



NEW
TEACHER
CENTER

LEVERAGING A DECADE OF RESEARCH

Designing Instructional Coaching for Optimal Learning

White Paper | February 2024

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Introduction

Effective teachers are the most important school-based factor influencing student achievement, so much so that access to high-quality instruction throughout primary school can offset disadvantages often associated with growing up in a low-income household (Rivkin et al., 2005). Yet not all students have access to highly effective teachers, leading predictably to differences in outcomes between students from high- and low-income families and between white students and students of color (Murell, 2007; Reardon, 2011). Students in schools serving primarily under-resourced communities and students of color are more likely to experience a revolving door of underprepared and beginning teachers (Carver-Thomas & Darling-Hammond, 2017; Podolsky et al., 2016), and they typically spend more years in classrooms with teachers who are less effective compared with their peers in schools with more resources (Goldhaber et al., 2018; Scafidi et al., 2007). The COVID-19 pandemic exacerbated these inequities, emphasizing the work that still needs to be done to better prepare teachers to meet the needs of all students (White et al., 2021).

An **induction mentor** meets regularly with beginning teachers during their first three years in the classroom to support them in developing foundational pedagogical skills and acclimate to the teaching profession. Effective mentors accelerate the development of beginning teacher effectiveness, improve teacher retention, increase student learning, and support equitable outcomes for every learner.

Although developing teachers' skills so they become highly effective facilitators of inclusive, supportive, and academically challenging classrooms is an equity imperative, conventional approaches to teacher professional learning have typically not yielded a good return on investment (TNTP, 2015; Garet et al., 2008; Garet et al., 2016; Garet et al., 2010; Gersten et al., 2014; Suk Yoon et al., 2007; Murphy, 2000). Traditional workshops and teacher training often fail because they are not sufficiently grounded in teachers' day-to-day experience and classroom contexts. However, there is strong evidence—from more than 60 experimental studies—that instructional coaching is an effective teacher development strategy (Kraft et al.,

An **instructional coach** collaborates with teachers of all experience levels to plan lessons, observe and reflect on instruction, and/or review and analyze student work. Instructional coaches support teachers as life-long learners in strengthening their classroom practices in order to create an optimal learning environment for each student.

2018). Job-embedded instructional coaching occurs during a teacher’s workday and involves one-to-one conversations, observation and feedback cycles, and modeling to help improve the teacher’s instruction with their current class of students. The coach’s support is ongoing and consistent over time, is connected to their specific students, contexts, and immediate problems of practice, and provides teachers with opportunities for practice and feedback (Joyce & Showers, 2002).

Job-embedded coaching and mentoring have been the cornerstones of the New Teacher Center’s (NTC) approach to teacher development since NTC was founded in 1998. Initially, NTC sought to advance educational equity for systemically underserved students by accelerating the effectiveness of beginning teachers during their first two years in the classroom. NTC mentoring prioritized development of beginning teachers’ instructional skills by fostering strong personal relationships between mentors and mentees. Over time, NTC has expanded its reach and focus beyond beginning teachers, partnering with school districts and educational cooperatives to design and implement instructional coaching programs that support optimal learning environments (OLE; see below) in all classrooms.

NTC’s Optimal Learning Environment (OLE)

■ Emotionally, intellectually, and physically safe

- Classroom relationships are based on trust and caring and on an understanding that learning is fundamentally sociocultural.
- Teacher–student and student–student interactions are positive, respectful, and safe.
- Developmentally appropriate self-awareness, positive identity formation, sense of purpose, effort, and supported risk-taking are all promoted and nurtured.

■ Equitable, culturally responsive, and standards-aligned

- Students are introduced to relevant and challenging content, aligned to grade-level standards.
- Teachers possess cultural competence and draw on data and their own empathy to elevate the value of multiple perspectives.
- Learning differences, productive struggle, and learner agency are valued and prioritized.

■ Tuned to the diverse needs of all learners

- Multiple learning pathways center and advance the innate giftedness of every child.
- Executive function skills, including goal orientation, self-monitoring, and self-direction, are fostered.
- Scaffolds for learning—including modeling, strategic grouping, sequenced questioning, timely feedback, and well-designed practice opportunities—are present and sturdy.

For more information, see the [full framework](#) and a [summary](#) of supporting research.

NTC's underlying premise is that sustained, instructionally focused, job-embedded coaching from trained expert mentors or coaches improves teacher practice and, ultimately, teacher retention and student outcomes.

NTC Instructional Coaching Theory of Action

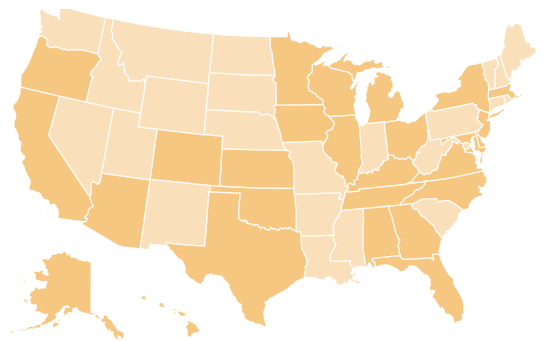


Through strategic planning with school leaders, personalized consultation, and development of highly skilled instructional coaches, NTC seeks to create student-centered ecosystems where educators are empowered to create classroom environments in which students thrive. In the most recent school year, NTC partnered with schools serving more than 3.8 million students and 217,000 teachers in 650 districts across 29 states. Two-thirds of students in schools served by NTC were black, indigenous, or people of color (BIPOC), and two-thirds were eligible to receive free or reduced-price lunch.

2022 Impact

NTC supported clients from coast to coast.

NTC served educators and students from every region of the United States, including 50 of the nation's largest 200 districts.



