

# Sound Basic Education for All

## An Action Plan for North Carolina



In collaboration with Learning Policy Institute and  
The William & Ida Friday Institute for Educational Innovation

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## Retaining and Extending the Reach of Excellent Educators

Current Practices, Educator Perceptions, and Future Directions

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# Contents

## SECTION 1: BACKGROUND

**1**

District Initiatives: Initial Efforts to Extend Teachers' Reach in North Carolina 1

State Initiatives: North Carolina Seeks to Expand 3

Defining Teacher Leadership in North Carolina 4

Policies Supporting Advanced Roles 5

## SECTION 2: LITERATURE REVIEW

**6**

## SECTION 3: APPROACH

**8**

Research Questions 8

Data Sources 9

## SECTION 4: FINDINGS

**11**

Question 1: What are current working conditions related to teacher support and advancement, and how do they impact retention? 11

What Educators Say Would Improve Working Conditions 12

Question 2: What are current staffing models that extend the reach of high-performing teachers? 15

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**SECTION 5: CONCLUSIONS****18**

Best Practices and Opportunities

18

Major Needs and Challenges

19

**APPENDIX A. SPAN OF EDUCATOR ROLES****23****REFERENCES****24****List of Tables**

Table 1. Funding for Original Advanced Roles Pilot Sites

16

# Section 1: Background

In addition to preparing, developing, and supporting teachers, North Carolina’s state and local leaders have sought to “extend” their teacher talent, increasing the impact that great teachers have beyond individual classrooms.

Extending teachers’ reach often takes the form of creating advanced roles and career pathways through which highly effective teachers can lead teams of other teachers or otherwise expand the scope of their responsibilities to strengthen their schools and earn higher pay (Aspen Institute, 2018). Recent research suggests that using advanced roles increases instructional capacity within schools whereby substantially more students have access to effective teachers. Teachers who may have left the teaching profession for administrative roles remain, continuing to teach while leading instructional improvement in the schools, and teachers receive more support in improving their practice (National Institute for Excellence in Teaching [NIET], 2018). In addition, principals benefit from a distributed leadership structure wherein they provide regular support to a team of teacher leaders instead of an entire teaching staff.

## District Initiatives: Initial Efforts to Extend Teachers’ Reach in North Carolina

Much of North Carolina’s early work to extend the reach of excellent teachers first occurred at the district level. Several local education agencies (LEAs) created their own advanced teacher-leader roles and differentiated compensation models, which laid the groundwork for later state policy. Two prominent examples are Guilford County Schools’ Mission Possible initiative and Charlotte-Mecklenburg Schools’ Opportunity Culture initiative for students in the West Charlotte corridor.

### Mission Possible (Guilford County Schools), 2006–2016

Guilford County Schools implemented its Mission Possible initiative during the 2006–07 school year. The initiative consisted of an alternative salary structure whose aim was to recruit, retain, and reward excellent teachers in some of the district’s highest-need schools. Mission Impossible provided five different financial incentives, one of which was a bonus of \$2,000 for teachers who assumed teacher-leader roles within their buildings. Principals and central office–based Mission Possible specialists co-selected teacher leaders, and schools had the discretion to choose the extra duties associated with the positions. Every Mission Possible school received six teacher leader positions,

and at its height, the program operated in 46 Guilford County schools. Federal Teacher Incentive Fund grants funded the program. Mission Possible ended after funds expired in 2015–16. Research showed that Mission Possible schools had lower turnover rates, higher rates of achievement of No Child Left Behind goals, and higher cohort graduation rates than the district as a whole (Bayonas, 2010).

## Opportunity Culture (Project L.I.F.T., 2013–Present)

In January 2011, several members of Charlotte, North Carolina’s philanthropic community partnered with Charlotte-Mecklenburg Schools to create a new school turnaround initiative called Project Leadership & Investment For Transformation, or Project L.I.F.T. The public-private partnership sought to improve academic outcomes for students in the West Charlotte corridor, defined as West Charlotte High School and all feeder elementary and middle schools. At the time, West Charlotte High was the city’s lowest-performing high school, and West Charlotte and its feeder schools served a high percentage of low-income students and students of color. Project L.I.F.T. aimed to make strategic investments in four key areas — Talent, Time, Technology, and Community Engagement.

As part of its Talent strategy, Project L.I.F.T. implemented Opportunity Culture, a national initiative that uses job redesign and innovative school models to extend the reach of excellent teachers to more students. In exchange for extending their reach, teachers receive additional compensation. Within Project L.I.F.T.’s Opportunity Culture model, qualifying teachers can become Reach Teachers and teach larger student loads or they can become Multi-Classroom Leaders and coach small teams of teachers, often while continuing to teach part-time. In exchange for taking on greater responsibility, teachers are held formally accountable for the academic growth of the students they teach and the students their team teachers teach. Teachers in Opportunity Culture roles can earn up to \$23,000 more per year, approximately a 50 percent increase over average teacher pay in North Carolina. Charlotte-Mecklenburg Schools decided to scale the initiative to more non-L.I.F.T. schools in 2014, branding the effort Success by Design. Success by Design and Project L.I.F.T. will merge into one program in 2019–20. In total, 57 Charlotte-Mecklenburg schools have implemented Opportunity Culture, and research has shown strong academic gains for students on teams led by Multi-Classroom Leaders (Backes & Hansen, 2018).

## The TAP System

Though not in North Carolina, many districts have adopted the TAPs System, a national model that elevates highly effective teachers into roles as master teachers and mentor teachers, and they receive additional compensation to support instructional improvement across the faculty in schools, more than 90% of which are “high need” according to TAP (Barnett, Hudgens, & Logis,, 2018). In TAP schools, these teacher leaders lead teams of other teachers to plan lessons, analyze data, and engage in professional development. Teachers across the school are eligible for performance-based bonuses, with larger supplements for teachers in advanced roles. Several studies have shown that TAP has a positive impact on student achievement and the measured quality of teacher instruction (Barnett, Hudgens, & Logis,, 2018).

## State Initiatives: North Carolina Seeks to Expand

After early efforts in districts like Guilford and Charlotte-Mecklenburg, North Carolina’s state policymakers sought to stimulate more local action to create advanced roles and teacher career pathways.

