

# 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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## Developing and Supporting North Carolina Teachers



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# Contents

<b>INTRODUCTION</b>	<b>1</b>
<b>BACKGROUND</b>	<b>6</b>
Literature Review	6
Understanding Teacher Growth and Development	10
<b>STATE POLICY CONTEXT</b>	<b>12</b>
Looking Back — Race to the Top	13
Current Context — The Every Student Succeeds Act	13
<b>CURRENT PROGRAMS AND INITIATIVES</b>	<b>15</b>
Support for Beginning Teachers	15
North Carolina Educator Effectiveness System	16
Key Takeaways	17
<b>APPROACH</b>	<b>18</b>
Equitable Access Data	18
Teacher Working Conditions Survey	18
Principal Survey	19
Extant Data	19

Focus Groups and Interviews	20
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<b>FINDINGS</b>	<b>21</b>
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Access to and the quality of professional learning opportunities vary across schools and districts.	21
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Teachers' professional environments differ across the state and influence teacher growth and development.	23
---	----

State-level efforts that support teacher growth and development are inadequate and inequitable.	26
---	----

North Carolina's regional support system lacks the capacity to support teacher growth and development for all districts.	27
--	----

The NCDPI does not systematically collect and analyze data about the types and effectiveness of professional learning opportunities available to teachers.	28
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<b>CONCLUSIONS</b>	<b>29</b>
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<b>REFERENCES</b>	<b>30</b>
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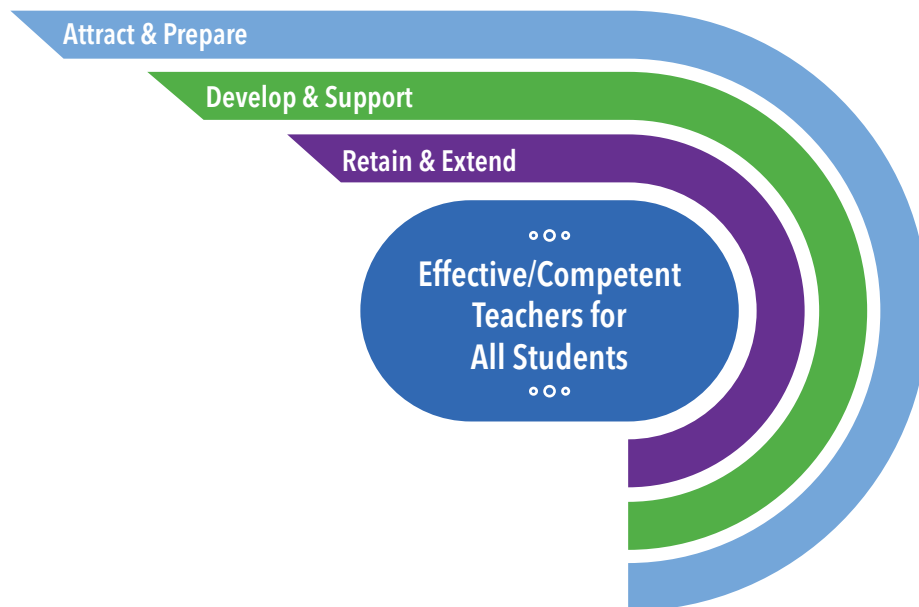
## List of Exhibits

Exhibit 1. A comprehensive approach to strengthening the teacher pipeline	1
Exhibit 2. Percentage of North Carolina teachers identified as Highly Effective (HE) and Needs Improvement (NI), by quartile of economically disadvantaged student population (2016–17)	3
Exhibit 3. Percentage of North Carolina teachers identified as Highly Effective (HE) and Needs Improvement (NI), by quartile of minority student population (2016–17)	3
Exhibit 4. Percentage of inexperienced North Carolina teachers, by quartile of economically disadvantaged student population (2016–17)	4
Exhibit 5. Percentage of inexperienced North Carolina teachers, by quartile of minority student population (2016–17)	4
Exhibit 6. Seven key characteristics of effective job-embedded professional learning	7
Exhibit 7. Elements of teacher professional environments	11
Exhibit 8. North Carolina’s proposed professional learning partnership model	14
Exhibit 9. Constructs measured by the North Carolina Teacher Working Conditions Survey	19
Exhibit 10. Influence of professional environment on teacher effects on math achievement	24
Exhibit 11. District-level average professional environment rating (2015–16)	25

# Introduction

Research definitively indicates that teachers are the most important school-based factor affecting student achievement (McCaffrey, Lockwood, Koretz, & Hamilton, 2003; Rivkin, Hanushek, & Kain, 2005; Rowan, Correnti, & Miller, 2002; Wright, Horn, & Sanders, 1997). Therefore, it's critical that states, districts, and schools strategically develop and sustain comprehensive teacher pipelines that address the three key areas illustrated in Exhibit 1 (Minnici, Barringer, & Hassel, 2016): attracting teachers into the profession and adequately preparing them to meet the needs of their students, particularly those students who come from challenging circumstances; developing teachers once they are in the classroom and supporting them to continue to be successful in the profession; and retaining effective teachers and making sure the most effective teachers impact as many students as possible. Piecemeal approaches that focus on one part of the pipeline, yet ignore the other parts, have been ineffective in improving the educator workforce significantly and at scale.

## Exhibit 1. A comprehensive approach to strengthening the teacher pipeline



Source: Minnici, Barringer, & Hassel (2016)

Every child in North Carolina deserves an effective teacher. Yet the promise of a competent, certified, well-trained teacher is too often left unfulfilled for economically disadvantaged students and students of color. There is

mounting evidence nationwide that the most-disadvantaged students are much more likely than their peers to be taught by less effective or less experienced teachers (Goldhaber, Lavery, & Theobald, 2015; DeMonte & Hanna, 2014). And yet, despite ongoing efforts to address such inequities, these gaps in access persist (Glazerman & Max, 2011).

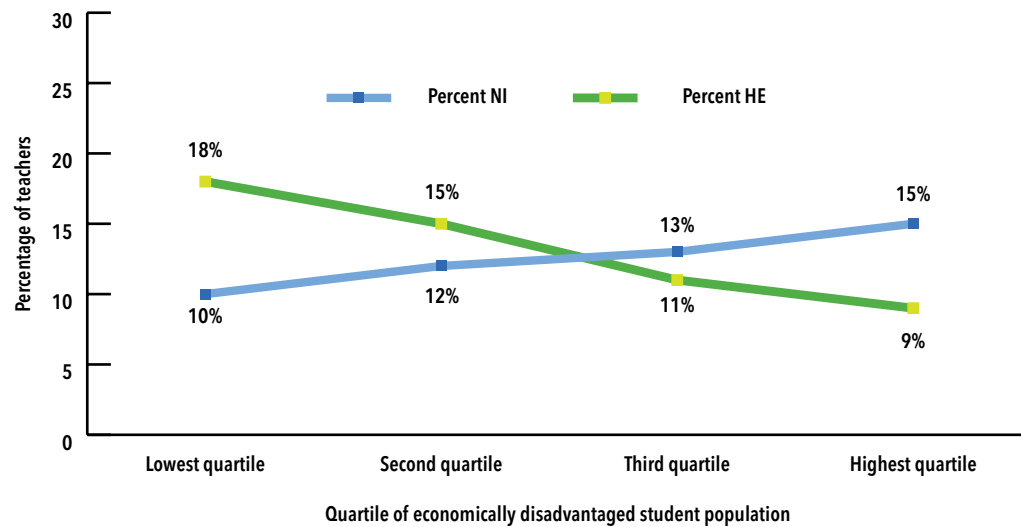
Economically disadvantaged students in North Carolina are no different from their national peers. They, too, have less access to effective and experienced teachers. In our analysis of educator supply and demand in North Carolina, we found that 53% of the state’s lateral entry teachers — those who enter teaching before they have had training to teach — are found in high-poverty (top two deciles) schools, compared with only 30% in low-poverty schools. Among these, 60% of North Carolina’s Teach for America recruits were teaching in higher-poverty schools, compared with only 7% in lower-poverty schools (Darling-Hammond, Bastian, Berry, Carver-Thomas, Levin, & McDiarmid, 2019).

Underprepared teachers teaching in high-poverty schools don’t have the experience that would help them succeed, and they need support in learning how to deliver high-quality instruction. They also rarely have the knowledge and skills to address the social-emotional learning needs of their students. And without significant training in teaching high-need students, teachers struggle in contributing to consistent, and equitable, school discipline policies and practices (Podolsky, Kini, Bishop, & Darling-Hammond, 2016).