NTC partnered with schools serving more than

3.8 million students and 217,000 teachers

Across 29 states, NTC support reached approximately

650 districts and more than 6,775 schools

On average

65% of students in those schools were BIPOC
66% were eligible to receive free or reduced-price lunch

Over the last decade, NTC has undertaken six rigorous, federally funded evaluations of its beginning teacher induction model and subsequent variations intended to support scaling of instructional coaching to additional teachers, schools, and district contexts. These studies examined the implementation and efficacy of NTC’s model as it continued to evolve through these scaling efforts, new frameworks (such as the OLE), and updates to its coaching tools and protocol. Consistent with its mission to support continuous learning and improvement for the teachers it serves, NTC is committed to leveraging insights from these studies to inform the design of future coaching initiatives. This white paper describes the resulting innovations and redesign of its model to best meet its current and potential partners’ needs.

NTC induction coaching

KEY FEATURES & EVIDENCE OF IMPACT

Beginning in 2013, NTC launched a three-year, large-scale randomized control trial (RCT) under an Investing in Innovation (i3) federal grant to test its original induction coaching model with 629 beginning teachers in 227 schools in two large urban districts.¹ Beginning teachers received two years of regular, instructionally focused, standards-based induction coaching from mentors hired by their districts to serve a caseload of beginning teachers across several schools. The model validated in this study had the following key features:

- **Highly selective recruitment of new mentors.** New mentor positions were supported by the grant funds, and NTC collaborated with districts to implement a multi-stage interview process with scores of applicants for each open mentor position.
- **Comprehensive training.** Induction mentors completed two years of training on NTC’s coaching facilitation strategies and tools; this training included 12 days of foundational training each year (in four 3-day sessions) and monthly full-day forums in which mentors gathered as a community of practice to revisit content from foundational training, reflect on application of protocols in their own work with teachers, and discuss problems of practice.
- **Protected time for coaching.** Full-time induction mentors were responsible for a caseload of no more than 15 teachers. As district or NTC employees, their sole responsibility was induction mentoring.

¹ The grant also included a rural consortium of schools, but it was not included in the RCT. [Results from a quasi-experimental design](#) with the consortium support these findings.

- **Significant contact time with teachers supporting strong relationships.** Mentors were expected to meet with beginning teachers for at least 180 minutes per month over seven months (October–May). Over two years, NTC mentors developed strong personal relationships with beginning teachers, who often saw their mentors as a lifeline during the first year of teaching. NTC mentors learned strategies for finding “entry points” with teachers to ensure that coaching was relevant and actionable.
- **Coaching conversations guided by NTC tools and protocols.** Mentors and teachers engaged in cycles of planning, observation, and analysis of student work guided by NTC–developed tools. These tools focused coaching interactions on teaching and learning standards and understanding and meeting the needs of every student. Mentors were expected to use an NTC–designed protocol in 85% of interactions with teachers. In later projects, NTC set the expectation that coaches would complete at least three coaching cycles that included all three high-leverage, instructionally focused tools ([see tools](#)). NTC continuously revises and refines its coaching tools and protocols to align with emerging research, support project goals, and respond to feedback from coaches and teachers in the field, so the design of these protocols evolved during the i3 validation study and in later iterations of NTC’s induction and instructional coaching projects.
- **Focus on equity.** From its earliest incarnation, NTC mentoring had an explicit focus on creating an optimal learning environment for all students and meeting the needs of systemically underserved students, although the focus on equity has increased and evolved in the decade since the i3 validation grant began.
- **Role of school leaders.** NTC’s model included intentional efforts to build school leaders’ capacity to understand the role they play in educator success. Mentors were expected to meet with school leaders throughout the school year and used an NTC–designed protocol to guide those conversations.
- **District capacity building.** NTC trained district–level program teams and lead coaches to deliver foundational institutes, lead monthly coach forums, and conduct in–field coaching.

The i3 validation study demonstrated that NTC induction mentoring had positive impacts on student learning in both English language arts (ELA) and mathematics that were equivalent to 2 to 4.5 additional months of learning, depending on the grade level (Young et al., 2017). In addition to this causal “gold standard” impact, the study results showed significant, positive correlations between students’ mathematics achievement and (1) contact time with mentors (both the frequency and length of meetings, as reported on surveys) and (2) the frequency of mentoring activities focused on instruction (such as classroom observation and feedback,

Supporting Teachers Boosts Student Achievement

Math

Teacher w/ traditional support



Teachers w/ NTC support

2-5 months of additional learning

ELA

Teacher w/ traditional support



Teachers w/ NTC support

2-4 months of additional learning

analysis of student work, and lesson planning). Impacts on teacher retention were small and not statistically significant, although an earlier study of NTC's induction mentoring model showed beginning teacher retention increased 9 percentage points over the prior year, before NTC induction began (Bell et al., 2013).

Compared with business-as-usual induction practices in control schools, teachers in treatment schools were much more likely to have an induction mentor, especially in their second year of teaching, more likely to meet frequently with their mentor, and more likely to focus on instruction during those meetings.

These outcomes were possible under ideal conditions, with funding that allowed mentors to work closely with NTC staff to develop their expertise and to work full-time supporting teachers. (In one district, NTC-trained mentors were also NTC employees and therefore supervised by NTC staff.) Nearly all NTC mentors completed the training as designed, and nearly all teachers met regularly with their mentors for at least 180 minutes per month, using NTC tools to guide those interactions. Crucially, compared with business-as-usual induction practices in control schools, teachers in treatment schools were much more likely to have an induction mentor, especially in their second year of teaching, more likely to meet frequently with their mentor, and more likely to focus on instruction during those meetings. They were also much more likely to report that working with their mentor was valuable. The study demonstrated that, under ideal conditions, high levels of mentor-teacher trust create space for teachers to learn in a deep way and to accelerate their development as proficient practitioners.

