, novice teachers, and school administrators within the district. Associated with these services, partner organizations have committed to provide in-kind fiscal resources to implement Master teacher training and support, quarterly customized professional development seminars, and summer symposia.

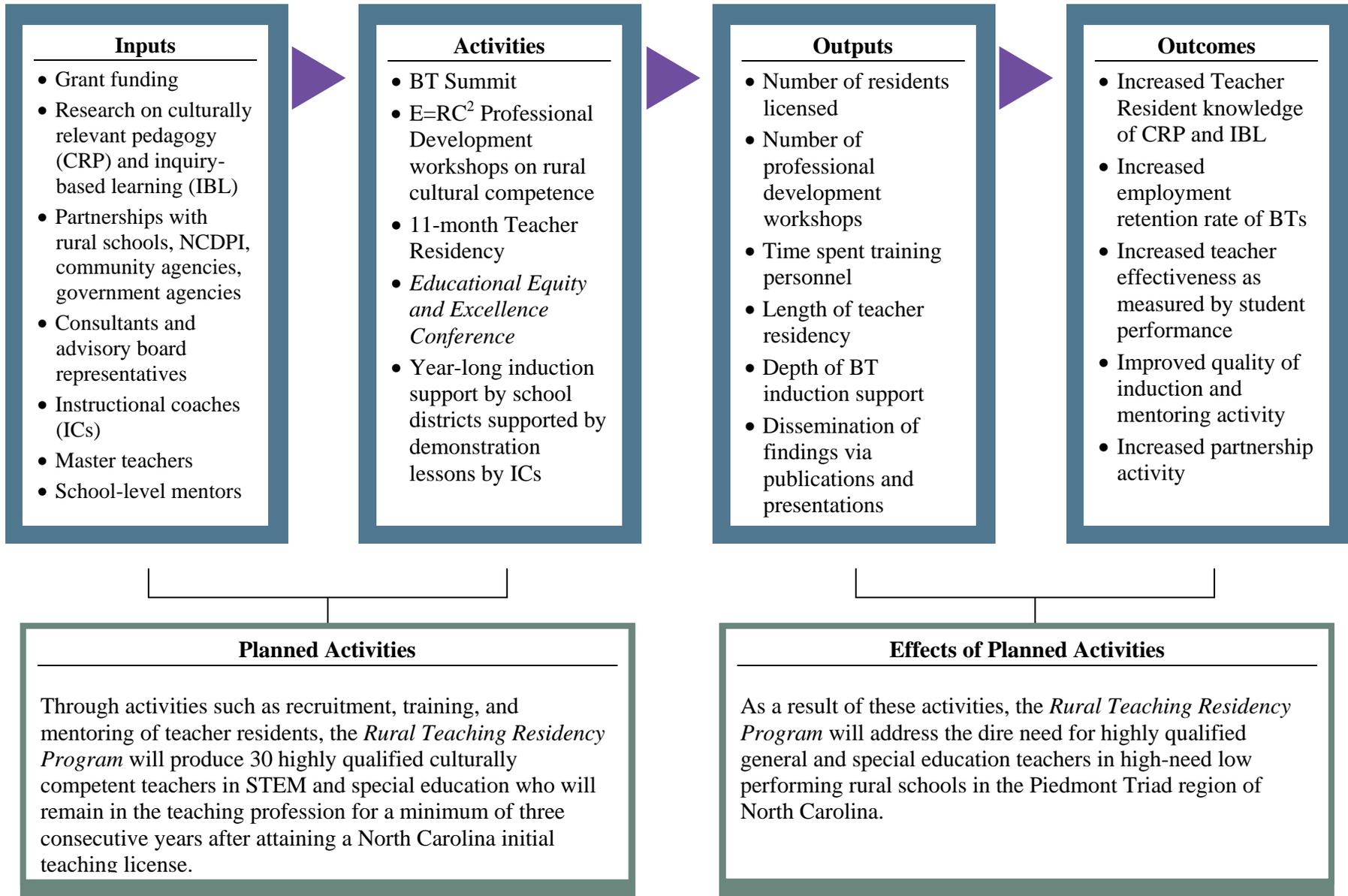
Partners from NC A&T have also committed to provide human and fiscal resources to implement the program successfully. Experienced faculty in each department who possess deep content knowledge and expertise in educational theories, research-verified pedagogical strategies, culturally relevant pedagogy for diverse populations, assessment principles and practices, and induction and mentoring support will work with Master teachers, novice teachers, new Teachers of Record, and Teacher Residents. Faculty will work collaboratively with personnel from the partnering school districts to teach preparation coursework, conduct symposium sessions, and facilitate professional development workshops. Faculty at NC A&T are accustomed to working collaboratively in these types of partnerships as we have executed several collaborative grant-funded projects and outreach initiatives, including: (1) Project FIRE (Fostering Inclusive Responsive Educators), an ED grant to revise elementary and special education teacher preparation curricula and program delivery while creating three model Professional Development Sites; (2) the NSF-funded *Content Mentoring for Middle Grades*