Recent data show that the least effective teachers are more highly concentrated in North Carolina’s highest-poverty schools than in its lowest-poverty schools. In 2017, 14.9% of teachers in the highest-poverty schools were rated “Needs Improvement” per the North Carolina Educator Effectiveness System (NCEES), compared with only 9.7% of teachers in the lowest-poverty schools (see Exhibit 2). The gap in access to more effective teachers is even wider in schools serving greater percentages of students of color. In 2017, 17% of teachers in schools with the greatest proportion of students of color were rated “Needs Improvement,” compared with only 9.7% of teachers in schools with the lowest proportion of students of color (see Exhibit 3).

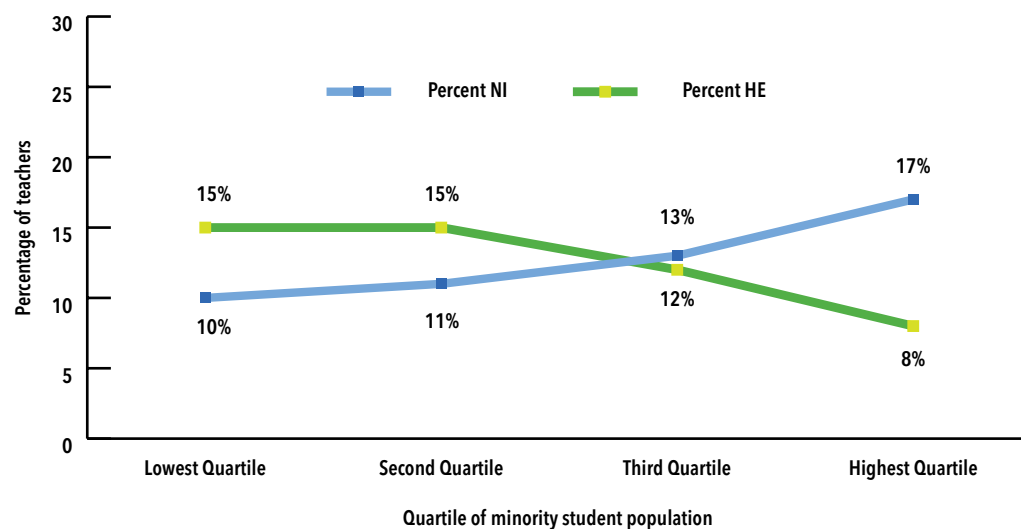
Furthermore, closing achievement gaps requires that teachers who are the most effective be assigned to schools and students with the most significant needs. According to a TNTP study (2012), the top 20% of performers generated five to six more months of student learning each year compared with poor-performing teachers. Yet, as shown in Exhibit 2 and Exhibit 3 on page 3, economically disadvantaged students and students of color in North Carolina are less frequently taught by those teachers designated as “Highly Effective.”

**Exhibit 2. Percentage of North Carolina teachers identified as Highly Effective (HE) and Needs Improvement (NI), by quartile of economically disadvantaged student population (2016–17)**



Source: North Carolina Department of Public Instruction (2018)

**Exhibit 3. Percentage of North Carolina teachers identified as Highly Effective (HE) and Needs Improvement (NI), by quartile of minority student population (2016–17)**



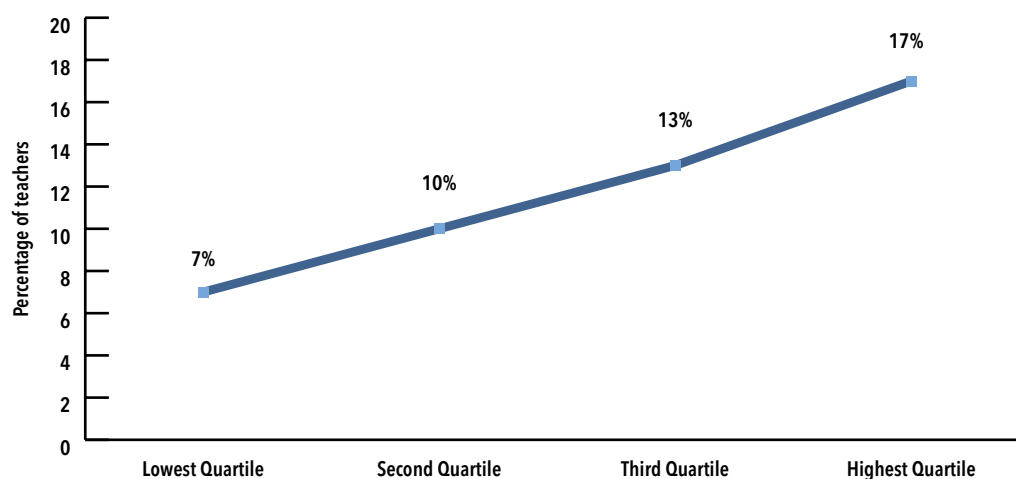
Source: North Carolina Department of Public Instruction (2018)

An examination of teacher experience reveals the same disconcerting patterns. The highest-poverty schools and schools with the highest proportions of students of color employed higher percentages of teachers with



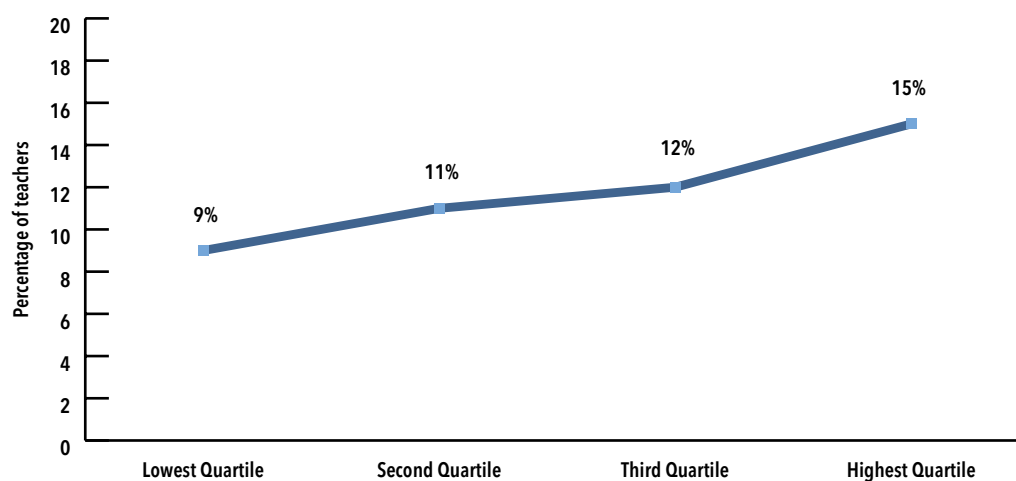
fewer than three years of experience. In 2017, 14.6% of teachers in the highest-poverty schools were inexperienced, compared with only 9.4% of teachers in the lowest-poverty schools (Exhibit 4). Again, the gap in access to experienced teachers is even wider for students of color. In 2017, 17.1% of teachers in schools with the greatest proportion of students of color were inexperienced, compared with only 7.2% of teachers in schools with the lowest proportion of students of color (Exhibit 5).

**Exhibit 4. Percentage of inexperienced North Carolina teachers, by quartile of economically disadvantaged student population (2016–17)**



Source: North Carolina Department of Public Instruction (2018)

**Exhibit 5. Percentage of inexperienced North Carolina teachers, by quartile of minority student population (2016–17)**



Source: North Carolina Department of Public Instruction (2018)

Ensuring that all students, but particularly students of color and economically disadvantaged students, have access to effective and experienced teachers is critical to their academic success and to closing persistent achievement gaps (TNTP, 2012). In addition, recent research demonstrates that all students — and students of color in particular — benefit from opportunities to learn in classrooms led by teachers of color (Cherng & Halpin, 2016). Specifically, research suggests that “student-teacher demographic match affects primary school students’ short-run outcomes” (Dee, 2004; Egalite, Kisida, & Winters, 2015; Holt & Gershenson, 2015), and access to adults with similar backgrounds to the student population improves community bonding and lowers cultural barriers (Ahmad & Boser, 2014). North Carolina’s current teacher workforce, however, is only about 20% teachers of color even though more than half of the state’s students are students of color.