Tools to Support the Teaching and Coaching Cycle

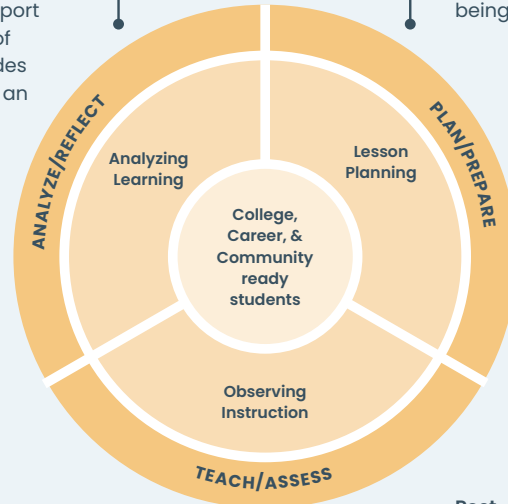
► HIGH-LEVERAGE TOOLS

Analyzing Student Learning

Analyzes artifacts of student learning and identities, strengths, learning needs, and support for subgroups of students. Provides entry points for an inquiry cycle of planning, teaching, reflecting.

Planning Conversation Guide

Guides a conversation analyzing an existing lesson plan or discussing a lesson being developed.



Pre-Observation Conversation

One of the three tools within the Observation Cycle. Guides a conversation to discuss lesson context, standard and task alignment, and observation focus.

Post-Observation Co-Analysis

Provides support for debriefing observations. Includes a descriptive continuum of indicators aligned with the OLE and guides a discussion of evidence, strengths, areas for growth, next steps, and goal-setting.

► FOUNDATIONAL TOOLS

Collaborative Assessment Log

Guides initial coaching conversations. Provides entry points to processes within the Teaching and Coaching Cycle.

Knowing Students

Provides information to help teachers connect content to students' context and discuss goal-setting. Often used in conjunction with high-leverage tools.

Knowing Teachers

Guides discussion with teachers to build relationships, identify connections, and provide entry points during coaching conversations.

Data Collection Tools

Used to collect evidence of an agreed-upon focus while observing instruction within the Observation Cycle.

Scaling instructional coaching

EVIDENCE OF IMPACT

Building on this initial success, NTC set out to test strategies to scale its mentoring model to a wider array of districts and to additional groups of teachers in five subsequent studies ([see table](#)). NTC’s scaling strategies were designed to make an instructional coaching model that was more flexible, easier to adopt, and less costly for schools and districts. The first of these was launched in 2016 and funded by an i3 scale-up grant and a Supporting Effective Educator Development (SEED) grant, respectively; subsequent studies launched in 2019, 2020, and 2021 ([see timeline](#)).

Professional learning communities (PLC) are small groups of teachers—often in the same grade level or content area—who meet regularly to engage in professional learning, review student work or assessment data, plan lessons, and reflect on their instruction.

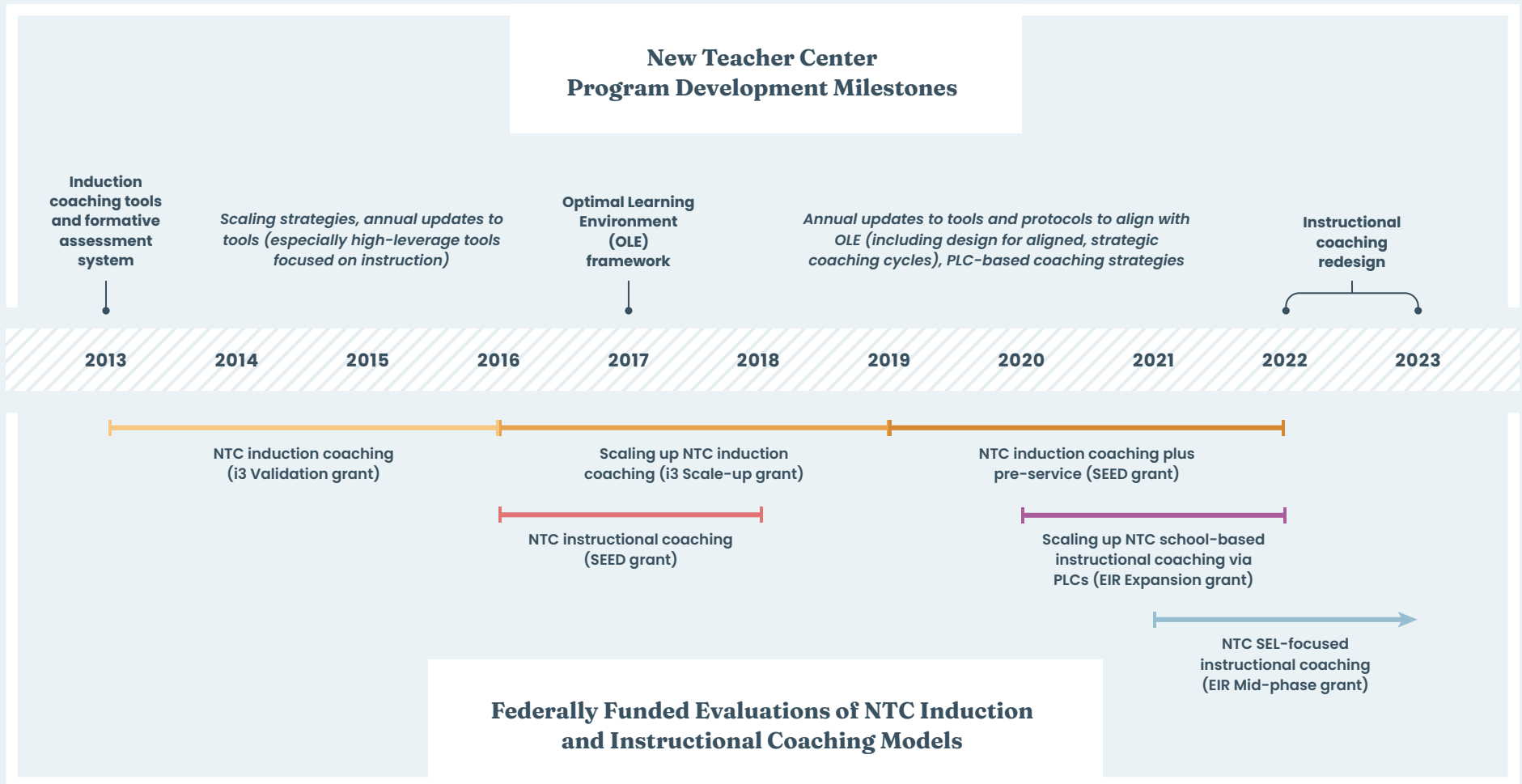
A key scaling strategy allowed the recruitment of teacher-leaders and other school-based staff to serve as part-time coaches, as well as redeployment of existing coaching positions (rather than new hiring). To increase the reach of school-based coaches, NTC also tested the application of 1:1 coaching tools and protocols with groups of teachers in professional learning communities (PLC).