Math and Science Teachers collaborative that was designed to examine the effects of mentoring relationships between content area university faculty in the College of Arts and Science, School of Business and Economics, College of Engineering, School of Technology, and School of Agriculture and Environmental Sciences and public school middle grades math and science teachers; (3) the ED-funded Transition to Teaching program entitled *The North Carolina Rural Teaching Fellows Initiative* that partnered with three rural school districts in Bertie County, Lenoir County, and Greene County to recruit, select, prepare, and induct highly qualified teachers in the high-need areas of secondary science, secondary mathematics, special education, and elementary education.

The logic model in Figure 3 (below) details the project goals, project activities, and project outcomes associated with this collaborative partnership. This diagram evidences the roles of the collaborators and what each partner institution contributes to the program's implementation. This logic model also highlights the resources and activities necessary to sustain the *Rural Teacher Residency Program* beyond the funding from the United States Department of Education. Elements of this program can be sustained through the in-kind support from each partner institution such as the time and effort of classroom mentor teachers and professional development workshops from university and K-12 school faculty. Other components of the program such as living stipends for Teacher Residents and salaries for Instructional Coaches will require funding support through partnerships with local businesses, corporations, and foundations. Entities like the Z. Smith Reynolds Foundation in Winston-Salem, the Bryan Foundation in Greensboro, and the Belk Foundation support K-12 educational initiatives, so these foundations may be willing to provide financial support beyond the grant-funded years.

Figure 3 Rural Teacher Residency Evaluation Logic Model

Project Goal: The North Carolina A&T Rural Teacher Residency program will prepare highly qualified culturally competent certified educators in STEM and special education to serve high need rural public school districts in the state of North Carolina.



Quality of the Management Plan and Personnel

The timeline in Appendix J details the activities of the *Rural Teacher Residency Program* by funding year. The project team will utilize a strategic coordination and management plan to achieve the goals and objectives of the proposed project on time and within budget. University faculty members who will serve as the PIs for this research project are: Dr. Kim Erwin, an Assistant Professor of Curriculum and Instruction who has 11 years higher education experience and 14 years of public school experience as a principal; Dr. Nichole Smith, an Assistant Professor of Curriculum and Instruction who has six years of higher education experience and nine years public school experience as a middle and high school teacher; Dr. Anthony Graham, a Professor of Curriculum and Instruction and Dean of the School of Education at NC A&T who possesses 15 years of higher education experience; Dr. Alisa Taliaferro, an Associate Professor of School Administration and Interim Associate Dean of Research and Graduate Programs in the College of Education who has 11 years higher education experience and 11 years of public school experience; and Dr. Cailisha Petty, an Assistant Professor of Biology who has 10 years of higher education experience. Dr. Graham served as the PI and Dr. Erwin served as the Co-PI of a \$2.7 million United States Department of Education Transition to Teaching grant; Dr. Graham currently serves as the PI and Dr. Petty serves as the Co-PI of a \$1.19 million National Science Foundation Robert Noyce Scholarship grant. These faculty members—who are diverse in their years of educational experience, academic ranks, and discipline areas—will work with pre-service and in-service professionals as instructors, advisors, and mentors to provide quality programming.