These data clearly demonstrate that students of color, economically disadvantaged students, and students in high-poverty schools in North Carolina are all less likely to have access to effective, experienced, and diverse teachers. “Every student deserves a great educator, not by chance, but by design” (Fisher, Frey, & Hattie, 2016, p. 2). Revitalizing North Carolina’s educational system and closing the equity gaps requires a multifaceted approach that addresses the adequacy, quality, and diversity of the supply of both current and prospective teachers. This paper addresses one key lever of a comprehensive and coherent approach to strengthening the teacher workforce: developing and supporting in-service teachers across all districts and schools to implement evidence-based and culturally responsive instructional practices that meet students’ unique needs. The sections below detail the policies and programs currently in place to support teachers’ growth and development across all career stages, teachers’ perspectives on their current professional environments, and the extent to which those environments facilitate such growth and development.

# Background

## Literature Review

### Characteristics of High-Quality Professional Learning

Improving teacher performance and increasing instructional quality does not end at the culmination of a teacher's preparation program. The opposite is true; teacher development actually begins when newly licensed teachers take the first step into their classrooms to teach. Having ongoing, high-quality professional learning opportunities, particularly those that are job-embedded, is essential to developing strong and highly qualified teachers. Research demonstrates that high-quality professional learning contributes to growth in teachers' knowledge and practice that leads to improvements in student outcomes (Archibald, Coggshall, Croft, & Goe, 2011; Darling-Hammond, Hylar, & Gardner, 2017). How adults learn, though, is both similar to and distinct from how children learn (Knowles, 1984). A key distinction, however, is that adult learners are self-directed, are internally motivated, possess extensive life experience, have a broader worldview, and have a high need for relevance and immediate application of what they are learning (Knowles, Holton, & Swanson, 2015; O'Toole & Essex, 2012). Consequently, how adult learning experiences are designed matters (Loucks-Horsley, Stiles, Mundry, Love, & Hewson, 2010). Adults need to be involved in the planning and evaluation of their own learning. It needs to be designed around the experiences adults bring to the work, it needs to be relevant to the adult learners, and it needs to be problem-centered (Knowles, Holton, & Swanson, 2015).

Further, when we examine high-performing school systems across the globe and their approach to developing and growing teachers, we see systems that are strategic and intentional about teacher growth and development. Key components of these systems include: (1) school improvement that is organized around effective professional learning, (2) professional learning that is ongoing, collaborative, and job-embedded, that is, it's built into the daily work of teachers and school leaders, and (3) extensive mentoring and coaching for all teachers as part of their professional learning (Jensen, Sonnemann, Roberts-Hull, & Hunter, 2016; Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009).

Despite the importance of job-embedded professional learning, not all approaches succeed at improving teacher practice and increasing positive student outcomes. Research indicates that, unfortunately, "many [professional development] initiatives appear ineffective" (Darling-Hammond, Hylar, & Gardner, 2017; Garet et al., 2008). In order to be successful, professional learning opportunities must include essential, research-based characteristics.

The seven key characteristics described in Exhibit 6 below are essential for professional learning to have a positive impact on both teachers and students (Darling-Hammond, Hylér, & Gardner, 2017).

### Exhibit 6. Seven key characteristics of effective job-embedded professional learning

Professional learning is effective when it ...	
<b>Is content focused</b>	Focuses on teaching strategies associated with specific curriculum content; includes an intentional focus on discipline-specific curriculum development and pedagogies
<b>Incorporates active adult learning</b>	Engages teachers directly in designing and trying out teaching strategies, using authentic artifacts and interactive activities to provide deeply embedded, highly contextualized professional learning; moves away from traditional lecture-based learning models and environments
<b>Supports collaboration</b>	Creates space for teachers to share ideas and collaborate in their learning, often in job-embedded contexts
<b>Uses models of effective practice</b>	Provides teachers with a clear vision of what best practices look like; may include lesson plans, unit plans, sample student work, observations of peer teachers, and video or written cases of teaching
<b>Provides coaching and expert support</b>	Involves the one-on-one sharing of expertise about content and evidence-based practices, focused directly on teachers' individual needs
<b>Offers feedback and reflection</b>	Provides built-in time for teachers to think intentionally about, receive input on, and make changes to their practice by facilitating reflection and soliciting feedback
<b>Is of sustained duration</b>	Provides teachers with adequate time to learn, practice, implement, and reflect upon new strategies that facilitate changes in their practice

*Source: Descriptions included within the table were adapted from Darling-Hammond, Hylér, & Gardner (2017)*

The key characteristics described in Exhibit 6 indicate that high-quality professional learning requires a multi-faceted and systemic approach. Short-term or one-stop-shop approaches to professional development, such as after-school workshops and isolated summer trainings, are generally unable to provide what teachers need to support their professional growth. Although such one-time events that take place outside the school context have their merits, application and refinement of knowledge and strategies gained through professional learning occurs through job-embedded experiences that include, but need not be limited to, professional learning communities (PLCs) (small groups of teachers who collaborate together to improve teaching and learning), lesson study, and cycles of formative observation and feedback.

### Job-Embedded Professional Learning: Examining Practices That Build Teacher Capacity

The term *job-embedded professional learning* (JEPL)<sup>1</sup> is commonly used to describe high-quality professional learning that meets the seven key characteristics identified in Exhibit 6. JEPL refers to professional learning that is “grounded in day-to-day teaching practice and is designed to enhance teachers’ content-specific instructional practices with the intent of improving student learning” (Croft, Coggshall, Dolan, Powers, & Killian, 2010, p. 2).

<sup>1</sup> Job-embedded professional learning is occasionally referred to as job-embedded professional development or JEPD. The terms are used interchangeably for the purposes of this report.

This type of professional learning takes place in the school, during or close to the time of student instruction, and is centered on teachers' actual practice. JEPL is not a cookie-cutter approach — it comes in a variety of forms and styles, including self-study, one-on-one coaching and guidance, and collaborative learning in teams. It has been widely identified as a highly effective approach to professional learning and has a myriad of direct applications in both school and district settings.

Historically, teacher professional development often entailed teachers attending single-day or short-duration workshops outside school. These engagements typically do not result in learning that transfers back into the classroom due to their misalignment with the school's goals and insufficient support and follow-up to apply what was learned. Such one-time experiences can be effective, but only if school-level systems and structures are in place to ensure that learning continues as teachers return to their classrooms. Teachers may receive credit for "seat time" in a lecture-style professional learning opportunity, with little time for connecting it to or reflecting on how it applies to their professional practice.

Research has found that professional development with a focus on academic content, opportunities for teachers to experience hands-on learning, and coherent integration with the classroom is more likely to produce enhanced teacher knowledge and skills (Garet, Porter, Desimone, Birman, & Yoon, 2001). Furthermore, when studying the impact of job-embedded mathematics professional development, Althaus (2015) concluded that JEPL may lead to greater teacher self-efficacy and improved student performance. In a major study of more than 800 meta-analyses, Hattie found that one of the key characteristics of highly effective teachers is that they view student progress as feedback on their teaching, and they continuously seek out data specific to their teaching in order to adjust and improve their practices (Hattie, 2009). JEPL facilitates this method of professional growth, as it is immediately applicable to the classroom setting and therefore enables teachers to collect real-time data on their students' learning. Current professional learning is too often focused on just teacher learning and doesn't make the critical connection to examining evidence of student learning and improving instruction and educational opportunities to increase student performance.

Other features of high-quality professional development include collaboration, coaching and expert support, and opportunities for feedback and reflection. Research has shown that collaborating, co-teaching, or having purposeful conversations about practice is linked to better student achievement and teacher morale (Bouchamma, Savoie, & Basque, 2012). Opportunities to collaborate may make teachers less likely to leave the profession (Ingersoll & Smith, 2004; Ingersoll & Strong, 2011). As part of JEPL, teachers can engage in multiple types of professional collaboration settings, including individual (coaching or mentorship) and small group (communities of practice).

Specifically, microteaching and lesson study are two effective models of collaborative inquiry used to improve instruction. Microteaching is an approach to teacher development often used in teacher preparation programs that work well in school-based PLCs to support JEPL (Kourieos, 2016). Microteaching involves teachers collaboratively designing lessons, teaching the lessons to one another, and ultimately engaging in analysis of the lessons, which is typically led by a professor or teacher leader. Lesson study is very similar to microteaching, but is more structured (e.g., Rock & Wilson, 2005). The approach, founded in Japan, engages small groups of teachers — led by a "knowledgeable other" who facilitates the process — in the ongoing study and analysis of a single lesson,

referred to as a “research lesson” (Takahashi, 2014). The lesson study process typically involves repeating a cycle of goal setting, planning, implementing, observing, analyzing, and revising the lesson (Lewis, 2002; Doig & Groves, 2011).

