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LEVERAGING A DECADE OF RESEARCH

# Designing Instructional Coaching for Optimal Learning

Executive Summary | February 2024



**Effective teachers are the most important school-based factor influencing student achievement, yet conventional approaches to teacher professional learning have typically not yielded a good return on investment (Rivkin et al., 2005; 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). There is strong evidence, however—from more than 60 experimental studies—that instructional coaching is an effective teacher development strategy (Kraft et al., 2018).**

Job-embedded coaching and mentoring have been the cornerstones of the New Teacher Center's (NTC) approach to teacher development since its founding in 1998. Initially focused on accelerating the effectiveness of new 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 in all classrooms.

# NTC Instructional Coaching Theory of Action



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, introduction of NTC's [Optimal Learning Environment framework](#) (OLE), and aligned updates to its coaching tools and protocol.

## 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 with 629 beginning teachers in 227 schools in two large urban districts to test its original induction coaching model.<sup>1</sup> Key model features included:

- Highly selective recruitment of new mentors
- Comprehensive mentor training
- Protected time for coaching
- Significant contact time with teachers supporting strong relationships
- Coaching conversations guided by NTC tools and protocols
- Focus on equity
- Role of school and district leaders in program success

This 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

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<sup>1</sup> 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.

grade level (Young et al., 2017). Providing evidence of causal “gold standard” impact, 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.

## Scaling instructional coaching

### LESSONS LEARNED

Building on this 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. 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 were 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.

Simultaneously, an NTC team was working with [CASEL](#), [CAST](#), and other education researchers to develop the Optimal Learning Environment (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 and in alignment with the OLE framework, coaching for equity became a core focus of NTC’s training, tools, and protocols.

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.<sup>2</sup> 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.

The smaller, less robust impacts reported in NTC’s later scaling studies are consistent with 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. These modifications often result in lower levels of implementation that are not consistent with developers’ expectations, and often, a “fatal adaptation” undermines a program’s impact (Morel et al., 2019).

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<sup>2</sup> Greater than .25 standard deviations.

# Redesigning instructional coaching for future impact

To solve for the barriers to implementation identified in these scaling studies, NTC has recently undertaken a comprehensive redesign of its instructional coaching model that elevates foundational and replicable elements and shifts away from those harder to implement with fidelity in different contexts. The redesign builds on “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. Primary shifts represent a more holistic, equity-focused approach grounded in optimal learning environments that allows for customization to local contexts, while maintaining key strong relationships, anchor practices and tools (planning, observing, and analyzing student work), and service anchors (foundational trainings, forums, and in-field coaching).

## SHIFT 1

### INTENTIONAL INTEGRATION OF EQUITY, TRANSFORMATIVE SEL, AND ACADEMICS

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.



## 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. 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.

## 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.

## Looking ahead

NTC is well-positioned to re-imagine instructional coaching by leveraging previous experiences as a springboard. 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.

# References

- Garet, M. S., Cronen, S., Eaton, M., Kurki, A., Ludwig, M., Jones, W., et al. (2008). *The impact of two professional development interventions on early reading instruction and achievement* (NCEE 2008-4030). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. Retrieved from <http://ies.ed.gov/ncee/pdf/20084030.pdf>
- Garet, M. S., Heppen, J. B., Walters, K., Parkinson, J., Smith, T. M., Song, M., & Wei, T. E. (2016). *Focusing on mathematical knowledge: The impact of content-intensive teacher professional development*. NCEE 2016-4010. Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Garet, M. S., Wayne, A., Stancavage, F., Taylor, J., Walters, K., Song, M., et al. (2010). *Middle School Mathematics Professional Development Impact Study: Findings after the first year of implementation* (NCEE 2010-4009). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. Retrieved from <http://ies.ed.gov/ncee/pubs/20104009/pdf/20104009.pdf>
- Gersten, R., Taylor, M. J., Keys, T. D., Rolhus, E., & Newman-Gonchar, R. (2014). *Summary of research on the effectiveness of math professional development approaches*. (REL 2014-010). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast. Retrieved from <http://ies.ed.gov/ncee/edlabs>
- Jagers, R., Rivas-Drake, D., & Williams, B. (2019). Transformative social and emotional learning (SEL): Toward SEL in service of educational equity and excellence, *Educational Psychologist*, 54(3), 162-184, DOI: 10.1080/00461520.2019.1623032
- Kraft, M.A., Blazar, D., Hogan, D. (2018). The effect of teaching coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, 88(4), 547-588.
- Morel, R.P., Coburn, C., Catterson, A.K., & Higgs, J. (2019). The multiple meanings of scale: Implications for researchers and practitioners. *Educational Researcher*, 20:10, 1-9.

- Muhammed, G. (2020). *Cultivating genius: An equity framework for culturally and historically responsive literacy*. New York: Scholastic, Inc.
- Picucci, A. & Laughlin, T. (2019). *Evidence-based coaching: Key drivers of scaleable improvement district-wide*. Santa Cruz, CA: New Teacher Center. Retrieved from <https://ntc.widen.net/s/gbnqgw2kc/evidence-based-coaching-report-rb21>
- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417-458.
- Suk Yoon, K., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). *Reviewing the evidence on how teacher professional development affects student achievement* (Issues & Answers Report, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from <http://ies.ed.gov/ncee/edlabs>
- Strunk, K., Marsh, J., Bush-Mecenas, S., & Duque, M. (2016). The best laid plans: An examination of school plan quality and implementation in a school improvement initiative. *Education Administration Quarterly*, 52(2), 259-309.
- TNTP (2015). *The mirage: Confronting the hard truth about our quest for teacher development*. New York, NY: TNTP, Inc. Retrieved from [https://tntp.org/assets/documents/TNTP-Mirage\\_2015.pdf](https://tntp.org/assets/documents/TNTP-Mirage_2015.pdf)
- Young, V. M., Schmidt, R., Wang, H., Cassidy, L., & Laguarda, K. (2017). *A comprehensive model of teacher induction: Implementation and impact on teachers and students. Evaluation of the New Teacher Center's i3 Validation Grant, Final Report*. Prepared for the New Teacher Center. Menlo Park, CA: SRI International.



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# Authors

Lauren Cassidy and Katrina Laguarda, SRI International

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(831) 600-2200