To limit the time coaches were required to be away from their school buildings, NTC reduced the days for its foundational training (from 24 days to 10–16 days total over two years), scaled back requirements for monthly coaching forums, and standardized a strategy for in-field coaching (of instructional coaches) by expert lead coaches. With less required training time and more emphasis on academics, NTC also focused training on its “high leverage tools”—those focused on planning, observation, and student work analysis—and reduced attention on foundational tools focused on setting goals, understanding teachers’ needs and experiences, and understanding students.


Taken together, these scaling strategies made it possible for many more districts to train and deploy NTC-trained coaches, including rural districts; appoint school-based coaches, with or without full-time release from other responsibilities; and provide coaching to teachers of all experience levels, including pre-service teachers completing clinical field placements.

To ensure success at scale, NTC recognized the need to build school and district capacity to support and sustain coaching. NTC program teams developed joint training and forums for school leaders and coaches designed to secure leaders’ buy-in and support for instructional coaching within their buildings. Site teams worked with district and school leaders to strategize how instructional coaching could help them meet district goals for teaching and learning and school improvement goals, respectively, understand district and school capacity, and identify ways they could support coaches to have adequate time for coaching.

NTC Federal Studies Timeline



In these subsequent scaling studies, the expectations for teacher contact time (180 minutes per month) and use of NTC tools and protocols to guide coaching conversations (three aligned coaching cycles using instructionally focused tools and protocols) remained largely the same.



Site teams worked with district and school leaders to strategize how instructional coaching could help them meet district goals for teaching and learning and school improvement goals, respectively, understand district and school capacity, and identify ways they could support coaches to have adequate time for coaching.

As NTC began developing these scaling strategies, NTC teams simultaneously worked with partners CASEL, CAST, and other education researchers to develop the OLE framework. This work emphasized the integrated fundamentals of social and emotional learning, learner variability/Universal Design for Learning, culturally responsive teaching, and learning environment research. Over time, coaching for equity became a core focus of NTC's training, tools, and protocols, and these have been updated annually to remain in alignment with the framework. For example, in later projects NTC's advanced coaching institute included modules that addressed planning and analyzing student learning with an equity lens, detecting implicit bias, implementing culturally responsive practices, and observing and providing actionable feedback on instructional choices that are inclusive and support equitable outcomes for every learner. The training also focused on developing coaching language that recognizes teachers' and students' social identities.

The strong positive causal impacts on student learning demonstrated in the first study of induction coaching were not replicated in any of the follow-up scaling studies. In general, impacts on student learning in later studies were smaller, not statistically significant, or limited to specific sub-samples ([see table](#)). The SEED pre-service study found positive impacts on ELA achievement for one cohort of teachers,² as did the i3 scale-up evaluation in some higher-need schools. The i3 scale-up also replicated the original study finding that more intensive, more instructionally focused coaching is correlated with student mathematics achievement.

²Impacts were seen for alternatively certified teachers who received coaching in 2020-21 and 2021-22. The same results were not seen for alternatively certified teachers in the earlier cohort (who received coaching in 2019-21), likely due in part to implementation challenges caused by the COVID-19 pandemic.



NTC coaching had a positive, moderately large impact on specific aspects of instructional practice, including engaging students in learning and communicating with students.

In three studies, NTC coaching had a positive, moderately large impact on specific aspects of instructional practice as measured by two components of the Danielson Framework for Teaching: Engaging Students in Learning and Communicating with Students.³ During observations, treatment teachers were more likely than control teachers to assign activities, use strategic groupings, and provide instructional materials and resources that intellectually engaged all students. Evidence of these impacts is promising, as NTC's OLE and aligned coaching strategies both prioritize students' intellectual engagement in learning. These impacts on teacher practice did not translate into positive impacts on student learning during the period of these studies, however.

Across the studies, without grant-funded coaches the schools had difficulty implementing the model with fidelity. Coaches were less likely to complete all of the required training and less likely to engage with teachers or use the NTC tools as frequently as expected. As a result, NTC-supported coaching was not very different from the coaching provided under business-as-usual conditions. Teachers in

³Greater than .25 standard deviations.

The most significant barrier to scaling and high-fidelity implementation of NTC’s model was time.

both treatment and control schools received instructional coaching with similar frequency and duration, and the coaching focused on similar content.