### **Coaching and Mentoring Models With JEPL**

Coaching and mentoring are frequently used approaches to JEPL. In a 2018 meta-analysis of available research on teacher coaching, Kraft, Blazar, and Hogan provide a definition of coaching that closely mirrors the seven features of high-quality professional learning introduced earlier, including: coaching as the process “where instructional experts work with teachers to discuss classroom practice in a way that is (a) individualized — coaching sessions are one-on-one; (b) intensive — coaches and teachers interact at least every couple of weeks; (c) sustained — teachers receive coaching over an extended period of time; (d) context-specific — teachers are coached on their practices within the context of their own classroom; and (e) focused — coaches work with teachers to engage in deliberate practice of specific skills” (Kraft, Blazar, & Hogan, 2018, p. 553).

Coaching may sometimes be confused with mentoring, but the content of the coaching interaction is more specific. Coaching, or expert support, focuses on individual aspects of instruction — both on what worked well and what could be improved — ultimately to strengthen teachers’ future practice. An instructional coach may provide lesson demonstrations, as well as feedback based on observation as the teacher implements new instructional practices. Typically, instructional coaches have expertise in the applicable subject area and related teaching strategies. In addition to coaching, new teachers also benefit from mentoring focused on preparing them for their role and responsibilities within a school.

Mentoring encompasses professional as well as personal and nonacademic topics related to teaching, including learning school norms, working effectively with families, maintaining a work/life balance, and collaborating with peers (Rowley, 2005).

An added benefit to instituting coaching and mentoring models is the pathway it creates for teacher leadership opportunities while keeping teachers in the classroom. In many districts, teacher coaches continue to teach in their own classrooms part time while they coach other teachers and may still work as a teacher in the school in which they are coaching. Although often used to support beginning teachers, coaching and mentoring models are useful for teachers at any stage of their professional career and also for when a school is implementing new curriculum or other innovations.

According to Kraft, Blazar, and Hogan (2018), coaching, when implemented well (e.g., coaches’ time to spend one-on-one with teachers is protected from other administrative duties), has a large positive effect on teachers’ instructional practices. The researchers examined the effect of teacher coaching across 43 studies, and they found that coaching’s effect on instructional quality was larger than the difference in instructional quality between novice and veteran teachers. In other words, having a coach can help close the gap in effective instruction that we often observe when comparing novice and veteran teachers. In addition, teacher coaching had an independent, positive effect on student achievement, as indicated by performance on standardized tests. The effects of coaching were also greater than various school-based improvement strategies explored in previous studies,

such as preservice training and merit-based pay for teachers and extended learning time for students. Thus, investments in instructional coaching aligned with best practices in JEPL have significant potential payoffs for teacher growth and development and student achievement.

### **Implementing JEPL at Scale: Examining Systems That Build Capacity**

Although there is strong research support for engaging teachers in JEPL to build their capacity, certain school- and district-level conditions must be cultivated in order for JEPL to become established in the infrastructure (Kraft et al., 2018). The most common barrier to successful implementation is time. Due in part to the limited time available in teacher contracts for professional learning, current professional learning models often rely on short, one-time workshops, despite that approach's misalignment with the features of high-quality professional learning. Short-term and sporadic professional learning opportunities often rely on lecture-style modes, which are contrary to the research calling for active adult engagement. Other barriers include a lack of access to quality facilitators (e.g., coaches, expert sources, mentors) to support teacher inquiry and learning (Kraft et al., 2018); Blazar & Kraft, 2015). In order to address these issues, districts must protect time for teachers' engagement in JEPL — potentially through already-existing structures such as PLCs or grade-level meetings — in conjunction with providing a pathway for teachers to enter leadership roles that support implementation of JEPL while maintaining their connections to the classroom (Kraft et al., 2018)).

## Understanding Teacher Growth and Development

There has been much debate about how, when, and under what conditions teachers grow and develop. Some researchers have argued that teachers develop significantly more early in their careers and show much slower improvement beyond those initial years (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2008; Rockoff, 2004). More recent research, however, suggests that teachers continue to develop throughout their careers (Podolsky & Kini, 2016; Kraft & Papay, 2014; Papay & Laski, 2018; Wiswall, 2013).

In addition to the availability and quality of professional learning opportunities, research suggests that teachers' professional environments influence their development (Kraft & Papay, 2014; Papay & Kraft, 2013; Papay & Laski, 2018). In other words, the conditions of the environments in which teachers work play a role in the growth and development of their knowledge and skills and can impact how quickly teachers move (or do not move) from novice to proficient to expert. For example, Papay and Kraft (2013) found that a positive working environment helped explain why some teachers improve over a three-year period of time compared with teachers working in less positive environments. In their 2014 study of North Carolina's Charlotte-Mecklenburg Schools, Kraft and Papay investigated how teachers' professional environment influences their development and effectiveness. They define a professional environment as having the elements described in Exhibit 7.

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## Exhibit 7. Elements of teacher professional environments

Element	Description
Order and discipline	Extent to which the school is a safe environment, where rules are consistently enforced and administrators assist teachers in their efforts to maintain an orderly classroom
Peer collaboration	Extent to which teachers are able to collaborate to refine their teaching practices and work together to solve problems in the school
Principal leadership	Extent to which school leaders support teachers and address their concerns about school issues
Professional development	Extent to which the school provides sufficient time and resources for professional development and uses them in ways that enhance teachers' instructional abilities
School culture	Extent to which the school environment is characterized by mutual trust, respect, openness, and commitment to student achievement
Teacher evaluation	Extent to which teacher evaluation provides meaningful feedback that helps teachers improve their instruction and that is conducted in an objective and consistent manner

Source: Reprinted from "Do supportive professional environments promote teacher development? Explaining heterogeneity in returns to teaching experience," by Kraft & Papay (2014), in *Educational Evaluation and Policy Analysis*. Retrieved from <https://doi.org/10.3102/0162373713519496>

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To support their growth and development, teachers must have sufficient opportunities to engage in high-quality JEPL that includes experiences that are interactive, sustained, and differentiated according to their needs. Although targeted professional learning for novice teachers through comprehensive, multiyear induction and mentoring is essential for mitigating the negative effects of inexperience on student outcomes (Ingersoll & Strong, 2011), these high-quality JEPL opportunities should not be limited to teachers' first few years on the job. Research suggests that teachers can and do continue to develop over the course of their careers, but not without the support to do so (Kraft & Papay, 2014).

High-quality JEPL is just one aspect of teachers' professional environment, and alone, it is not sufficient; teachers' continuous growth and development hinges on the quality of the collective aspects of the professional environment. That is, strong leadership must advocate and create the conditions for JEPL to occur or allocate the resources for others to do so. This includes making necessary adjustments to the scheduling structure to facilitate peer collaboration and providing timely, actionable feedback.



# State Policy Context

Although there is ample evidence that teacher growth and development must be supported through high-quality, job-embedded professional learning, the systems and structures that enable such experiences are often missing or insufficient. In this section, we examine the state's policies and practices currently in place compared with what we know about high-quality professional learning systems to determine what professional learning is currently available for teachers and whether those opportunities are likely to support teacher growth and development.

The North Carolina Department of Public Instruction (NCDPI) states that it is “committed to supporting [the] state’s educators as they seek to refine their instructional and professional practices” (North Carolina Department of Public Instruction, n.d.). In addition, the North Carolina State Board of Education (SBE) formally adopted Learning Forward’s Standards for Professional Learning to serve as guidance for both the design and the assessment of quality of professional learning opportunities. Yet despite this rich history and the initial investments in the teacher pipeline, many of the programs and policies that had been put in place over the past several decades are no longer being funded or have been eliminated altogether. In 1985, the General Assembly established the nonprofit North Carolina Center for the Advancement of Teaching (NCCAT) to provide professional development on a broad range of topics and innovative support to veteran teachers through weeklong residential programs to conduct research and develop leadership skills. By 2006, state funding for the NCCAT, which at that time served as many as 5,000 teachers per year, had increased to \$7 million annually. In 2011, however, the budget was cut by more than 50%, and the program changed dramatically.

Another example of a state-supported program is the Teacher Academy, which was established in the mid-1990s to support professional development for teachers and administrators. By 2010, the annual budget for the Teacher Academy had grown to \$4.7 million, and it began to customize professional development for teachers and administrators in low-performing schools and districts, per their school improvement plans. The Teacher Academy was defunded in 2010.