### Legislative Request for Differentiated Pay Plans

In 2014, the North Carolina General Assembly enacted legislation requesting all LEAs to submit proposed plans for differentiated compensation models. The legislature did not provide LEAs with significant guidance, nor fund any specific technical assistance to support LEA plan-development. Despite the state directive, most LEAs did not submit plans that tied greater compensation to increased teacher responsibilities. Only 21 plans included advanced teaching roles, and only 14 of those plans indicated how much pay could be earned for advanced roles. Among those, the level of proposed compensation was relatively low — the median maximum pay supplement for an advanced role was only \$1,000. Only two LEAs proposed maximum pay supplements that amounted to more than 10% of the state’s average teacher pay at the time (Public Impact, 2015).

### Governor’s Proposed Career Pathways

Also in 2014, then-Governor Pat McCrory included funding for Career Pathways for Teachers in his budget proposal. The Career Pathways fund would have allowed 16 school districts to implement differentiated pay structures for highly effective teachers in advanced roles, which might include mentoring younger teachers or leading teacher teams. The proposal provided approximately \$9 million for the first eight districts, envisioning a statewide Career Pathway program by or before 2019 (Bonner & Helms, 2014).

The final 2014 budget did not include funding for McCrory’s Career Pathway pilot program. However, the proposal did lay the groundwork for North Carolina’s future Teacher Compensation Models and Advanced Teacher Roles Pilot Program, outlined below (Bonner, 2016).

### **Teacher Compensation Models and Advanced Teacher Roles Pilot Program**

As part of its 2016 budget, the North Carolina General Assembly charged the State Board of Education (SBE) with establishing a three-year pilot program “to develop advanced teaching roles and organizational models that link teacher performance and professional growth to salary increases.” According to legislation, the purpose of the program is to:

1. Allow highly effective classroom teachers to teach an increased number of students by assuming accountability for additional students, by becoming a lead classroom teacher accountable for the performance of all of the students taught by teachers on that lead classroom teacher’s team, or by leading a larger effort in the school to implement new instructional models to improve schoolwide performance.

2. Enable local school administrative units to provide salary supplements to classroom teachers in advanced teaching roles. Selection of an advanced teaching role classroom teacher and award of related salary supplements shall be made on the basis of demonstrated effectiveness and additional responsibilities.
3. Enable local school administrative units to create innovative compensation models that focus on classroom teacher professional growth and student outcomes.
4. Utilize local plans to establish organizational changes related to compensation in order to sustain evidenced-based teaching practices that have the capacity to be replicated throughout the state.

The SBE issued its first Request for Proposal (RFP) on September 15, 2016, and the General Assembly appropriated \$7.18 million for the program, along with an additional \$3 million to be distributed among the three largest LEAs each year. In all, the General Assembly appropriated \$10.18 million for the three-year program.

The legislation allowed for 10 LEAs to take part in the pilot without providing much guidance to the SBE on how to allocate the funding. It did not, for example, direct the SBE to prioritize low-performing LEAs or those with high proportions of economically disadvantaged students. It did reserve grants for LEAs of specific sizes. Eligible LEAs included:

1. Up to five local school administrative units with enrollment, or an average daily membership (ADM), equal to or less than 4,000.
2. Up to three local school administrative units with an ADM of 4,001 to 20,000.
3. Up to two local school administrative units with an ADM of 20,001 or more (Maser & Stallings, 2018).

For information about how these pilots have unfolded, see Question 2 in the Findings section below.

## Defining Teacher Leadership in North Carolina

In addition to promoting the creation of advanced teacher-leader roles, the North Carolina Department of Public Instruction (NCDPI) has worked to create a consistent definition for teacher leadership.

In line with the North Carolina Professional Teacher Standards, the NCDPI has created a career continuum for all teachers, known as the Span of Educator Roles. The continuum includes three relevant roles — two Teacher Leader roles and one Teacher Leadership Specialist role (see Appendix A, Span of Educator Roles). The three roles vary in their job responsibilities and accountability.

1. Teacher Leader (single classroom): Single-classroom teacher leaders are educators who lead and support other teachers in their buildings while also providing regular classroom instruction.
2. Teacher Leader 2 (multiple classrooms): Multiple-classroom teacher leaders also are educators who lead and support other teachers. However, unlike single-classroom teacher leaders, multiple-classroom



teacher leaders are directly responsible for their own students as well as those taught by the teachers they lead.

3. **Teacher Leadership Specialist:** Teacher Leadership Specialists are district- or building-based professionals who support the development of other teachers. They do not supervise or evaluate teachers, nor are they directly responsible for any students. However, beyond those parameters, the definition of a Teacher Leadership Specialist is somewhat broad — Teacher Leadership Specialists can facilitate professional development, coach teachers, mentor teachers, or provide in-class interventions. Only the Teacher Leadership Specialist position has separate teaching standards and a separate evaluation process, though as of this writing, these were not available on the NCDPI’s website.

Within North Carolina’s Span of Educator Roles, only the multiple-classroom teacher leader is formally accountable for a larger student load, that is, those students they reach through the teachers they lead and serve. Also, the Span of Educator Roles only names these teacher-leader roles; it does not specify qualifications or selection requirements, require LEAs or schools to offer the roles, or specify how much additional pay, if any, teachers should earn for assuming one of these leadership roles..

## Policies Supporting Advanced Roles

Some state policies have made it easier to create advanced teacher-leader roles. Low-performing schools in North Carolina can seek Restart status from the SBE, which provides them with substantial autonomy on a range of issues, including school staffing. More than 100 North Carolina schools have received this status. The Restart program does not require schools to implement advanced roles or teacher career pathways, but a nonprofit consortium of districts called the Innovation Project has run a series of sessions for Restart schools prompting them to consider staffing innovation as part of their restart plans and is exploring ways to provide additional support for Restart schools that elect to implement new roles (Granados & Hinchcliffe, 2018).

# Section 2:

## Literature Review

Given the magnitude of the challenge in North Carolina, even dramatic improvement in the recruitment and preparation of qualified teachers is unlikely to meet the *Leandro* mandate of providing every school with a competent principal and every public school student with a competent teacher.

According to the NCDPI's *State Plan to Ensure Equitable Access to Excellent Educators* (2015), only 7% of teachers in schools serving the highest quartile of economically disadvantaged students were designated "Highly Effective" on state teacher evaluations. As standards for teaching practice continue to rise, teachers of all experience levels need a great deal of development to succeed, particularly in high-need environments. Yet research has found a high degree of teacher dissatisfaction with many professional development practices, and such efforts have been faulted for not translating into substantial growth in teacher evaluation scores (Bill & Melinda Gates Foundation, 2014; TNTP, 2015). Professional development often takes the form of standalone sessions that may take teachers out of the classroom. Research has shown job-embedded professional learning, wherein teachers collaborate, receive coaching, and practice new approaches as part of regular daily schedules, is more effective at increasing teacher capacity and improving teacher performance (Garet, Porter, Desimone, Birman, & Yoon, 2001; Althausen, 2015).