The most significant barrier to scaling and high-fidelity implementation of NTC’s model was time. School-based coaches who were also classroom teachers did not usually receive release time for coaching and had less flexibility to meet with teachers. Full-time or part-time coaches often juggled multiple roles and other duties as assigned, limiting their ability to attend trainings and meet with teachers. Coaches also encountered some resistance to coaching from veteran teachers, who saw coaching as relevant only for new or struggling teachers. This veteran teacher’s perspective was typical: “It would have been more useful to me when I first started because I feel like at this point, I’m pretty established and I know what is going on... There were a couple of things [the coach] helped me with, but I definitely feel like it would have been great my first or second year.” Schools that lacked a strong culture of transparent practice or continuous, lifelong professional learning tended to reinforce these attitudes. Finally, many coaches struggled to apply NTC’s coaching tools and protocols—which were originally developed for 1:1 coaching—to PLC-based coaching interactions. In later studies, the COVID-19 pandemic exacerbated those challenges, as schools focused their available staffing and time on implementing new forms of remote and hybrid instruction, managing quarantines, and addressing staff turnover.

Despite these implementation challenges, several sites developed the capacity to sustain induction mentoring programs after their participation in NTC’s federal grants ended. Following the i3 scale-up grant, both Fresno Unified School District (California) and Polk County (Florida) Public Schools replicated NTC’s expanded mentoring to all schools districtwide, including those in the study’s delayed treatment group. District staff who had been specially trained under the grant to deliver NTC’s professional learning (foundational mentor training, monthly forums, and in-field coaching of induction mentors) assumed responsibility for training and supporting large cohorts of new induction mentors. Similarly, the Miami-Dade County Public Schools expanded NTC mentoring to pre-service teachers with support from a second federal grant and adapted these strategies to support beginning teachers entering classrooms via the district’s innovative grow-your-own programs.

Evaluations of NTC Coaching

SUMMARY OF FEATURES & IMPACTS

	STUDY 1 (i3 VALIDATION)	STUDY 2 (i3 SCALE-UP)	STUDY 3 (SEED PRE-SERVICE)	STUDY 4 (SEED IC)	STUDY 5 (EIR PLC)	STUDY 6 (EIR SEL)
MODEL						
Focus	Original induction coaching	Induction coaching with scaling strategies	School-based induction coaching plus pre-service	Instructional coaching	Instructional coaching with a focus on PLC settings	Instructional coaching integrating social-emotional with academic learning
Coaches	Centrally deployed full-time release	Centrally deployed or school-based, may or may not have a full- or part-time teaching load	School-based, with a full-time teaching load	School-based, full-time release	School-based, with a full-time teaching load (limited number of full-time, centrally deployed)	School-based, with a full-time teaching load
Teachers	Beginning	Beginning	Pre-service and beginning	All experience levels	All experience levels	All experience levels
Coaching modality	1:1	1:1	1:1	1:1 and PLC	1:1 and PLC	1:1 and PLC
STUDY						
Design	RCT	RCT	RCT	QED	RCT	QED
Sample	2 urban districts 1 rural consortium participated in a QED	5 urban districts	2 urban districts	2 urban/suburban districts	2 urban districts 2 rural consortia of districts	1 urban district 2 rural consortia of districts
Grade levels	4–8	4–8	4–9	4–8	4–9	4–8
Duration	2013 to 2016	2016 to 2019	2019 to 2021	2016 to 2018	2020 to 2023	2021 to 2024

	STUDY 1 (i3 VALIDATION)	STUDY 2 (i3 SCALE-UP)	STUDY 3 (SEED PRE-SERVICE)	STUDY 4 (SEED IC)	STUDY 5 (EIR PLC)	STUDY 6 (EIR SEL)
IMPACTS						
Teacher practice, as measured by the Framework for Teaching	No impact	Positive, moderate impact on Communicating with Students	Positive, moderate impact on Engaging Students for one cohort of beginning teachers	Positive, moderate impact on Engaging Students	Study ongoing, not yet available	Not an outcome (study will report on the Tripod 7Cs measure of classroom practice instead)
Student achievement	Impacts in ELA and mathematics (2–4.5 additional months of learning) Positive correlations between math achievement and coaching intensity and instructional focus	Small positive impacts in ELA and math, not statistically significant Small, positive impacts in ELA in high-poverty schools and schools with large enrollments of multilingual learners Positive correlations between math achievement and coaching intensity and instructional focus	Positive impact in ELA for one cohort of beginning teachers (4–8 additional months of learning)	No impacts in ELA or math No positive correlations between achievement and coaching intensity or focus	Study ongoing, not yet available	Study ongoing, not yet available
Retention	Small differences not statistically significant	Small differences not statistically significant	Small differences not statistically significant for one cohort of beginning teachers	Not an outcome	Not an outcome	Study ongoing, not yet available
IMPLEMENTATION						
Coach development	High fidelity	High/medium fidelity	Medium fidelity	Not available	Medium fidelity	Study ongoing
Delivery of coaching	High fidelity	Medium/low fidelity	Medium fidelity	Low fidelity	Low fidelity	Study ongoing

Lessons learned

SCALING NTC'S INSTRUCTIONAL COACHING DESIGN

The smaller, less robust impacts reported in NTC's later scaling studies are consistent with other research that shows the challenges of maintaining effectiveness once programs are taken to scale (Kraft et al., 2018). Programs are necessarily adapted to account for local context and constraints, to be feasible for more participants, and to buffer the increased costs of large-scale adoption, which often result in lower levels of implementation that are not consistent with developers' expectations. Often, a "fatal adaptation" undermines a program's impact (Morel et al., 2019). As NTC coaching scaled, coaches struggled to meet expectations for contact time, gain buy-in from a larger pool of teachers, learn and use coaching tools and protocols, and translate those tools for use with groups of teachers in PLC settings. These scaling challenges yielded important lessons about the conditions needed to support effective instructional coaching.