The PIs have designed the *Rural Teacher Residency Program* to align directly with the 21st Century North Carolina Professional Teaching Standards, graduate school requirements for a

Master of Arts in Teaching degree at NC A&T, Southern Association of Colleges and Schools (SACS) comprehensive standards, and the Council of Accreditation for Educator Preparation (CAEP) standards. As a program offered through a state-supported institution of higher education, the program also aligns with requirements articulated in the Americans with Disabilities Act (ADA), which prohibits discrimination based on disability or exceptionalities. As such, this program is open to any person who is qualified under the predetermined criteria who desires to teach a high-need subject area in a high-need rural school in Randolph County Schools and Stokes County Schools. Participants who complete the program successfully will earn a Master of Arts in Teaching degree as well as both an initial North Carolina teaching license and an advanced North Carolina teaching license.

The PIs also will ensure that the induction support and professional development component of the program aligns with the strategic plans of the two school district partners. More specifically, PIs will coordinate activities to guarantee that the instructional support team works to develop the content knowledge and pedagogical skills of the BTs to ensure their K-12 students perform at the “proficient” level on End-of-Grade mathematics, reading, and science tests as measured by the North Carolina accountability model. Induction support services will also develop the BT’s leadership skills so they have the ability to communicate proactively with parents and community members regarding successes and challenges. According to a regional superintendent, current induction support services with Beginning Teachers (BTs) offered by Randolph County Schools and Stokes County Schools orient new teachers to the daily administrative responsibilities of a classroom teacher but are less effective with providing research-based approaches to teaching content. Therefore, the PIs will coordinate efforts to

ensure that instructional coaches work collaboratively with school district induction personnel to explore evidence-based pedagogical practices with BTs and mentor teachers.

Project Feedback

Throughout the implementation of the *Rural Teacher Residency Program*, the PIs will be accountable for program alignment to professional teaching standards and compliance with accreditation requirements. The PIs will also be responsible for ensuring that university personnel work collaboratively with administrators and support personnel from the two partner school districts. To achieve this outcome, the PIs will rely on monthly meetings with project staff and instructional coaches. Advisory Board meetings with representatives from partner institutions and organizations as well as monthly communiqué via email correspondence, online discussions, and telephone conferences will ensure continuous engagement and collaboration. Additionally, face-to-face meetings that focus on recruitment and selection processes for mentors and Teacher Residents, preparation activities during the clinical experience, induction and support services, and review of assessment data will occur frequently to ensure partners communicate to improve the quality of the program and revise its direction as necessary. Representatives from Randolph County Schools, Stokes County Schools, the College of Arts and Sciences, and the School of Education will be included in all meetings.

Using formative and summative assessment data from the logic model, PIs will work with the Advisory Board to analyze program quality and effectiveness on a continual basis. The external evaluator will assist the partnership in all forms of interim, annual, and final evaluations as well as ongoing data collection and assessment measures. PIs will monitor the academic progress of Teacher Residents toward programmatic benchmarks and provide updates and documentation to each Resident throughout the program. Midterm and annual reports will

present synthesized data; these reports will be shared with Advisory Board representatives and other pertinent collaborators to address weaknesses in program implementation. The following assessment data will be used to assess the effectiveness of the *Rural Teacher Residency Program* as it relates to the performance of Teacher Residents on licensure examinations, knowledge acquisition, and their teaching during the first three years of induction: (a) PRAXIS II score reports within the specified content area, (b) Student opinion forms of university-offered coursework, (c) Professional development attendance records, (d) Evaluation survey feedback from the Summer Institute, professional development workshops, and seminars, (e) Data to support collaborative efforts with partnering institutions and departments, and (f) Data on Teacher Residents completing certification requirements. The assessment plan will be revisited after each evaluation period to ensure it measures the goals and objectives of this Initiative.