And in the early 2000s, the Coach2Coach program was in effect. The program organized and provided systemic, professional support statewide to those who mentored new teachers or supervised preservice interns (Edelfelt & Coble, 2004). During the 2001–02 school year, nearly 5,000 preservice teachers and faculty and more than 13,000 in-service teachers participated in sessions conducted by Coach2Coach teachers (Edelfelt & Coble, 2004). However, this program, too, has since been eliminated.

Beginning in 2010, the state began using some of its Race to the Top (RttT) grant funding to develop and implement a wide array of professional learning reforms, including state-level support for the transition to new

curriculum standards, the implementation of formative and summative assessments, the use of data to support instruction, the effective utilization of the NCEES, and the use of technology for teaching and learning (Smart et al., 2015). Much of this support became unsustainable, however, upon the expiration of the grant period in 2015. More recently, the state has reintroduced some of these professional learning reforms under the Every Student Succeeds Act (ESSA), but a lack of state-level funding and capacity to implement the reforms has prevented widespread, consistent impact on instructional practices.

## Looking Back — Race to the Top

North Carolina received nearly \$400 million for its public school system through the U.S. Department of Education-funded RttT competitive grant program, which included specific funding for comprehensive support for educator growth and development. An anchor of the RttT professional development components was the establishment of the North Carolina Professional Development Initiative (PDI). The PDI built on regional and statewide professional development programs and resources to provide a comprehensive, targeted, seamless, and flexible system for all educators. One of the core activities proposed as part of the PDI was the establishment of “a cadre of Professional Development Leaders to serve as professional development resource developers, workshop leaders, professional learning community coaches, and content-specific regional coaches,” an infrastructure critical for expanding and sustaining support (North Carolina Department of Public Instruction, 2010, p. 185).

The RttT grant period lasted only through 2014, with a no-cost extension that supported the continuation of certain state and local activities through 2015. According to an evaluation of the final year (2013–14) of RttT implementation, “Another focus in SY 2014–2015 will be providing ongoing professional development to ensure that educators in the State have the training and information needed to continue carrying out major reform initiatives. The State will maintain personnel needed to implement the Professional Development Initiative framework” (U.S. Department of Education, 2015, p. 6). However, professional development coordinators and principals “expressed uncertainty about how their LEAs [local education agencies] and schools would pay for professional development efforts in the future” (Smart et al., 2015, p. 3).

Also concerning professional development supports, “Overall, the results of this evaluation show that much has been accomplished, but also that professional development efforts need to continue and that the LEAs need additional resources and supports to ensure that effective professional development — focused on priority areas and supported to meet local needs — continues to be available throughout the state” (Smart et al., 2015, p. 5). Despite this identified need for additional resources and supports, there is no evidence that efforts were continued in a systemic way.

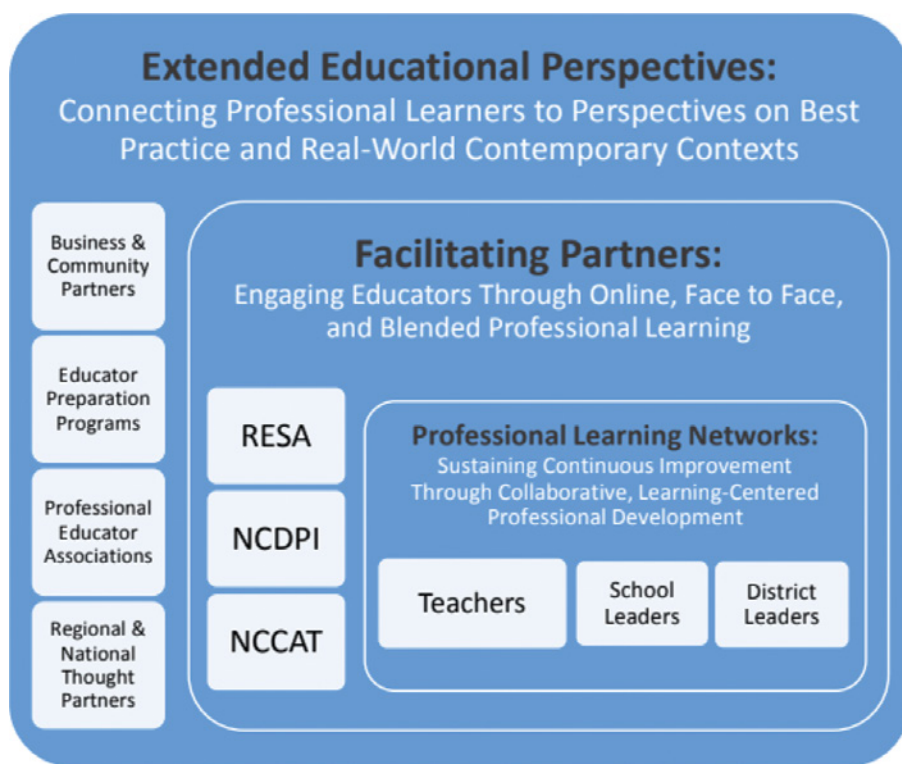
## Current Context — The Every Student Succeeds Act

In 2018, the U.S. Department of Education approved North Carolina’s ESSA Consolidated State Plan, which outlines the state’s overall system of support through which professional development will be provided, as well as associated standards and policies (see Exhibit 8). According to the plan, North Carolina’s state system of development and support is organized by support regions made up of districts in each of the state’s eight SBE

districts; each region has a dedicated NCDPI Regional Support Team. These Regional Support Teams assist districts and charter schools with the development of a “comprehensive professional development plan” and provide targeted support to principals, assistant principals, and teachers. Support is provided through in-person and online formats, which includes online modules (self-paced and instructor-led), webinars, and regional professional development opportunities. Multiple entities collaborate with the NCDPI to provide this support, primarily Regional Educational Service Alliances (RESAs) and the NCCAT.

In 2019, NCDPI staff presented additional aspects of this regional support structure redesign that build upon the model included in the state’s ESSA Consolidated State Plan. Additional aspects include the hiring and placement of Regional Case Managers in each of the eight SBE districts to oversee the existing Regional Support Teams and increased collaboration between the Regional Support Teams and the districts to determine needs, plan for support, and evaluate services.

**Exhibit 8. North Carolina’s proposed professional learning partnership model**



Source: North Carolina Department of Public Instruction, 2018

# Current Programs and Initiatives

Although some professional learning programs and initiatives are clearly defined in the state’s ESSA plan, the scope of these programs and initiatives is limited, implementation has not yet begun and state-level capacity to do so is inadequate, and there is little quality or impact data available. Furthermore, fluctuations in funding for the state’s system of development and support over the past 20 years — with sharp declines in funding upon the conclusion of RttT and subsequent budget cuts at the NCDPI — have significantly hindered progress and success of these professional learning efforts.

## Support for Beginning Teachers

To ensure adequate support for beginning teachers (BTs), the SBE adopted a policy (TCED-016) that requires all LEAs and charter schools (with licensed teachers) to implement a Beginning Teacher Support Program (BTSP), a three-year induction program for BTs that must include a formal orientation, mentor support, and formative observations and summative evaluations. LEAs and charter schools are required to develop and submit for approval by local boards and the NCDPI a BTSP plan aligned to the program’s standards, both for BTs and the mentors they’re assigned. LEAs and charter schools are monitored by the state for compliance with this policy as they implement their locally developed plans, but monitoring is scheduled to occur only once every five years.

### New Teacher Support Program

The state “used \$7.7M of its RttT funds to create and implement the New Teacher Support Program (NTSP), an induction model aimed at helping novice teachers in the state’s lowest-performing schools acquire the knowledge and skills necessary to raise the quality of their instruction, increase student achievement, and persist in teaching in their lowest-performing schools” (Bastian & Marks, 2017, p. 2). The NTSP supplements already-existing school-based induction programs and incorporates three core components: (1) a conference-style professional institute; (2) intensive, individualized classroom coaching (e.g., co-teaching, modeling, collaborative planning); and (3) professional development sessions aligned with districts’ needs. According to an analysis of program outcomes (Bastian & Marks, 2017), the NTSP increased teacher retention and performance for those participating most intensively and receiving more coaching.