Despite research showing the efficacy of job-embedded professional learning, traditional organizational structures make it difficult to provide such professional development on a schoolwide or districtwide scale. Traditional organizational structures place the overwhelming responsibility of supporting all teachers in a building on a single principal or small group of administrators. On average, principals supervise nearly 50 adults, far more than leaders in other high-skill professional fields, and a majority believe that they are the "primary person responsible for [the] performance and growth" of the teachers they lead (Bierly, Doyle, & Smith, 2016). Stretched too thin over a wide range of responsibilities, principals too often cannot provide the supports that are most closely linked to improvements in instructional practice, such as intensive, high-dosage instructional coaching associated with job-embedded professional learning (NIET, 2018).

Organizational structures that include formal teacher-leader roles address these challenges and have a strong, positive impact on key teacher and student outcomes. Research suggests that principals can leverage teacher-leader roles to create a distributed leadership system. One example, known as the TAP system, creates formal teacher-leader roles that involve multiple career paths and performance-based compensation. In a 2017 survey of TAP school employees, 100% of administrators agreed that "the TAP professional growth activities improve my school's teachers' instructional practice," and a 2018 evaluation of the program found that "within

the TAP system, improvements to teacher instructional practices translate into gains in student achievement” (Barnett, Hudgens, & Logis, 2018). A 2018 CALDER study of Opportunity Culture, an initiative that creates formal teacher-leader roles called Multi-Classroom Leaders (MCLs) to extend the reach of excellent teachers to teams of teachers and their students, found that team teachers who previously were, on average, at the 50th percentile in student learning gains in math produced growth equivalent to that of top quartile of teachers after being placed on MCL-led teams (Backes & Hansen, 2018).

In addition to teacher development and student learning benefits, research has found that teacher-leader roles can not only attract early-career and proven teachers to high-need environments, but also retain them. Qualitative studies have identified recent trends in teacher preference for “hybrid” roles that enable teachers to take on greater leadership responsibilities while remaining in the classroom (NIET, 2018; AFT & AIR, 2011; TeachPlus, 2014). When schools respond to this preference by creating formal teacher-leader opportunities, fewer teachers may pursue other opportunities that require them to leave the classroom or change schools (NIET, 2018). In one simulation, high-performing teachers were significantly more likely to select to work in a high-need, low-performing school over a low-need, high-performing school as long as that school had a “clear path to taking on school leadership roles while continuing to teach.” (Jacob, Vidyarthi, & Carroll, 2012). In a 2017 survey of schools participating in the aforementioned TAP system, 98% of principals agreed or somewhat agreed that “the implementation of TAP has helped retain effective teachers at my school” (Barnett, Hudgens, & Logis, 2018).

Research suggests that teacher-leader roles can be intentionally designed to achieve the greatest impact on important teacher and student outcomes. First, research points to the importance of empowering teacher leaders with the instructional authority to drive results for their teams. As part of a follow-up study on the efficacy of a teacher-leader initiative, University of Pennsylvania researcher Jonathan Supovitz found that “without empowering teacher leaders with more authority to exert influence on their colleagues to engage in instructional reform, efforts to leverage teacher leadership for school improvement will continue to fall short of their potential” (Supovitz, 2018).

For roles that include instructional coaching intended to build the capacity of other teachers in the building, research indicates that the number of teachers on an instructional coach’s caseload affects the impact of that coaching on teacher practice and student learning (Kraft, Blazar, & Hogan, 2018). In CALDER’s analysis of the effects of Opportunity Culture roles on student growth, the median team size supported by MCLs was six (Backes & Hansen, 2018). Evidence also suggests that significant compensation supplements may be needed to attract and retain excellent educators, especially in high-need environments. Economic research suggests pay differentials of at least 20% may be needed to attract and keep strong teachers in high-need schools (Hanushek, Kain, & Rivkin, 2001). Finally, some research points to the importance of selectivity for advanced roles. All the teacher leaders studied in the CALDER report that were producing the strongest academic gains came from the top 25% of teachers in terms of previously produced student growth (Backes & Hansen, 2018).

In summary, research shows that differentiated staffing models with advanced teacher-leader roles extend the reach of high-performing teachers to more students, resulting in improved student achievement, improved working conditions for teachers and principals, and improved retention rates. The WestEd team considered this literature review when conducting its own research.

# Section 3: Approach

## Research Questions

Two primary questions guided this study:

### Question 1: What are current working conditions related to teacher support and advancement, and how do they impact retention?

Researchers sought to establish whether working conditions related to teacher support and advancement, for example, instructional support via advanced teacher-leader roles, would be an effective means of improving teacher retention in North Carolina schools. We addressed this research question by first determining the primary drivers of teacher turnover according to North Carolina teachers and leaders. Once researchers had established the main contributing factors of teacher turnover, the team identified the working conditions needed to address those teacher and leader concerns, focusing primarily on the role teacher leadership could play. Finally, researchers determined to what extent those working conditions already exist in North Carolina schools, especially within the five *Leandro* plaintiff districts (*Leandro* districts).

### Question 2: What are current staffing models that extend the reach of high-performing teachers?

Researchers also examined current staffing models and advanced teaching roles in place across North Carolina. As discussed earlier, North Carolina has worked to promote the creation of such models, but even districts in the Advanced Teaching Roles Pilot Program have significant autonomy over job responsibilities, compensation levels, and selection processes. We reviewed the current landscape and determined the extent to which there are similarities and differences across LEAs.

## Data Sources

We used multiple data sources to address the primary research questions.

### Responses from Focus Groups and Interviews

In the fall of 2018, the research team conducted a series of interviews and focus groups in North Carolina school districts, including 14 teacher focus groups, 16 principal interviews, and 13 interviews with district staff members. The research team also conducted two focus groups with superintendents from districts across the state. Additional interviews were conducted with NCDPI staff members and leaders from different nonprofit and public organizations, such as the North Carolina Principals and Assistant Principals Association and North Carolina Health and Human Services.

When conducting teacher focus groups, researchers randomly assigned teachers to one of two focus group topic areas, Teacher Development and Working Conditions or Recruitment and Selection/Teacher Leadership, each of which had its own interview protocol. Each focus group interview lasted approximately an hour; the groups were typically four to eight participants.