SCHOOL LEADERSHIP

School leaders play a key role in creating the conditions to support effective instructional coaching. Leaders signal the importance of instructional coaching by connecting it to broader instructional goals and supporting it through actions, such as including coaching time in the master schedule, relieving coaches of other responsibilities, attending the leader-specific professional development, and meeting regularly with coaches. Without strong leader support, coaches often lacked sanctioned time for coaching and had difficulty convincing veteran teachers to be coached.

CULTURE

Coaching must be part of lifelong learning and the continuous improvement narrative. Leaders need to message coaching as a support for every teacher—not just new or struggling teachers—as part of continuous learning and improvement for all. As one principal said, "I think [coaching] is a huge thing—it's what it's all about. You have to have that internal want to improve and grow. Once everyone on staff has that mindset, then it's going to go into our student achievement." In schools where coaching was seen as non-evaluative and as a support that could benefit everyone, all teachers were more receptive to engaging in it. For example, one school assigned entire departments to coaching to ensure all teachers received it, and another school purposefully created mixed coaching caseloads of new teachers in need of help and veteran teachers who needed less help to demonstrate that receiving coaching was not a reflection of teaching ability.

TRAINING

School-based coaches need time to sharpen their practice. In scaling, NTC reduced the training expectations and caseload sizes, leaving coaches with less opportunity to practice their skills. It took coaches considerable time to be comfortable and facile with the tools. Across studies, coaches reported improvement in their use of tools in the second and third years of coaching.

TIME

Coaching is possible and impactful when mentors are full-release and centrally deployed. Meeting NTC's coaching minutes threshold is difficult for school-based coaches with partial or no release time. Even school-based coaches whose time was fully allocated to coaching were often asked to take on other roles and responsibilities, like testing coordinator, that interfered with coaching time. With these time limitations, coaches struggled to complete full coaching cycles with the tools and to translate the coaching practices and tools to PLC settings.

CONTENT

Coaching should be tied to specific content or curricula. As it was originally intended for beginning teachers, NTC's coaching was content-agnostic and primarily focused on foundational teaching practices. Coaches were sometimes asked to coach outside of their content area of expertise (and then had to learn the content and standards across multiple subjects). Some teachers, especially veteran teachers or teachers in specialized assignments (e.g., special education, arts, career and technical education), were more receptive to coaching or found it more useful when the coach's content area aligned to their own and when coaching was related to specific subject-area content and curriculum.

SUSTAINABILITY

Sustaining the NTC coaching model requires district commitment and resources. Districts often see full-release coaching positions as an unaffordable luxury. Because coaches do not support students directly, they are often among the first positions cut when district budgets are strained. (To demonstrate the value of full-time induction as implemented in the i3 Validation study, NTC published a [follow-on cost study](#) showing that the cost of high-quality induction mentoring is offset in part in the short term by savings stemming from higher teacher retention, and in the long-term by impacts on student learning worth multiple times the original investment in mentor salaries and training.)

Study districts that sustained the model after the federal grants ended saw the NTC coaching model as a key part of their coaching strategy and a way to make coaching more formalized and consistent across the district. They strategically built district and school staff capacity in the coaching model and maintained staff to oversee coach training (continuing NTC's institutes and forums) and implementation.



NTC's experience scaling its coaching and mentoring models in multiple contexts generated valuable insights into the school- and district-level conditions required to implement and sustain high-quality coaching with the potential to support more equitable outcomes for students. In a quest to solve for the barriers to implementation identified in these scaling studies, NTC has recently undertaken a comprehensive redesign of its instructional coaching model, which reflects the best thinking from the field about the actions that teachers, school leaders, and district partners must take to accelerate educator effectiveness and disrupt the predictability of educational inequities for systemically underserved students.

Redesigning instructional coaching for future impact

NTC's redesign elevates foundational and replicable elements and shifts away from those that are harder to implement with fidelity in different contexts. Its redesign maintains and builds upon the "hallmark" components—grounding the work in relationship-building, supporting strong instructional practices with high-leverage, standards-based coaching tools, centering equity and supporting student voice—and emphasizes improvements to provide districts with a customized, cohesive system of support that will truly bring optimal learning environments to life.

NTC identified three main shifts to its approach to supporting teacher development. These shifts represent a more holistic and equity-focused approach that allows for customization to local contexts, while maintaining key features of the model like strong relationships, anchor practices and tools (planning, observing, and analyzing student work), and service anchors (foundational trainings, forums, and in-field coaching).

NTC’s Instructional Coaching Design Shifts

FROM	TO
A focus on instructional coaching best practices	An intentional integration of equity, identity, centering students, elevating needs of priority groups, SEL, and rigorous academics
A one-size-fits-all approach to partnerships	A customizable offering that adjusts content and delivery approach to best meet customer needs/priorities
An emphasis on instructional coaches as an agent for change and impact	An opportunity to drive coherence and alignment from district leadership through teachers

These improvements build on foundational assets from the existing model:

- Grounding in relationships
- Grounding anchor practices in high-leverage tools (planning conversation guide, post-observation co-analysis, analyzing student learning)
- Utilization of standards & continuum tools
- Maintaining service anchors (foundational training, forums, in-field coaching, capacity-building)

SHIFT 1

INTENTIONAL INTEGRATION OF EQUITY, TRANSFORMATIVE SEL, AND ACADEMICS

Centering equity has always been a core feature of NTC’s work. Most notably, its OLE framework is intended to ensure classroom environments support the needs of every student. This framework posits that knowing students’ contexts, assets, and needs, having high expectations, developing positive and identify-affirming relationships, and offering challenging, standards-based and culturally responsive instruction can build students’ sense of belonging and support their academic success. Under its redesign, NTC is updating its coaching model to include transformative social-emotional learning and more explicit equity-based and student-centered best practices for teaching and learning.