Beyond the RttT grant period, however, the state’s General Assembly provides only some funding for program administration, and individual districts bear the burden of paying \$2,200 per novice teacher to participate. The

NTSP currently serves more than 1,000 BTs in more than 40 districts — this equates to about 6% of BTs and less than half of districts statewide. Furthermore, the NTSP currently partners with only nine institutions of higher education (IHEs) to deliver its core components, limiting the program’s capacity and reach; none of the current IHE partners is a minority-serving institution. Thus, despite the NTSP’s combination of components that research confirms has a positive impact on teacher practice and student outcomes, the program’s cost and narrow reach have limited its influence across the state’s BT population, especially within small and rural districts.

## State-Level Training and Resources

The NCDPI provides resources on its website to support LEA and school-level implementation of local Beginning Teacher Support Programs, including standards for beginning teachers and mentors, links to websites and blogs, presentations to support mentor training, and online professional development modules addressing a variety of topics, including the state’s code of ethics for all educators, educator evaluation process, and professional teaching standards, as well as strategies for developing and maintaining a positive learning environment.

There are also regionally based efforts to support local implementation of BTSPs. IHE-BT Coordinator Collaborative Conversations meetings are held quarterly in each of the eight regions of North Carolina. The meetings are facilitated by the Regional Education Facilitators. These collaborative conversations have been held on the campuses of IHEs or within local districts in each of the respective regions. The purpose is to enhance collaboration between the IHE and the district/charter school while promoting the improvement of mentor development and induction programs. The time frame is a minimum of three hours. During the course of the meetings, IHEs and districts/charter schools collaborate, share, and plan activities to promote growth of prospective teachers, beginning teachers, and mentors. In addition to these collaborative conversations, IHEs and districts/charter schools have been provided presentations from other education stakeholders, including the NCDPI. However, the extent to which these resources are accessed and used is unclear.

## North Carolina Educator Effectiveness System

Most recently revised by the SBE in 2015, the NCEES includes the professional standards and evaluation processes that apply to every educator in North Carolina. According to the state’s teacher evaluation process manual, the purpose of the NCEES for teachers specifically is to “assess their performance in relation to the North Carolina Professional Teaching Standards and to design a plan for professional growth” (North Carolina State Board of Education & North Carolina Department of Public Instruction, 2015).

Data for the NCEES are captured annually in an online tool, and the information is included in the Educator Effectiveness data reported at the state level. Teachers’ overall “status” is determined once they have a three-year rolling average of student growth values; the three “status” categories are In Need of Improvement, Effective,

and Highly Effective.<sup>2</sup> Beginning teachers must be evaluated per the Comprehensive Evaluation Cycle, which includes three formal observations by the principal and one formal observation by a peer. Teachers with more than three years of experience may be evaluated per the Standard or Abbreviated Evaluation Cycles, which include fewer formal observations.

In addition to the manual detailing the teacher evaluation process, which includes specific instructions for engaging in the various cycles as well as templates and forms evaluators can use, the NCDPI provides technical support and professional learning opportunities to supplement the online tool for gathering NCEES data.

## Key Takeaways

From 2010 to 2014, the RttT grant provided North Carolina with significant funding for professional learning, particularly for educators in the state's lowest-performing schools. Although the professional learning investments were nominally aligned with high-quality JEPL, there is little evidence that they continued to be implemented with fidelity and at scale throughout the state after the grant ended. Not surprisingly, there is also little evidence that the RttT improved instructional quality or increased student achievement beyond the funding period.

In the wake of the elimination of RttT funding, the state's financial investment in high-quality job-embedded professional learning has decreased significantly. This decline has disproportionately impacted low-wealth districts, which, unlike their wealthier counterparts, cannot compensate for the decrease in state funding through district-funded initiatives.

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<sup>2</sup> The three status categories are defined as follows:

- In Need of Improvement: A teacher who fails to receive a rating of at least "proficient" on each of the Teacher Evaluation Standards 1–5 or receives a rating of "does not meet expected growth" on Standard 6 of the Teacher Evaluation Instrument.
- Effective: A teacher who receives a rating of at least "proficient" on each of the Teacher Evaluation Standards 1–5 and receives a rating of at least "meets expected growth" on Standard 6 of the Teacher Evaluation Instrument.
- Highly Effective: A teacher who receives a rating of at least "accomplished" on each of the Teacher Evaluation Standards 1–5 and receives a rating of "exceeds expected growth" on Standard 6 of the Teacher Evaluation Instrument

# Approach

To address the extent to which the current policies, programs, and professional environments in place support the growth and development of North Carolina teachers, WestEd examined the following qualitative and quantitative data sources.

## Equitable Access Data

WestEd conducted an analysis of teacher effectiveness and experience data from the National Center for Education Statistics (NCES) by quartiles of economically disadvantaged students and students of color to determine the extent of inequities in access to “excellent educators.” The North Carolina ESSA Consolidated State Plan also served as a key source for equitable-access data, given that individual-level overall-effectiveness-status data are not publicly available through the NCES.

## Teacher Working Conditions Survey

WestEd accessed and analyzed publicly available data from the biannual North Carolina Teacher Working Conditions Survey. More than 120,000 educators responded to the survey, which was most recently administered in 2018. The survey measures the constructs described in Exhibit 9.

## Exhibit 9. Constructs measured by the North Carolina Teacher Working Conditions Survey

Construct	Description
Community support and involvement	Community and parent/guardian communication and influence in the school
Teacher leadership	Teacher involvement in decisions that impact classroom and school practices
School leadership	Ability of school leadership to create trusting, supportive environments and address teacher concerns
Management of student conduct	Policies and practices to address student conduct issues and ensure a safe school environment
Use of time	Available time to plan, collaborate, provide instruction, and eliminate barriers in order to maximize instructional time during the school day
Professional development	Availability and quality of learning opportunities for educators to enhance their teaching
Facilities and resources	Availability to educators of instructional, technology, office, communication, and school resources
Instructional practices and support	Data and support available to teachers to improve instruction and student learning

Source: Reprinted from 2018 North Carolina Teacher Working Conditions Survey Scatterplots Companion, by The New Teacher Center (2018). Retrieved from [https://ncteachingconditions.org/uploads/File/NC18\\_companion\\_for\\_composites.pdf](https://ncteachingconditions.org/uploads/File/NC18_companion_for_composites.pdf)

## Principal Survey

WestEd designed and administered an online, statewide survey for all principals. The survey included 75 items that addressed the components of a sound basic education: effective teachers and principals in all classrooms and schools, adequate resources, and an assessment and accountability system that can monitor and demonstrate progress. Approximately 840 principals responded to the survey.

## Extant Data

WestEd reviewed a variety of extant data, analyzing information included within already-existing documentation of policies and programs and their impact, including:

- » [Independent Operational Assessment of the North Carolina Department of Public Instruction](#)
- » [North Carolina ESSA Consolidated State Plan](#)
- » [North Carolina State Plan to Ensure Equitable Access to Excellent Educators](#)
- » [Outcomes for Beginning Teachers in a University-Based Support Program in Low-Performing Schools](#)
- » [Race to the Top Professional Development Evaluation Report](#)



## Focus Groups and Interviews

WestEd conducted interviews and focus groups with teachers, principals, superintendents, and other district and state professionals. Researchers coded transcripts from 52 interviews and focus groups conducted during site visits throughout the state. These included 14 focus groups of teachers, 16 interviews with principals, 13 district-level staff interviews, two interviews with superintendents, and four interviews with participants from related organizations, such as the North Carolina Principals and Assistant Principals Association and North Carolina Health and Human Services. The participants were from eight different districts, four of which were plaintiffs in the *Leandro* lawsuit.

# Findings

The following are major findings about the current state of in-service teacher development and support in North Carolina.

## Access to and the quality of professional learning opportunities vary across schools and districts.

There is some evidence that professional learning opportunities exist in almost every North Carolina school and district environment, but the frequency, approach, and overall quality of those opportunities vary. The state's once-extensive infrastructure and funding for professional learning has been greatly reduced, and many teachers report that current offerings often fail to meet high-quality professional development standards: professional development that is sustained over time, that features active learning and collaboration for teachers, that is content focused and embedded in the job, and that has opportunities for developing new practices supported by coaching and reflection (Darling-Hammond, Hylar, & Gardner, 2017).

Meanwhile, the 2018 North Carolina Teacher Working Conditions (TWC) Survey results, as well as interviews and focus groups, reveal several closely related areas in which a majority of North Carolina teachers say they need more professional development, including differentiating instruction, serving students with disabilities in special education, closing the achievement gap, and integrating technology into instruction. Data from interviews and research conducted for this project also suggest that teachers need and want additional professional development in addressing social-emotional learning and restorative practices as well as trauma-informed and culturally responsive practices.