The success of the *Rural Teacher Residency* program will be quantified by the number of Teacher Residents completing North Carolina licensure requirements in the specified content area and by the number of Teacher Residents completing Master of Arts in Teaching degree requirements. Retaining new Teachers of Record after one year and after three years of completion from the *Rural Teacher Residency* will also indicate program success. Additionally, completing Project Milestones each fiscal year without exceeding the articulated budget will serve as a measure to determine the success of the program. Formative assessments will occur throughout the implementation of the program. Each of the four “Phases” will be assessed with the intent of making adjustments to the program. The various stakeholders and participants in the program (e.g., Teacher Residents, Master teachers, faculty) will provide valuable insight into the quality and effectiveness of the program. Agency reports will appear approximately one year after the completion of the final grant-funded year. PIs will report to the United States

Department of Education results of the *Rural Teacher Residency* program at North Carolina A&T State University. PIs will also disseminate data on the effectiveness of the model in peer-reviewed educational journals (e.g., *Journal of Teacher Education*) and will present at international, national, and state conferences (i.e., American Educational Research Association, National Council of Teachers of Mathematics, National Science Research Council, North Carolina Association of Colleges and Teacher Educators Education Forum, North Carolina Conference on Closing the Achievement Gap). A complete report of the *Rural Teacher Residency* program will be published and made available on the University's web page under the School of Education web site.

Quality of Project Evaluation

To determine the overall effectiveness of the *Rural Teacher Residency* program, the external evaluators will conduct a formative and summative evaluation utilizing objective performance measures to triangulate data on the intended project outcomes. Formative evaluation activities will ascertain and improve the project's successful attainment of stated objectives and will focus on assessing the quality of residents' training and associated activities. Summative activities will assess the degree to which the stated objectives are attained, including increase recruitment, retention, certification, placement of residents as Teachers of Record, and the quality of residents as teachers. The project evaluation will yield data that will provide sufficient information on the impact of this program on the recruitment and preparation of Teacher Residents for certification as well as their impact on student achievement once employed as new Teachers of Record in a high need school. These measures will also connect to the program Government Performance and Results Act (GPRA). Additionally, it will yield data that assess the impact of Teacher Residents on student achievement compared to similarly new

but non-participating teachers. To make these connections explicitly, the project evaluation will focus on five overarching questions based on the project's logic model:

- (1) To what extent are qualified participants recruited, selected, and retained in the *Rural Teacher Residency* program, including what percentage of participants persisted during the 14-month period to complete initial licensure, advanced licensure, and master's degree requirements?
- (2) What was the quality of their training and did it prepare Teacher Residents to pass the Praxis and prepare them to be successful as Teachers of Record in a classroom?
- (3) What percentage of new Teachers of Record has been retained in rural high-need schools for a minimum of three consecutive years after completion of the residency program?
- (4) What was the quality of the induction services and the Professional Development Academy and to what extent did they influence the retention rates and teaching quality of these new teachers?
- (5) How do teachers who have been part of the residency program compare to similarly new non-participating teachers in terms of their impact on students' achievement?

Findings will be formally disseminated via Annual Performance Reports each May, via an Interim Project Report at the conclusion of the third funding year, and via a final evaluation report at the conclusion of the fifth funding year. Data will be informally disseminated as available and in an ongoing basis to PIs such that they can make changes as needed to support achievement of project objectives.