Under its redesign, NTC is updating its coaching model to include transformative social-emotional learning and more explicit equity-based and student-centered best practices for teaching and learning.

Recent research indicates the need to expand how educators think about equity and consider how the individual and social identities of all participants—student, teacher, coach—inform the work (Jagers et al., 2019; Muhammed, 2020). This approach includes three strands in building more equitable learning environments: (1) supporting students to understand and develop their own identities, (2) helping teachers to consider students’ identities and lived experiences in their instruction and to think about students in an asset-based way, and (3) helping coaches and teachers better understand themselves and how their own perspectives influence their interactions and relationships with each other and with students.

Building upon recent updates to the [CASEL framework](#), NTC is grounding its equity work in transformative social-emotional learning (SEL). CASEL characterizes transformative SEL as “...a process whereby young people and adults build strong and respectful relationships that facilitate co-learning to critically examine root causes of inequity and to develop collaborative solutions that lead to personal, communal, and societal well-being” (Jagers et al., 2021). It focuses on supporting students and adults to build competencies related to five core constructs: identity, agency, belonging, collaborative problem-solving, and curiosity. The first four are included in NTC’s redesign (Jagers et al., 2021). NTC is also leveraging the Search



Institute’s [Developmental Relationships Framework](#) to help educators and students build strong, supportive, respectful relationships that encourage students to understand who they are, empower them with a sense of agency in their own lives, and encourage them to grow and experience new opportunities. The framework recognizes that the way these relationships and practices are implemented depends on individual, community, and cultural contexts.

Research suggests that accounting for students’ identities and lived experiences has the potential to promote equitable learning environments and outcomes.

Research suggests that accounting for students’ identities and lived experiences has the potential to promote equitable learning environments and outcomes (Jagers et al., 2019). Coaches and teachers must engage in perspective-taking and understand their own biases in order to create learning environments that are culturally responsive and in which all students feel seen and safe (Jagers et al., 2019; Warren, 2018). The Ready for Rigor framework emphasizes the role teachers’ cultural lens plays in how they approach what and how they teach (Hammond, 2015). Hammond (2015) and others argue that systemically marginalized students have not received opportunities to become independent learners due to a history of education inequities (Love, 2019). The framework challenges teachers to understand their own sociopolitical position and how they respond to student diversity. It calls for strong teacher-student relationships to create a safe space for student learning and growth (Hammond, 2015).

Effectively situating identities within the work requires coaches with particular skill sets who can help teachers pay attention to equity in pedagogy (how they teach) and content (what they teach) (Dyches & Boyd, 2017). Hammond (2015) refers to coaches as “instructional sherpas” who guide teachers to build capacity in culturally responsive teaching and equity-based practices. Coaches must be able to recognize and name instances of inequity, help individuals confront biases and behaviors, and support them to work through their discomfort (Bocala & Holman, 2021). In addition, coaches need to be credible, understand the school’s context, and have strong and trusting relationships (Bocala & Holman, 2021; Booker & Russell, 2022).

With its redesign, NTC is emphasizing the self-work that coaches and teachers need to do to effectively meet the needs of their students. As part of its foundational institute training for coaches, NTC is explicitly integrating SEL and rigorous academics by introducing transformative SEL, developing transformative SEL skills in adults, and weaving transformative SEL into its coaching protocols. It is also working toward elevating student voice in its trainings.

SHIFT 2

CUSTOMIZING CONTENT AND DELIVERY

NTC has tried to scale its model in a range of district and school contexts, from urban to rural, large to small, elementary to high school, each with its own motivations and conditions that support or hinder coaching work. However, once NTC scaled its original induction model to work with school-based coaches and all teachers, the sites had a very difficult time implementing the model with fidelity due to contextual factors. So while NTC initially conceived of replicating its coaching model—offering the same content and expecting the same practices and minute thresholds regardless of coaches’ release time—it became clear that varying contexts required adapting and customizing the model to meet the specific needs of each place.

Understanding that a unique set of variables—especially the context for equity work— influences the implementation and success of coaching efforts at each partner site, NTC is redesigning its partnership model with significant upfront investment in consultation and co-design with partners to ensure a much more contextualized approach (Picucci & Laughlin, 2019). NTC and partners collaborate to identify partner priorities and needs and to adapt supports to meet partners where they are.

The content redesign also involves highly personalized initial experiences to support authentic collaborative learning and engagement of individual groups of mentors/ coaches, teachers, and leaders. NTC’s new approach draws from the forum format

of contextualizing the work in authentic problems of practice as well as learning from partners who have sustained the model, including how they internalized it as their own and continued to grow and innovate programming in response to site-specific needs and circumstance.

The new approach retains foundational assets of the original model, including centering relationship building, using high-leverage tools and anchor practices, and maintaining service anchors (i.e., the foundational institute, coach forums, and in-field coaching). At the same time, it allows for the content and delivery of the model to be adapted to better meet local context and needs.

Focusing coaching on the specific content and curricular needs of teachers makes it more relevant and impactful, especially for teachers with more years of experience. NTC's model originally provided content-agnostic coaching, with the theory that good instructional strategies would translate to any content area. This held true for beginning teachers, who needed more practice with fundamental teaching skills. Content-agnostic coaching does not depend on content area match between the coach and teacher and allowed for greater flexibility in coach assignment, which was particularly important in small, rural schools with fewer staff. As the model expanded to serve veteran teachers, however, the need for content-specific coaching was more paramount. When coaching was tied to curricula, especially newly adopted curricula, veteran teachers were more receptive to it than coaching that was focused on more fundamental instructional practices.