The researchers also interviewed principals during site visits, either before or after teacher focus groups (principals were not present for teacher focus group interviews). Principal interviews lasted approximately 45 to 60 minutes, with questions addressing the school's general teaching climate and culture, existing support for teachers, and existing support for school leaders.

### Statewide Principal Survey

In addition to principal interviews, WestEd sent an online survey to all principals in the state of North Carolina via e-mail. The survey included 75 questions, covering topics from principal preparation to ongoing support and general working conditions. Approximately 840 principals completed the survey, a 31.3% response rate.

### Teacher Working Conditions Survey

The researchers also utilized publicly available data related to teacher working conditions. North Carolina issues its Teacher Working Conditions Survey biennially, with 2018 being the most recent year for which data is available. In 2018, more than 120,000 teachers — approximately 91% of North Carolina's teacher workforce — completed the survey. The Teacher Working Conditions Survey covers a variety of topics, including:

- » Community engagement and support
- » Teacher leadership
- » School leadership
- » Management of student conduct

- » Use of time
- » Professional development
- » Facilities and resources
- » Instructional practices and support
- » New teacher support

The responses to most Teacher Working Conditions Survey questions are measured on a Likert scale (five levels from “Strongly disagree” to “Strongly agree”), and results are available for schools and districts that have a 40% response rate and at least five respondents.

## Year 1 (2017–18) Interim Report on Advanced Roles Pilot Program (The Friday Institute)

When the North Carolina General Assembly first created the Teacher Compensation Models and Advanced Teaching Roles Pilot Program in 2016, it provided additional financial support to The Friday Institute for Educational Innovation to conduct an ongoing evaluation of the program. The Friday Institute completed its Year 1 (2017–18) interim report in October 2018. The report assessed the impact of each pilot’s current implementation as it related to:

- » Quality of classroom instruction
- » Attractiveness of the teaching profession
- » Recognition of high-quality classroom teachers
- » Retention of high-quality classroom teachers
- » Retention of beginning classroom teachers
- » Impacts on high-quality experienced classroom teachers

As part of its research, The Friday Institute collected and analyzed survey and focus group data from all six of the original pilot LEAs. The report also outlined a plan for conducting a future quantitative analysis of student and teacher outcomes and provided a breakdown of key similarities and differences among pilot sites.

## Original Advanced Roles Proposals

The research team also referenced the original proposals submitted by LEAs applying for the Teacher Compensation Models and Advanced Teaching Roles Pilot Program. Those proposals provide detailed information regarding each LEA’s proposed implementation.

# Section 4: Findings

## Question 1: What are current working conditions related to teacher support and advancement, and how do they impact retention?

The research identified several factors that contribute to increased teacher turnover, especially in low-wealth districts. Three factors emerged as most relevant to Question 1.

### 1. Inadequate Teacher Preparation

Teacher focus group participants described feeling unprepared for the everyday challenges of teaching students, especially those who are economically disadvantaged. Both beginning teachers and veteran teachers felt their teacher preparation programs had not provided the content and skills needed to effectively manage a classroom and deliver high-quality instruction. According to interviewees, teachers recognize just how unprepared they are and avoid teaching in low-wealth, low-performing schools as a result. Teachers who do choose to teach in low-performing schools often leave to teach in wealthier, “easier” districts and schools.

*“Specifically for the school that I’m coming from, it was rather difficult to recruit teachers because for one, the school had a history of low performance. The school had some behavioral challenges with some of the students, or what have you, or the demographic and the population was a little bit more challenging.” (Elementary school principal)*

### 2. Teacher Workloads and Pressure

Teacher focus group participants also described feeling considerable stress in their jobs. According to interviewees, much of this stress stems from the top-down pressure to achieve results on state assessments while balancing a workload and schedule that is unsustainable. Many teachers expressed a desire for a more manageable work-life balance, and many noted they and/or their colleagues would eventually leave the profession in pursuit of that balance.

*“I do enjoy being in the classroom, but this is a very high-stress environment in general. I’ve had a lot of health issues because of the high-stress environment. [I] love what I do, so the*

*stress, a lot of times, I can justify it and say it's worth it, it's not a long-term thing. I know that in five years I'm going to have to go to a different environment. There's no way I can sustain this for a long time." (Middle school teacher)*

### 3. Inadequate Compensation

Inadequate teacher compensation was one of the most common reasons cited for teacher attrition. Many focus group participants stated that compensation is inadequate for the work teachers do, and the current level of pay does not allow teachers to achieve a suitable quality of life. Many teachers remarked either they or some of their colleagues often have second and third jobs to supplement their teaching income.

According to interviews, pay disparities between rural, low-wealth schools and their wealthier counterparts further exacerbate the teacher pay issue. Some districts are unable to provide adequate local supplements or additional pay opportunities (such as stipends for leadership positions), so teachers seek out nearby districts that can provide better pay, even if that pay comes with a longer commute.

*"People that would be wonderful teachers choose not to do it because that reward of what you feel when you're teaching children and knowing that you're making a difference, that's not enough. It doesn't pay the bills, and because it is so incredibly exhausting, [in] every way imaginable, ... it's not going to draw people in. Find a way to make it more appealing to people that are highly qualified, would make wonderful educators." (Elementary school teacher)*

### Principal Perspective on Teacher Turnover

Principal interviews and survey results mirrored teachers' responses. Many principals identified low compensation and heavy workloads as the primary reasons teachers leave. According to principals, teachers often leave to pursue higher pay in wealthier districts, where they may also have a less challenging teaching environment with fewer students who have faced multiple adverse childhood experiences.

## What Educators Say Would Improve Working Conditions

Interviews, focus groups, and the principal survey results align with literature review findings. Responses suggest schools and districts could improve retention by providing all teachers, especially those who are new to the profession, with certain working conditions, including:

- » A supportive, collaborative school environment
- » Regular coaching and support, especially for newer teachers
- » Leadership opportunities for teachers to assume greater responsibility and earn higher pay

The team's research examined whether teachers and leaders agree that these working conditions positively impact retention. In addition, research determined to what extent these conditions exist within North Carolina schools.



## 1. A Supportive, Collaborative School Environment

According to interviews, aside from increased compensation, teachers and leaders identified a supportive and positive school and community culture as the most important strategy to improve teacher retention. Teachers and principals both mentioned how important it is to create a close-knit “family feel” among staff and administration — one in which teachers feel they have a voice and can readily access resources and advice when needed. According to the principal survey, approximately 80% of principals named “creating collegial and collaborative work environments” as one of their main strategies to retain teachers in their schools.