The evaluation will employ a longitudinal case study design (Yin, 1994) to collect quantitative and qualitative data on the program participants embedded with a quasi-experimental design to compare the progress of new Teachers of Record completing the Rural

Teacher Residency Partnership to those comparable non-participating new Teachers of Record hired at the same time within the district. This methodology allows PIs to use multiple data collection and analytical strategies that lead to deeper understanding and more robust findings (Yin, 1994). Within this case study design, the evaluator will employ a mixed-methods approach. A mixed-methods approach to conducting evaluation is different from using multiple methods or a combination of methods in that data from one type of method (quantitative or qualitative) is merged, connected, or embedded with data from the other type of method (Creswell, 2006). The use of a mixed-methods evaluation approach provides richer data sets and allows for better triangulation of data.

1. To what extent are qualified participants recruited, selected, and retained in the <i>Rural Teacher Residency Partnership</i> including what percentage of participants persisted during the 14-month period to complete initial licensure, advanced licensure, and master’s degree requirements?				
Data Sources	Collection Time Period	Analysis Method	Person Responsible	GPRA Connection
Account of recruitment activities conducted each academic year	Annually, Years 1 – 3	<ul style="list-style-type: none"> • # of activities conducted • # of follow up communications with each prospective candidate • Correlation between recruitment activity and # of enrolled candidates 	PIs, project staff, external evaluator	Measure 1: Certification
Recruitment spreadsheet with prospective candidates	Years 1 – 3	<ul style="list-style-type: none"> • Total # of people recruited and selected • Total # of candidates enrolled • % of candidates retained during coursework 	PIs, project staff, external evaluator	Measure 1: Certification
Program enrollment data (e.g., applications received, number of persons selected, etc.) including application and selection information	Annually, Years 1 – 3	<ul style="list-style-type: none"> • Pre/post analysis of Rural Teacher Residency Partnership enrollment data (beginning of school year and end of school year) 	PIs, project staff, external evaluator	Measure 1: Certification
Participant course performance data including course grades, Electronic Evidences	Annually, Years 1 – 3	<ul style="list-style-type: none"> • Mean cumulative grade point average of candidates • Mean cumulative average score on electronic evidence key assessments 	PIs, project staff, external evaluator	Measure 1: Certification
Praxis II and Pearson test scores for each participant	Annually, Years 1 – 3	<ul style="list-style-type: none"> • Total # of participants passed • Disaggregated test score data by subset • Aggregated test score data 	PIs, project staff, external evaluator	Measure 1: Certification
MAT degrees conferred to participants by cohort group	Annually, Years 1 – 3	<ul style="list-style-type: none"> • Number of participants recommended for degree completion • Percent of participants who receive MAT degree 	PIs, project staff, external evaluator	Measure 1: Certification
Initial and advanced licensure applications submitted to NCDPI	Annually, Years 1 – 3	<ul style="list-style-type: none"> • Number of initial licensure applications submitted to NCDPI • Percent of participants who receive initial license 	PIs, project staff, external evaluator	Measure 1: Certification

2. What was the quality of their training and did it prepare Teacher Residents to pass the Praxis and prepare them to be successful as Teachers of Record in a rural high-need public school classroom?				
Data Sources	Collection Time Period	Analysis Method	Person Responsible	GPRA Connection
Residents' assessment of quality of training particularly pedagogy training and culturally responsive pedagogy training as part of the E=RC ² seminar series	Semi-annually, Years 1 – 3	<ul style="list-style-type: none"> • Class ratings (means, percents) • Ratings of quality and utility (means, percents) 	PIs, project staff, external evaluator	Measure 2: 1-Year Persistence
Review of residents' teaching throughout immersion to clinical practice to teaching conducted by evaluator, mentors, and principals via observations/walkthroughs*	Ongoing - Years 1 – 5	<ul style="list-style-type: none"> • Observation ratings (means, percents) • Thematic analysis of qualitative data 	PIs, project staff, external evaluator	Measure 2: 1-Year Persistence
Interviews with mentors and instructional coaches about roles and responsibilities and preparedness for them	Annually, Years 1 – 3	<ul style="list-style-type: none"> • Ratings (means, percents) • Thematic analysis of qualitative data 	PIs, project staff, external evaluator	Measure 1: Certification
Residents' assessment of mentors' support	Semi-annually, Years 1 – 3	<ul style="list-style-type: none"> • Ratings (means, percents) • Thematic analysis of qualitative data 	PIs, project staff, external evaluator	Measure 1: Certification
3. What percentage of new Teachers of Record has been retained in rural high-needs schools for a minimum of three consecutive years after completion of the residency program?				
Data Sources	Collection Time Period	Analysis Method	Person Responsible	GPRA Connection
Employment placement data for new Teachers of Record	Annually, Years 1 – 5	<ul style="list-style-type: none"> • Number of participants employed by LEAs as a Teacher of Record after licensure attainment 	PIs, project staff, external evaluator	Measure 3: 1-Year Employment Retention
Teachers of Record employed after 1 year in a partner rural school district	Annually, Years 2 – 5	<ul style="list-style-type: none"> • Percentage of participants employed by LEAs as a Teacher of Record at the beginning of each participant's second year of employment 	PIs, project staff, external evaluator	Measure 3: 1-Year Employment Retention