Overall, teachers and principals reported more high-quality support in places implementing models that employ teacher leaders or instructional coaches to provide JEPL. Principals who were interviewed reported that instructional coaching is critical for developing teachers, particularly in low-wealth, high-need schools. One middle school principal identified the school's coaching model as "the first and foremost reason that the teachers particularly stay, because with the coach, [teachers] tend to feel like they can handle the workload and [are] learning how to do things, learn how to plan effectively."

Several teachers similarly emphasized the positive impact of context-specific, timely support from instructional coaches:

*"It wasn't until 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 I took ... notes while she was teaching, and I think that ... [even though] I have been teaching for six years, ... that helped me more than anything." (High school teacher)*

*"[It] was very helpful because then I got feedback basically instantly. [The coach] could see where I was struggling and came in to help me out with the students. ... I will say, last year, [the coach] was probably in the classroom three times a week at the beginning. It was a lot. Then obviously pulled back as I got better." (Middle school teacher)*

However, interview data revealed that the amount of time for teachers to learn and collaborate is greater in some places than others, and the quality of support from instructional coaches and mentors also varies. One high school teacher explained, "I had a mentor [in the county where I taught previously] who came to my class, gave me a sheet of paper once a week on Monday, and she left. I saw her five minutes. She did nothing to support me as a new teacher, nothing, absolutely nothing."

In addition, sought-after and high-quality supports, such as instructional coaches, appear to be less available in low-wealth districts. Some teachers described shouldering the responsibility of identifying and accessing their own professional learning opportunities, as opposed to a school or district in which such opportunities are embedded and provided in a systemic way.

*"There's the support when it comes to beginning teachers, but I think a lot of times support for other teachers kind of goes by the wayside sometimes because ... if you don't ask for help ... you don't get the help." (Elementary school teacher)*

*"I don't think things just fall into your lap. You kind of have to keep looking." (Elementary school teacher)*

Many respondents referenced participation in professional learning communities or other similar team (grade level or content area) planning meetings. Some schools mentioned meeting on a consistent, regular basis; others mentioned meeting less frequently.

*"Grade-level teams are a big support. All grade levels work really well together sharing ideas and activities." (Elementary school teacher)*

*"[A]s a sixth grade team, we meet at least once a week and get feedback that way." (Middle school teacher)*

*"I don't think all the PLCs meet all the time. Like maybe two or three times a week, we meet for honors. I don't think every PLC meets two times a week. I think there's [sic] some PLCs at this school that may never meet. Yeah, they're not consistent like we are." (High school teacher)*

*"I'm not sure if it's happening across the building. But I know there are pockets of collaboration happening." (High school teacher)*

Some teachers serving in schools implementing specific differentiated staffing models described higher-functioning, more consistent PLCs intentionally focused on student learning; however, this experience appears to be an outlier based on our interview data.

Responses from the 2018 TWC Survey indicate that teachers statewide have spent limited time over the past two years on professional development addressing instruction for underserved, disadvantaged populations:

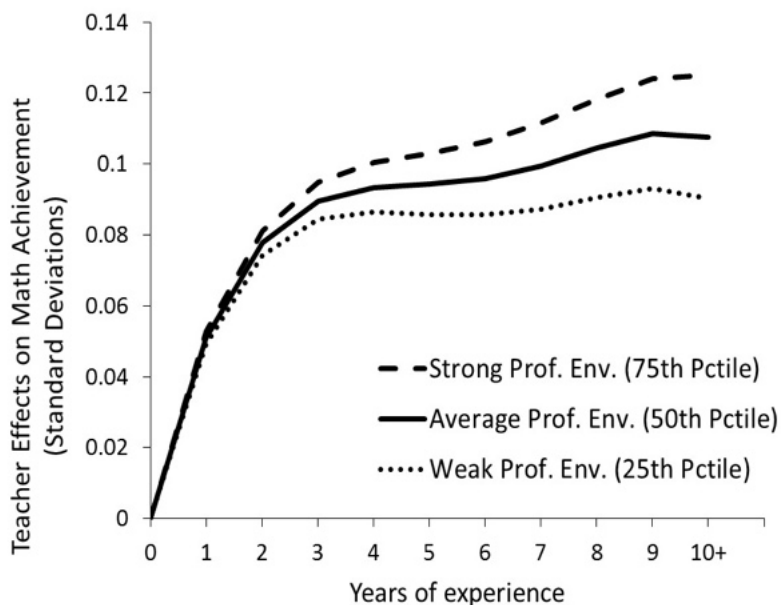
- » 20% had 10+ clock hours of professional development in the area of **special education (students with disabilities)**
- » 16% had 10+ clock hours of professional development in the area of **English language learners**
- » 25% had 10+ clock hours of professional development in the area of **closing the achievement gap**
- » About 50% of all teachers identified a need for more professional development in these areas to teach their students more effectively.

The 2018 TWC Survey also includes specific items regarding the kinds of support beginning teachers receive. Although 94% confirmed that they were formally assigned a mentor, only 54% of respondents indicated that they had a formal time to meet with their mentor during school hours. Less than half responded that the support they received from their mentor influenced their practice in terms of instructional strategies "quite a bit" or "a great deal." Sixteen percent of respondents indicated that they received no additional support as a new teacher.

## Teachers' professional environments differ across the state and influence teacher growth and development.

Recent research has shown that teachers' professional environment (see Exhibit 7) influences teacher growth and development (Kraft & Papay, 2014; Papay & Kraft, 2013; Papay and Laski, 2018). Kraft and Papay (2014), utilizing 10 years' worth of test score and survey data from Charlotte-Mecklenburg, North Carolina, found that teachers working in schools with strong professional environments improved their effectiveness, over time, by 38% more than peers in schools with weak environments. In this context, the greater the score, the more positively the environment was rated. As displayed in Exhibit 10, "strong" environments represent those in the top 25%, or 75th percentile, and "weak" environments are those in the bottom 25%, or 25th percentile.

## Exhibit 10. Influence of professional environment on teacher effects on math achievement



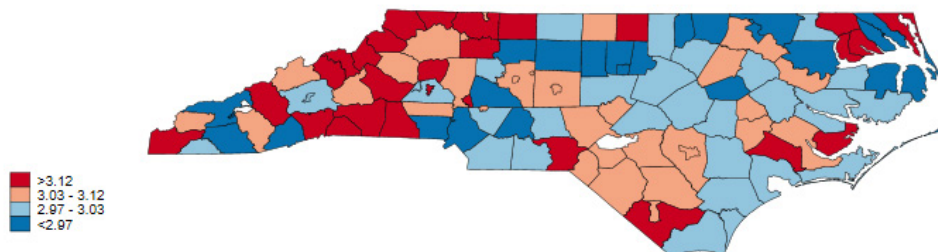
### Predicted returns to teaching experience across schools with strong, average, and weak professional environments.

WestEd researchers replicated and expanded on previous work by Kraft and Papay (2014) to explore the theory that supportive professional environments are likely to increase the rate at which a teacher’s effectiveness grows with each additional year of experience. For example, a teacher will generally improve between the first and second year of teaching, but the same teacher would improve more over this period if the environment were relatively more supportive than the environment in other schools in the district. Overall, the results of the study replicated those of Kraft and Papay (2014), confirming their findings; however, this study, which looked beyond the Charlotte-Mecklenburg, North Carolina, district, revealed that the effect of the professional environment on returns to teacher experience varies widely from district to district in North Carolina.

As part of this study, researchers used the most up-to-date available data from the TWC Survey to replicate Kraft and Papay’s (2014) measure of teachers’ professional environments. Based on this new measure (which is itself based on teachers’ perceptions of six key elements of their professional environments: order and discipline, peer collaboration, principal leadership, professional development, school culture, and teacher evaluation), the study found that the quality of professional environments varied across the state. Exhibit 11 geographically illustrates the variation in district-level average ratings of professional environments in the most recent year of data, the 2015–16 school year. This average score is drawn from responses on a 4-point scale, with 4 being the most positive and 1 being the least positive. Therefore, an average score of 2.5 would suggest an even distribution of positive and negative scores. Districts in red are above the median rating, and those in blue and dark blue are below. It is important to note that our study was limited by the specificity of this data, which did not classify the professional environments that exist at the school-building level. Knowing that differences exist in district-level averages of professional environments provides us with some information, but school-level analyses would yield more actionable data for school and district leaders.