*“So, beyond pay, I think the key for retention is how we treat people. How we care for people. Teachers have to feel cared for, especially when you can’t pay them much.” (Superintendent)*

Furthermore, many teachers and leaders referenced the importance of creating a schoolwide culture of improvement. In a schoolwide culture of improvement, teachers and administrators collaborate and continually hone their craft. There is a focus on professional growth, and teachers are reflective in their work, taking ownership of their own professional development.

*“Our principal and a few other people have been really good about, what do you need to work on? We’re allowed to control our own PD [professional development]. What do you want that will help make this happen? I’ve mentioned conferences before. Sometimes they happen, sometimes they haven’t, but at least it’s worked on. There’s effort going into ‘What do you want to do to make yourself a better teacher? Let’s make that happen for you.’” (Middle school teacher)*

2018 North Carolina Teacher Working Conditions Survey (TWCS) results were generally positive when it came to creating a supportive, collaborative work environment.

According to the TWCS:

- » 92% of teachers agreed that teachers work in professional learning communities to develop and align instructional practices
- » 84% of teachers agreed that teachers are trusted to make sound professional decisions about instruction
- » 77% of teachers agreed that faculty has an effective process for making group decisions to solve problems
- » 75% of teachers agreed that teachers have time to collaborate with colleagues

However, 46% of teachers noted they had less than or equal to one hour a week for collaborative planning time, and according to focus group participants, professional learning community (PLC) meetings are often infrequent. Some PLCs meet weekly, but others meet rarely, if at all.

Although TWCS responses from *Leandro* districts are fairly similar to the state as a whole, interviewees from *Leandro* districts were much less likely to mention the importance or presence of a schoolwide culture of improvement. Only 4% of *Leandro* interviewees mentioned currently having or wanting a schoolwide culture of improvement.

In addition, many principals do not feel fully prepared to create collaborative work environments that provide regular, intensive support to teachers. According to principal survey results, only 44% of principals indicated they were “Well” or “Very Well” prepared to create collegial and collaborative work environments, and only 30.8% indicated they were “Well” or “Very Well” prepared to redesign the school’s organization and structure to support deeper learning for teachers and students.

Teachers and leaders see the value in teacher collaboration and consistent instructional support, but results indicate roles and structures often do not exist to make that work environment possible.

## 2. Regular Coaching and Instructional Support

Some advanced roles do exist that aim to provide teachers, especially beginning teachers, with regular instructional support. Many interviewees mentioned having a separate mentor who primarily works with newer teachers. The mentor helps new teachers adjust to their positions and assimilate into the school community.

Interviewees cited mentor roles as being helpful in combating new teacher turnover. According to interviewees, new teachers receive support that helps them manage what can be an overwhelming workload and schedule. Principals often pursue this strategy, as 96% of principals named “Mentoring/induction for beginning teachers” as one of their main strategies to retain teachers in their schools. TWCS results identified “formally assigned mentor” as one of the most common support roles for beginning teachers — 94% of respondents said they had one.

However, when further reviewing 2018 TWCS responses, it appears mentors do not provide regular instructional support. In response to the question “On average, how often did you engage in each of the following activities with your mentor?”:

- » 16% of respondents said they develop lesson plans with their mentors less than once per month, and 28% said they never plan with their mentors
- » 39% of respondents said they are observed by their mentors less than once per month, and 24% said they are never observed
- » 47% of respondents said they never observe their mentor’s teaching
- » 17% of respondents said they analyze student work with their mentors less than once per month, and 29% said they never do

These results are not altogether surprising, as mentors are often full-time teachers in the building, and the mentor role is an informal role without protected time to meet. In fact, only 55% of respondents had a mentor that taught in the same content area or grade level. Research suggests that mentors are helpful with more “soft skills,” helping mentees navigate the everyday challenges associated with a new teaching career. However, evidence suggests that these mentors rarely have time to provide high-quality instructional support.

Several advanced teacher-leader roles also exist in North Carolina schools. The most frequent support roles mentioned among interviewees were instructional coaches and MCLs. Interviewees described receiving valuable coaching and in-class support from teachers in these positions, noting they valued the frequent feedback and

team planning meetings. Interviews indicate that these positions can not only reduce beginning teacher turnover, but also entice successful teachers to remain in the classroom.

*“It wasn’t till I came to this school and actually had a very strong instructional coach that really showed me and what she did — she was a model for me. Although I had been teaching for six years already, she modeled for me ... and that helped me more than anything.” (High school teacher)*

### 3. Leadership Opportunities and Higher Pay

Positions such as instructional coaches and MCLs provide opportunities for great teachers to advance in their professions without leaving the classroom. However, only advanced teacher leader positions like the MCL role provide guaranteed higher pay. Instructional coaches are still paid according to the state teacher salary schedule.

Interviewees found the idea of higher compensation particularly appealing and noted that many teachers are often deterred from pursuing leadership opportunities because they aren’t associated with greater pay. In fact, this lack of compensation for teacher-leader roles was mentioned much more often by participants from *Leandro* districts than non-*Leandro* districts. Approximately 69% of *Leandro* respondents mentioned “No extra compensation for additional responsibilities” as a concern.

Research indicates that advanced teacher-leader roles, wherein great teachers provide regular instructional support and foster a collaborative culture of improvement, can be an effective means of retaining beginning teachers. In addition, these roles create new opportunities for teachers to remain in the classroom, which can improve retention among more experienced educators who might have otherwise changed careers or transitioned into administration. However, it is crucial that these roles be tied to greater compensation.

## Question 2: What are current staffing models that extend the reach of high-performing teachers?

As described above, North Carolina has provided two rounds of funding for the Teacher Compensation and Advanced Roles Pilot Program, funding a total of 10 districts. Most teachers, however, continue to work in schools that do not have advanced teaching roles like those in these pilots.

In the first round of competition, 12 LEAs applied to participate, but the NCDPI accepted proposals from only 6 — Chapel Hill–Carrboro City Schools, Charlotte–Mecklenburg Schools, Edgecombe County Schools, Pitt County Schools, Vance County Schools, and Washington County Schools. Table 1 below lists the original pilot participants along with the total funding each received.