When coaching was tied to curricula, especially newly adopted curricula, rather than focusing on more fundamental instructional practices, veteran teachers were more receptive to it.

Along with this firsthand experience, developments from the field highlighted the importance of supporting teachers' content knowledge. The introduction of the Instructional Core emphasized content in improving instruction and student learning and described the relationship between the level of content taught, the knowledge and skills required to teach the content, and the level of student engagement in the content (Elmore, 2008; City et al., 2009). These elements are interdependent, and when the content changes, the teachers' skills and knowledge must evolve as well. Research indicates that when teachers are supported to learn new content and curricula through coaching, the impacts are greater than when coaching is focused on general teacher practice (Booker & Russell, 2022; Short & Hirsh, 2020; Kraft et al., 2018).

NTC also understands its program staff must be flexible about how training content is delivered. Coaches often have limited availability to be out of the school for training, and their personal preferences for how they receive information vary. Some coaches, for example, wanted all foundational content delivered at one time so they could understand the entirety of the model and others preferred to have content spread out throughout the year so it was more digestible. Moreover, the COVID-19 pandemic significantly expanded individuals' ability to participate in hybrid (virtual and in-person) offerings. While NTC will make recommendations for delivery, its approach under the redesign is to have flexible options for how (virtual or in-person) and when foundational content is delivered (e.g., during consecutive days at a summer institute or the launch of the school year or spread throughout the year based on the partner's staff development calendar).

SHIFT 3

IMPLEMENTING A COHERENT APPROACH ACROSS THE DISTRICT

When coaching is included as a key strategy for meeting district and school goals, it is more likely to be prioritized and implemented with fidelity. Identifying coaching in district and school planning can help ensure that attention is given to how coaching is implemented, sufficient resources and time are allotted to it, and staff understand its purpose (Strunk et al., 2016).

NTC's induction model initially focused on mentors as the main mechanism for change, although leaders did have a role in the work, including selecting, assigning, and supporting mentors. NTC connected with district and school leaders to ensure they understood the purpose of the coaching and their roles in supporting it, and they held professional development sessions for leaders and met with them during in-field coaching visits. School leaders were supposed to meet with coaches quarterly and capture their conversations using an NTC tool. In more recent partnerships, NTC's lead coaches tried to meet more regularly (every 6–8 weeks) with district and school leaders to strategically plan and share coaching data, and at least one partner site created a school leader handbook to provide leaders with guidance on how to recruit, select, and assign mentors and provide structure for effective coaching. In a few instances, NTC was able to help districts strategically plan to include coaching as a key mechanism for improving teaching and learning. In one such district, a leader described how the NTC model expanded their ideas of the role of coaching in schools and what it could accomplish and provide: "It's not just another set of hands in the classroom and not another set of hands in the

school. It's a specialized kind of feedback and specialized way of monitoring and supporting teachers that is now consistent from school to school, which before looked very different from campus to campus and teacher to teacher."

It's not just another set of hands in the classroom and not another set of hands in the school. It's a specialized kind of feedback and specialized way of monitoring and supporting teachers that is now consistent from school to school, which before looked very different from campus to campus and teacher to teacher.

However, many other sites leaders viewed coaching as an add-on strategy and did not embed it in their district or school improvement plans or use it as an explicit strategy for meeting their goals. As a result, leaders did not communicate it to school staff as a primary mechanism for improving teacher practice and student achievement or set aside the necessary time and resources. Coaches and teachers often did not view the program as a priority but as an additional burden in their already busy schedules.

NTC saw the potential for coaching in sites where it was a key part of improvement strategies and understood it had missed opportunities in other sites by not effectively engaging leaders. It became clear that it was important to include district and school leaders earlier and more deeply in the roll-out of the program. With its redesign, NTC is engaging in a new tactical approach that includes engaging in pre-meetings with partners to understand district priorities (e.g., a certain grade level or curriculum, a priority population) and select content and a coaching structure that aligns to those priorities. NTC will hold strategic planning sessions with school leaders and instructional leadership teams to make connections between coaching and other existing priorities and to create a plan and vision for instructional coaching. Ultimately, NTC is trying to help partners align the coaching to their priorities and see how coaching can act in service of broader goals.

Looking ahead

NTC is well-positioned to re-imagine instructional coaching by leveraging previous experiences as a springboard for redesigning the content. The current iteration of the redesigned content provides training rooted in practices that align with transformative SEL (Jagers et al., 2019) and layers in identity work as a foundation for creating classrooms that center students. NTC’s vision aspires to learning environments that put people and relationships at the center and create space for creativity and play so that students can be fully themselves and lose themselves in the joy of learning.

Instructional Coaching Redesign Framework



While centering students is critical in establishing classrooms where students thrive, NTC knows that is not enough. The redesigned instructional coaching content provides training, tools, and resources that equip coaches to anchor coaching interactions in subject area content, standards, and curriculum. While training site-based coaches, lead teachers, and/or district coaches is a valuable strategy for accelerating student learning, it must be accompanied by systems-level structures to result in long-term dynamic change. Along with the redesigned instructional coaching content, NTC aims to work with partners to develop an overall strategy at the systems level that creates or enhances structures to ensure practices are sustained over time and become embedded to support educators throughout their careers.

Looking ahead, NTC plans to pilot the redesigned content with rural and urban partners, in both instructional coaching and induction mentoring programs. Piloting the content in various contexts gives the organization a unique opportunity to test adaptive models with partners and allows space to continuously innovate based on learning from the field. NTC remains committed to continuous improvement because all students deserve teachers who have the tools and skills to meet their individual needs and support them to thrive academically, socially, and emotionally.

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