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### Exhibit 11. District-level average professional environment rating (2015–16)



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Teacher focus group participants reported on the importance of professional environment to their growth and development. They highlighted that having opportunities to learn and grow, especially through collaboration with a community of colleagues, is a key aspect of a positive professional environment. Many teachers also reflected on the role their school leaders play in creating a positive professional environment, and some principals themselves highlighted the importance of their maintaining high expectations for teachers and students and their responsibility for setting a clear vision of success.

*“So I think that ... having a leader who is an instructional leader works wonders and [our former assistant principal] ... she had a silent persistence, where she just made sure that we all ... reached our goal.” (High school teacher)*

*“One thing [that keeps me here in this school] is sheer leadership. She lets us participate in the decision-making.” (Elementary school teacher)*

*“[O]ur principal is marvelous. She makes sure that she protects our planning. She protects our time — she values it.” (High school teacher)*

*“I came from the middle school in this county. ... My [personal development plan] for 15 years was ... one sentence that was it, and I'd have to upload artifacts [like lesson plans]. I get here, and I did what I've been doing for 15 years, and it was rejected. I went and I sat down with [our principal] ... and [she] said, 'Okay, this is what I want to see [in your instruction] and the reason why I want to see this [change in practice] because I want you to see professional growth yourself.'” (High school teacher)*

One of the 2018 TWC Survey items asks which aspect of teachers' working conditions most affects their willingness to keep teaching at their school; school leadership was the aspect selected at more than twice the rate of any other aspect.

However, some principals appear to be more skillful than others at managing resources (including time) for the development and growth of teachers. Responses to the 2018 TWC Survey items addressing school leadership demonstrate a disparity between expectations and support. Ninety-three percent of teachers statewide indicated that they “agree” or “strongly agree” that they are held to high professional standards for delivering instruction.

Yet only 75% to 80% of teachers statewide “agree” or “strongly agree” with the following statements about their school leadership: there is an atmosphere of trust and mutual respect in this school; teachers feel comfortable raising issues and concerns that are important to them; and the school leadership consistently supports teachers.

In addition, just over one third of principal survey respondents indicated that they were “well” or “very well” prepared by their leadership programs to design professional learning opportunities for teachers and other staff. Respondents also reported a desire to learn more about designing professional learning opportunities for teachers — 47% indicated that they would like to receive more professional development in this area.

## State-level efforts that support teacher growth and development are inadequate and inequitable.

As described in the state policy context section, there has been a significant decrease in funding and support for professional learning for teachers over the past decade resulting in reduced capacity to provide adequate professional learning for teachers. According to an independent audit of the NCDPI conducted by Ernst and Young (EY) in 2018, the NCDPI “appears to lack an overriding theory for how to support LEAs and educators to drive student outcomes.” Furthermore, “individual offices develop their own support structures, professional development plans, and assessments; multiple offices have aligned staff to regions, but those regional support providers do not coordinate or prioritize their work within each region” (p. 22). In its audit, EY also noted that the NCDPI has “faced state funding cuts and the sunseting of federal grants, yet has strived to maintain its historic level of support for the field.” EY also observed that “many NCDPI teams have field-based resources, but coordination is limited, and resources are thinly spread” and that “LEAs seek a more coherent approach from NCDPI, one in which available tools and support align with a clear vision for teaching and learning” (p. 25).

One education stakeholder described a similar lack of infrastructure and capacity within the NCDPI to provide adequate support for teacher professional learning.

*“So you need that structure of support from the Department of Public Instruction. You need that structure to support the professional development ... the structured support of how to use and interpret data, structured support of formative assessments along the way so that teachers will understand that formative assessment is not just another test.”*

Due to cuts in funding and capacity at the state level, there is a limited availability of high-quality professional learning opportunities for teachers. Many principals and superintendents interviewed for this study reported that there is a lack of support and funding from the NCDPI to provide high-quality professional learning opportunities for teachers. Superintendents that were interviewed noted that professional development is critical to recruit, develop, and retain teachers. However, they also reported significant barriers to implementing high-quality programs. Specifically, participants noted that the state does not fund professional development and that mentor pay has been cut. One superintendent said, “We don’t receive much [professional development] funding from the state. So any ... is going to be out of local funds.” A middle school principal explained that although “[the school has] fantastic experienced teachers who are mentoring beginning teachers, we need funding to offer

mentor teachers a paid day so that they can co-teach with beginning teachers.” Furthermore, low-wealth districts have fewer local funds to use to provide extended professional learning opportunities for staff. For example, low-wealth districts have fewer resources to find substitutes for teachers to attend professional development sessions and less money to pay for teachers’ time outside school hours or to pay for travel to conferences. Schools or districts that need systematic, guaranteed strategies for getting strong teachers in place quickly and inducted effectively are the same ones that do not have adequate local funds to invest in the professional learning needed. Higher-wealth districts are better able to provide the support low-wealth districts cannot, contributing to the inequity in the state.

## North Carolina’s regional support system lacks the capacity to support teacher growth and development for all districts.

A “regional approach” was identified by many stakeholders at all levels as a promising strategy to address improving the quality of teachers. One superintendent suggested, “Somehow we’ve got to look at regional support models ... because ... historically DPI has developed and designed one-size-fits-all solutions, but if the instructional support teams ... were regional teams, then they could more clearly in collaboration with the districts address the needs.” Although the NCDPI appears to be shifting in its approach from supporting individual district towards developing a regional approach due to the previously described lack of funding and capacity at the NCDPI. Current structures in place to provide such regionally based support vary in focus, strength, and quality.

The existing RESAs have the potential to customize their services to their member districts, but those services vary by region, both in terms of availability and quality. One RESA director referenced this variation:

*“We all, of course, work for different boards of superintendents, and they all have different ideas about what they want their RESA to be. There is also, of course, just some history there, and so my RESA doesn’t allow any type of vendor participation at all, and another director’s RESA does. We are funded by the school districts alone, but that varies in the amount we are paid and how we are paid. We are very, very unique, but I think ... some of the things ... are very similar, [such as] professional development with the job-alike groups. But there is kind of a different focus or vision [for each RESA]; we are very unique from each other.”*

In addition, RESAs currently replicate inequity and inequality across the state given who they serve and how they receive their funding, which is from its member districts, not the state. One low-wealth district’s superintendent asserted, “[You can’t say] the RESAs can be a solution without any sort of funding to the RESAs or recognition of the RESAs that are representing almost exclusively small school systems based on geography.”



## The NCDPI does not systematically collect and analyze data about the types and effectiveness of professional learning opportunities available to teachers.

Gathering and analyzing additional information at the state level is necessary to gain a more complete understanding of the current state of professional learning across North Carolina. Although some data are collected through the TWC Survey, its limited scope reveals little about teachers' perceptions of their professional learning opportunities. Further evidence of the extent to which professional learning opportunities are available — or how closely those opportunities align with JEPL or lead to changes in instructional practice or student outcomes — is lacking. Studies such as those originally conducted by Kraft and Papay (2014) and replicated by WestEd may be integrated into a continuous improvement approach to strengthen the teacher workforce.

# Conclusions

Access to effective, diverse, and experienced teachers is critical for students' academic success and well-being, especially for economically disadvantaged students and students of color. Yet, currently, North Carolina's most underserved students do not have equitable access to the teachers they need the most. Supporting teachers' growth and development is essential to reversing this trend and promoting student success, but meaningful statewide improvements can come only when high-quality, job-embedded professional learning experiences are available for all teachers. Although many professional learning programs and initiatives appear within the state's ESSA plan, implementation is variable or just emerging, with little quality or impact data available. Further, many teachers in North Carolina reported having little or no access to such high-quality job-embedded professional learning. Our analysis of professional environments in districts in North Carolina showed great variation across the state. Some teachers may be able to thrive in schools with poor professional environments, but most need positive working conditions to be successful and continue to develop throughout their career. Our analysis found that at the state level, there are weak structures for systemic supports for teacher development and support, including induction, coaching, and mentoring.

Support for teachers' growth and development should not — and cannot — be so variable because student success depends on it. To implement models and practices reflecting the tenets of JEPL at scale, and thereby improve the quality of the teaching workforce, we must look beyond improving individual teachers and instead focus at a systems level on improving the organizations in which they teach (Kraft & Papay, 2014; Jennings, Minnici, & Yoder, forthcoming; Johnson, 2009; Kennedy, 2010; Papay & Laski, 2018). This requires a focus on improving the wide-scale infrastructure for professional learning at the state, district, and school levels.

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