**Table 1. Funding for Original Advanced Roles Pilot Sites**

LEA	Total Project Budget	Recommended Funding	Annual Recurring Funding			Total Funding
			2017-18	2018-19	2019-20	
Charlotte-Meck.	\$ 2,645,131	\$ 1,947,995	\$257,477	\$257,477	\$182,182	\$2,645,131
Pitt	\$ 4,810,169	\$ 2,161,613	\$492,596	\$492,596	\$542,547	\$3,689,352
Chapel Hill-Carrboro	\$ 2,258,952	\$ 1,096,732	\$249,927	\$249,927	\$275,271	\$1,871,857
Vance	\$ 898,000	\$ 898,000	NA	NA	NA	\$ 898,000
Edgecombe	\$ 1,002,210	\$ 943,480	NA	NA	NA	\$ 943,480
Washington	\$ 132,180	\$ 132,180	NA	NA	NA	\$ 132,180
<b>Total</b>	<b>\$11,746,642</b>	<b>\$ 7,180,000</b>	<b>\$ 1,000,000</b>	<b>\$ 1,000,000</b>	<b>\$ 1,000,000</b>	<b>\$10,180,000</b>

The General Assembly chose to expand the pilot program in 2018 from a three-year program to an eight-year program and charged the SBE with issuing another RFP to fill the remaining four pilot slots. The unfilled slots were all for LEAs with an ADM of 4,000 students or fewer. Thirteen LEAs submitted proposals, and the NCDPI announced the four winners in January 2019 — Halifax County Schools, Bertie County Schools, Hertford County Schools, and Lexington City Schools. The General Assembly appropriated \$700,000 in funding, but site-specific funding amounts are not yet available.

Although the legislation authorizing these grants did not specifically provide for technical assistance on designing and implementing advanced roles, such technical assistance was explicitly named as a potential use of grant funds. At least 8 of the 10 winning LEAs have engaged outside organizations to provide such assistance.

The Friday Institute’s interim evaluation report on the program contained descriptive information about the pilots. The report grouped the created roles into five categories:

- » Professional development facilitator
- » Coach
- » Co-teacher
- » Mentor
- » Team leader

Each district offers between two and four of these roles, with coach, co-teacher, and team leader being the most common.

Several findings emerged from The Friday Institute’s analysis. According to the report, Advanced Teaching Roles Pilot Programs show early signs of:

1. Positively impacting classroom instruction by:
  - Creating a more collaborative atmosphere via Communities of Practice, leading to the sharing of best practices

- Providing more direct coaching to teachers who need it
  - Providing great instruction to a larger number of students
2. Elevating attractiveness of the teaching profession by:
    - Providing official leadership roles and career pathways that do not require teachers to leave the classroom
    - Compensating teacher leaders for taking on additional leadership responsibilities (which many may already do without compensation, but are now being recognized in schools in this program)
  3. Promoting the implementation of more rigorous selection processes
  4. Improving retention for teachers who may have considered transitioning to a different role outside teaching, but decided to stay in light of the advanced role (though more analysis is needed)
  5. Providing helpful support to beginning teachers, though only one pilot explicitly addresses beginning teachers
  6. Providing teacher leaders with high-quality professional development, resources, and support
  7. Contributing to improved empowerment and confidence among teacher leaders

The Friday Institute also identified some areas of concern. One was that in some pilot districts — especially rural ones — new advanced positions could be difficult to staff even with higher levels of compensation (Stallings, Maser, & Steinbrecher, 2018).

Subsequent rounds of evaluation may be able to build on these preliminary findings by following the pilots for longer periods of time, examining the second cohort of pilots, investigating the degree to which the roles created are improving the instructional capacity of teachers, and looking for impact on student growth.

# Section 5: Conclusions

## Best Practices and Opportunities

This review of current efforts, the research literature, and the viewpoints expressed by North Carolina educators converge to suggest a potential opportunity for North Carolina to fulfill the promise of *Leandro*: building on locally initiated efforts to extend the reach of great teachers to students and peers across the state via advanced roles, with a focus on the highest-need schools.

Advanced roles can address the challenges outlined here in several ways:

- 1. Enabling great teachers to reach more students.** Currently, North Carolina’s excellent teachers — those who achieve more than a year of growth with their students — reach only a fraction of the state’s students, no more than any other teacher. Advanced teaching roles give highly skilled teachers the opportunity to reach far more students, directly and by leading teams in which they help other teachers excel. As described in the literature review above, well-constructed advanced teaching roles can have a strong, positive impact on student learning.
- 2. Inducing great teachers to stay in teaching and seek out higher-need schools.** If advanced roles entail substantial compensation increases and if they are concentrated in higher-need schools, they may make higher-need schools more enticing to accomplished teachers. Rather than leave the classroom to become an administrator or leave schools altogether, teachers with a strong track record would gain a way to advance while continuing to teach. And in contrast to standard recruitment incentives, paying more for advanced roles enables districts and schools to obtain more value from the teachers and for teachers to have a larger impact than if they only fill the standard classroom teaching role.
- 3. Increasing support and retention of new and developing teachers.** Focus group participants provided substantial evidence that North Carolina’s teachers, especially those with less experience, desire a much greater level of support in the classroom. Teachers in team-leadership roles can be a major source of support to new and developing teachers. They have the ability to help their peers on the job on a daily basis. Research cited elsewhere in this series suggests that when new and developing teachers receive better support, they are more likely to stay in teaching — a shift that would help address the relatively high level of teacher turnover in high-need schools (Minnici, Beatson, Berg-Jacobson, & Ennis, 2019).

- 4. Providing a better environment for school leadership.** Research suggests that well-designed, advanced roles for teachers can transform the role of the principal, enabling more school leaders to be effective. If teachers lead small teams of other teachers, for example, the principal gains a “team of leaders” and can focus his or her management and leadership on that team — a significant contrast to the norm, in which the principal is each individual teacher’s direct instructional leader. In high-need schools specifically, principals face a great need to focus strategically and directly on improving schools and addressing achievement gaps. When principals’ time is reallocated in these ways, principals can support the teacher leaders to work with their teams to make instruction consistent across the building, aligned to high standards and high expectations. Teacher-leader roles may also afford principals the time to attend to other needs of economically disadvantaged students, for example, coordinate with social and health services, support access to wrap-around services, and so on.

In all these ways, advanced roles that extend reach can help North Carolina live up to the promise of “staffing every classroom with a competent, well-trained teacher” and “staffing every school with a competent, well-trained principal.” The next section describes the major needs and challenges North Carolina would face in trying to capitalize on this opportunity.