3. What percentage of new Teachers of Record has been retained in rural high-needs schools for a minimum of three consecutive years after completion of the residency program? (cont'd)				
Data Sources	Collection Time Period	Analysis Method	Person Responsible	GPRA Connection
Teachers of Record employed after 2 years in a partner rural school district	Annually, Years 2 – 5	<ul style="list-style-type: none"> Percentage of participants employed by Stokes or Randolph County Schools as a Teacher of Record at the beginning of each participant's third year of employment 	PIs, project staff, external evaluator	N/A
Teachers of Record employed after 3 years in a partner rural school district	Annually, Years 2 – 5	<ul style="list-style-type: none"> Percentage of participants employed by Stokes or Randolph County Schools as a Teacher of Record at the beginning of each participant's fourth year of employment 	PIs, project staff, external evaluator	Measure 4: 3-Year Employment Retention
4. What was the quality of the induction services and the Professional Development Academy and to what extent did they influence the retention rates and teaching quality of these new teachers?				
Data Sources	Collection Time Period	Analysis Method	Person Responsible	GPRA Connection
Principal Survey	Years 2 – 5	<ul style="list-style-type: none"> Frequencies and percentages (mean and standard deviations) of survey results. 	External evaluator	Measure 5: Student Learning
Interviews with new Teachers of Record, school executives, state-supported mentors	Years 2 – 5	<ul style="list-style-type: none"> Content analysis of interview transcripts 	External evaluator	Measure 5: Student Learning
Data from Evaluation Instruments for all Professional Development workshops	Years 1 – 5	<ul style="list-style-type: none"> Percentage of BTs participating in workshops Number of workshops participants attended Workshop survey data 	External evaluator	Measure 5: Student Learning

5. How do teachers who have been part of the residency program compare to similarly new non-participating teachers in terms of their impact on students' achievement?				
Data Sources	Collection Time Period	Analysis Method	Person Responsible	GPRA Connection
New Teachers of Record student benchmark and EOG/EOC data compared to non-Rural Teacher Residency Program new Teachers of Record	Years 2 -5	<ul style="list-style-type: none"> T-test and regression analyses will compare benchmark and EOG/EOC data between new Teachers of Record from the Rural Teacher Residency program and non-Rural Teacher Residency beginning teachers** 	External evaluator	Measure 5: Student Learning

***Note:** The evaluator will work with principals, mentors, and other project personnel to develop or revise an observation rubric (such as Horizon's Teacher Observation Rubric or the Reformed Teacher Observation Protocol) and walkthrough rubric for use in observations and walkthroughs that reflect North Carolina teacher competencies and project goals (e.g., culturally relevant pedagogy)

****Note:** Evaluators will use Propensity Score Matching (PSM) to match residency teachers with non-residency teachers in the same grades and subject for comparison purposes in a quasi-experimental design