## Major Needs and Challenges

Although expanding advanced roles across North Carolina’s high-need schools could bring significant benefits, the state would need to address some significant challenges in the process. Three in particular stand out:

- » **Districts and schools need guidance** on creating well-designed advanced roles. Advanced roles are not new. Over the last 40 years, roles like instructional coaches, curriculum facilitators, department chairs, data coordinators, and PLC leaders have proliferated. However well-intended, these roles often have not provided a teaching career ladder, nor have they improved student outcomes at scale. Asking districts to design new advanced roles without providing them with guidance would likely lead to rewarmed versions of the same. Districts would need design guidance to ensure advanced roles are well constructed to support teachers to improve outcomes for students. As the literature review above notes, districts can learn from past experience and research as they move forward with new roles, but educators will need to develop the capacity to implement this model effectively.
- » **Districts need short-term transition funding.** In the long term, districts can pay for advanced teaching roles within regular district and school budgets, and many districts have already implemented financially sustainable advanced teaching roles. However, in their first three to five years, districts would require startup funds for design, staff training, and implementation support. For example, advanced teaching roles require districts to create and/or adapt several district policies and processes, from funding and hiring to training and evaluation. They require schools to redesign their staffing structures and schedules to ensure teacher leaders and their teams have the time they need to plan, observe, and co-teach. Facilitating these transitions will require districts to engage staff and/or consultants, incurring some additional costs until the staffing model is in place and working smoothly.

- » **The state needs to learn and continuously improve** as districts and schools implement advanced roles. Again, because this strategy represents a new way of organizing a school and working, everyone involved has a lot to learn. If North Carolina moved to scale up the advanced roles model statewide, it would benefit from a deliberate effort to foster learning across educators implementing the model and from using data to continuously learn from and improve the design and implementation over time.

## Design Guidance

District and school contexts vary. Mandating a one-size-fits-all approach to advanced roles would be counterproductive. At the same time, a set of design specifications based on research and early experience could help districts and schools move forward in an evidence-based fashion. As the state learns more about effective advanced roles (see below), the design guidance could expand to include more specific examples, along with planning and implementation templates. Potential design specifications include ensuring that advanced roles:

- » Are filled through a **highly selective** process. Those in advanced teaching roles would be most able to help their peers teach students well if they have a track record of dramatically improving the outcomes of their students — both on test scores and on other results that matter, like improved discipline and reduced absences. Districts and schools should implement rigorous selection processes focused on the competencies demonstrated by excellent teacher leaders.
- » Have **manageable spans of responsibility**. Research suggests those in advanced teaching roles can most effectively lead a team of five to six teachers. Leading larger teams of teachers will likely result in the same dilemma faced now by many principals — being spread too thin to provide the kind of in-depth feedback and support that teachers need.
- » Are provided **sufficient time to lead**. Advanced teaching roles demand more than a free period once or twice a week. Teachers in advanced teaching roles need substantial time both inside and outside their team members' classrooms, co-teaching with them, modeling lessons, observing instruction, and debriefing observations. Teachers in advanced roles also need time to meet with their teams — to analyze student data, discuss instructional strategies, and plan as a group.
- » Include the **formal authority** to lead. Unlike an instructional coach or facilitator, teachers in advanced roles lead a team. They help the team set goals, make instructional decisions, monitor progress, and adjust strategies. Along with authority, districts can establish teacher-leader **accountability** for the progress of teachers on the team and for the learning of all of the students taught by the team.
- » Are **well compensated**. With increased responsibility should come significantly increased compensation, especially if a key purpose of advanced roles is to attract strong teachers to high-need schools. Significantly higher pay (20% or more above the salary schedule) can attract and retain accomplished teachers in new roles.
- » Are **financially sustainable**. If additional pay for advanced roles depends on one-time dollars, the roles will disappear when the funding expires. Many districts have already shown that it is possible to create a financial plan that sustains these roles within existing district and school budgets after a few years of initial investment to institutionalize the new staffing model.



- » Build on **high-standards curricula and materials and schoolwide instructional models**. Teachers in advanced roles are best positioned to support peers when they can start with a foundation of high-quality curriculum and materials and a common “playbook,” or instructional approach, used across the school. These foundations let teacher leaders build from a strong start, increasing the chances of consistent high quality.

## Short-Term Transition Funding

North Carolina can help districts find the funds for the initial planning and training costs related to transitioning to new roles. Specifically, it could:

- » Expand the Teacher Compensation Models and Advanced Teaching Roles Pilot Program to allow all districts to apply for one-time startup funds.
- » Establish a 5- to 10-year Transition to Advanced Teaching Roles program that leads cohorts of districts and schools through a common design process. This structure could be especially helpful to smaller districts that are located near each other. A cohort model can increase overall capacity and provide a community of practice.
- » Fund design of advanced teaching roles as a school improvement strategy. Expand eligibility for designation as a Restart school to provide staffing flexibility that facilitates the district and school design decisions.
- » Redirect a portion of existing funding streams dedicated for low-performing schools. Title I school improvement funds and Title II educator effectiveness dollars are two sources state education agencies and LEAs nationwide have tapped to fund transitions to advanced teaching roles.

The funds would need to be both significant and time-limited. Districts and schools need enough funds to do in-depth planning and training. Smaller districts (4,000 or fewer students) could transition with \$300,000 to \$500,000 over three to five years, with larger districts (greater than 20,000 students) requiring \$1.5 million to \$2.0 million and mid-sized districts (4,001 to 20,000) requiring \$750,000 to \$1.25 million. Although these are significant amounts, spread over 5 to 10 years, they represent a relatively small and short-term statewide investment that would leave LEAs and schools with sustainably funded advanced roles for the long term. After the first few years, districts will build their own capacity to induct and train new staff on the advanced teaching roles and to improve the implementation of the staffing system. They will have a repository of knowledge to turn to when needed, internally as well as statewide.

## Learning and Continuous Improvement

North Carolina could support district and school learning in three ways. First, it could collect and curate professional learning resources from early-adopter districts. For example, Charlotte-Mecklenburg Schools has created a series of training modules for teachers in advanced teaching roles. The NCDPI could make these resources available statewide via its online delivery system.

Second, the state could provide ways for the districts to connect with each other. It could create venues for district leaders to share experiences and lessons, perhaps via in-person regional groups and across the state virtually. It could do the same for teachers in advanced teaching roles across the state. In fact, North Carolina could position itself as the hub of what the Carnegie Foundation for the Advancement of Teaching calls “network improvement communities” (NICs). Unlike many manifestations of communities of practice, NICs do more than share experiences; they solve implementation problems together. Every NIC needs a coordinating hub, and with scores of districts and hundreds of schools all trying to introduce new advanced roles in different contexts, the NCDPI, perhaps partnering with an external organization to coordinate with the NICs, is in a prime position to lead this work.

Finally, the state, in partnership with external parties, could add to its rich data to answer questions that would help districts understand the impact of the advanced teaching roles and to suggest solutions to implementation problems. A companion report in this series identifies the elements necessary to track progress toward meeting the goals of the *Leandro* decision, including an NCDPI-developed statewide dashboard of indicators. North Carolina could include information relevant to advanced roles and access to highly effective teaching in this dashboard, helping districts answer questions such as:

- » To what extent are student outcomes — test scores, discipline, absenteeism, being on track to graduate — improving because of the advanced roles?
- » How is the instructional effectiveness of the teachers being led by a teacher in an advanced role improving?
- » How are the advanced teaching roles affecting the school climate? Are the working conditions improving for the teachers on the team? For all staff in the school?
- » To what extent are the advanced teaching roles improving the retention of effective teachers in schools? In districts?
- » Are student teachers placed with a teacher holding an advanced role more likely to be effective in their first few years of teaching? To stay in teaching longer than their novice peers?
- » How do the answers to these questions vary by the characteristics of the advanced roles schools employ? Do certain team structures lead to better student outcomes?
- » What scheduling strategies are schools using to create more time for teacher leaders to lead their teams?
- » How are districts supporting principals in managing the advanced teacher roles? How are principals spending their time? How do they assess the value of advanced teaching roles in achieving school improvement goals?

There will be other questions that districts and schools want to answer. For all these questions, understanding if and to what extent things are improving is just a first step. Districts will also need to understand why. Using data to undergird district-to-district learning will improve implementation and outcomes for teachers and students in high-need schools.

# Appendix A. Span of Educator Roles

	Aspiring Teacher	Beginning Teacher	Experienced Teacher	Model Teacher	Teacher Leader		Leaders of Teachers (external to classroom)		
					Single Classroom	Multiple Classroom	Teacher Leadership Specialists	Principals/ Assistant Principals	Central Office
<b>Description</b>	Students enrolled in a teacher education program	Educators in their first three years of teaching	Educators who have completed all beginning teacher requirements	Educators who share and model best practices for others	Educators (who still have responsibility for regular direct instruction of students) who also provide leadership and support to other teachers	Educators who provide leadership and support to other teachers . <b>and</b> take responsibility for the learning of the students they teach, as well as those they reach through those teachers they lead and serve	Educators (who no longer have responsibility for regular direct instruction of students) who provide leadership and support to other teachers	Educators who serve as instructional leaders who provide building-level leadership and support	Educators who serve as instructional leaders who provide district-level leadership and support
<b>Performance Evaluation</b>	NC Preservice Rubric	NC Professional Teaching Standards					NC Teacher Leadership Specialist Standards	NC School Executive Standards	NC Instructional Central Office Standards

# References

- AFT & AIR. (2011). *Workplaces that support high-performing teaching and learning: Insights from Generation Y teachers*.
- Althaus, K. (2015). Job-embedded professional development: Its impact on teacher self-efficacy and student performance. *Teacher Development, 19*(2), 210–225.
- Aspen Institute Education and Society Program. (2018). *Developing a professional learning system for adults in service of student learning*. Washington, DC: Author.
- Backes, B., & Hansen, M. (2018). *Reaching further and learning more? Evaluating Public Impact's Opportunity Culture initiative*. CALDER Working Paper No. 181.
- Barnett, J. H., Hudgens, T. M., & Logis, H. A. (2018). *TAP research summary spring 2018: Examining the evidence and impact of TAP: The system for teacher and student advancement*. Santa Monica, CA: National Institute for Excellence in Teaching.
- Bayonas, H. G. (2010). *Guilford County Schools Mission Possible Program Year 3 (2008–09) External Evaluation Report*. Greensboro, NC: SERVE Center at University of North Carolina at Greensboro.
- Bierly, C., Doyle, B., & Smith, A. (2016). *Transforming schools*. Boston, MA: Bain & Company.
- Bill & Melinda Gates Foundation. (2014). *Teachers know best: Teachers' views on professional development*. Seattle, WA: Gates Foundation.
- Bonner, L. (2016, October 29). Candidates for NC governor look to public education's future. *The News & Observer*.
- Bonner, L., & Helms, A. D. (2014, October 3). Gov. McCrory proposes small NC teacher raises now, big changes in coming years. *The Charlotte Observer*.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal, 38*(4), 915–45.
- Granados, A., & Hinchcliffe, K. (2018, March 19). Restart program gives some low-performing schools flexibility to help struggling students. *EdNC*.
- Hanushek, E., Kain, J., & Rivkin, S. (2001). *Why public schools lose teachers*. Cambridge, MA: National Bureau of Economic Research.
- Jacob, A., Vidyarthi, E., & Carroll, K. (2012). *The irreplaceables: Understanding the real retention crisis in America's urban schools*. New York, NY: TNTP.
- Kraft, M., Blazar, D., & Hogan, D. (2018, August). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research, 88*(4), 547–88.
- Maser, R., & Stallings, T. (2018). *Teacher Compensation Models and Advanced Teaching Roles Pilot Programs: Year 1 (2017–18) Interim Report*. Raleigh, NC: The William and Ida Friday Institute for Educational Innovation at North Carolina State University.
- Minnici, A., Beatson, C., Berg-Jacobson, A., & Ennis, J. (2019). *Developing and supporting North Carolina's teachers*. San Francisco, CA: WestEd.
- National Institute for Excellence in Teaching. (2018). *Unleashing teacher leadership: How formal teacher leader roles can improve instruction*. Santa Monica, CA: Author.
- North Carolina Department of Public Instruction. 2015. *State plan to ensure equitable access to excellent educators*. Raleigh, NC: Author.
- Public Impact. (2015). *Summary analysis of NC differentiated pay plans*. Chapel Hill, NC: Author.
- Stallings, D. T., Maser, R., & Steinbrecher, T. D. (2018). *Teacher Compensation Models and Advanced Teaching Roles Pilot Programs Year 1 (2017–2018) Preliminary Report*. Raleigh, NC: The William and Ida Friday Institute for Educational Innovation at North Carolina State University.
- Supovitz, J. (2018). Teacher leaders' work with peers in a quasi-formal teacher leadership model. *School Leadership & Management, 38*(1), 53–79.
- TeachPlus. (2014). *The decade-plus teaching career: How to retain effective teachers through teacher leadership*. Boston, MA: Author.
- TNTP. (2015). *The mirage: Confronting the hard truth about our quest for teacher development*. New York, NY: Author.