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NTC Response to IES/Mathematica First-Year Report on Teacher Induction

The U.S. Department of Education’s Institute of Education Sciences (IES) and Mathematica Policy Research, Inc. released the first-year results of a three-year study on comprehensive teacher induction on October 28, 2008. This randomized controlled trial compared the implementation of a designed induction treatment – supported by the New Teacher Center (NTC) and Educational Testing Service (ETS) – to a control group represented by existing programs in 17 urban school districts. After one year, the study found no statistically significant relationship between the induction treatment and teacher retention, teaching practice, or student achievement.

The NTC sees this first randomized controlled trial of teacher induction as an important step toward a broader base of research. We are excited that the federal government viewed comprehensive teacher induction as worthy of such an investment, and were honored to have participated in this evaluation as a result of being selected as one of the two most robust induction programs in the nation.

It is important to note that the research design modified the NTC’s induction model for experimental purposes. As the authors note, “The study was intended to explore the effects of comprehensive teacher induction in general, not the specific impacts of any one program.” The studied treatment was not the full NTC induction model. We understood this entering into the study, but nonetheless felt that it was an approach to new teacher support worth testing.

Unlike the induction treatment studied, the NTC’s induction model is more comprehensive:

- a. It is a multi-year implementation, featuring participation by **all first- and second-year teachers**.
- b. It is **district-wide**, involves a variety of **stakeholder groups**, provides a **robust infrastructure for mentor support**, and is **contextualized** for individual district and schools.
- c. It utilizes carefully **selected and trained mentors** who begin their work before the school year begins in order to build relationships throughout the district.

As an organization, we have spent the time since its release reviewing the report in detail. Our internal review has raised a number of issues and questions – about the implementation and duration of the induction treatment, similarities between control and treatment groups, and the timing and measurement of teacher practice – that are important to consider alongside the findings of the year-one report and which we hope will be addressed in subsequent reports.

1. First-Year Implementation

During the course of the study, the NTC raised concerns about the quality and consistency of the implementation of the designed induction treatment. Such bumps in the road are inevitable in the first year of any new program, let alone in a tightly regimented research design. In the real world, programs have an opportunity to work out those kinks in the second year and beyond. Such an opportunity does not exist in a one-year design experiment.

Some of our questions and concerns about implementation hinge on the following issues:

- **Mentor Experience** – The most important element of the induction treatment developed for this study was the quality of the mentor. All of the educators who were selected to support new teachers were first-year mentors being trained during the course of the year that the induction treatment was being implemented. In fact, by December, the mentors had only received half of their training, which continued through May. There were few mechanisms within the study to help these mentors accelerate their steep learning curve. In comparison, existing programs are able to provide support to help bring first-year mentors up to speed (i.e. pairing with more senior mentors, one-on-one coaching from experienced program directors, etc.). NTC mentors—who generally commit to three years of service—typically develop a deeper level of expertise in their second and third years in the role as well.
- **Mentor Selection** – The NTC uses a mentor selection rubric to help districts identify, recruit, and select the most talented educators, with a particular set of dispositions and skills (i.e. mastery of content/pedagogy, knowledge of adult learners, ability to collaborate, etc.). Mentors were not selected to participate in this study until extremely late in the process when many educators had already committed to teaching and other leadership roles. Two mentors began their duties after the mentor orientation and two of the mentor trainings had already taken place. Overall, the mentor recruitment process in each of the districts was less than rigorous, with limited articulation about the power or importance of the work. This meant that many top educators were unavailable, unaware, or uninterested in applying for the positions. As a result, the mentor applicant pool was very small at most sites and less robust than in the many school districts with which the NTC works.

Further, we know that some treatment-group schools got a late start, with some mentor-new teacher matches occurring more than a month after the start of the school year. Beginning teacher orientations were held at each site, but many beginning teachers had not yet been paired with mentors at that time. In our program work, we recommend that mentors build relationships with the new teachers that they have been matched with prior to the start of the school year. The report acknowledges that only about half of the treatment mentors had been able to meet with their teachers before the school year began.

- **Multiple Mentors** – Nearly one third (29%) of new teachers in the treatment group (versus 17% of the control group) reported having two or more mentors—most likely, the full-release mentor provided through the induction treatment as well as a site-based mentor at their school site. This overlap raises a fundamental question about measuring the causal impact of an induction treatment when multiple (and potentially conflicting) avenues of support were available and provided to new teachers during the treatment period. From our experience in other settings, new teachers with multiple mentors or instructional coaches often experience confusion about which mentor’s advice to follow and which mentor to rely upon.
- **Beginning Teacher Development** – The NTC facilitated one full-day and five two-hour professional development sessions for the beginning teachers we supported in the study. The PD sessions complemented the interactions between mentors and beginning teachers and provided networking opportunities. On average, the PD sessions drew 65 percent of the beginning teachers, but average attendance ranged from almost universal attendance in one district (93 percent) to less than half in another (43 percent). In total, 20-30 percent of new teachers missed three or more of the six professional development sessions. Some of these absences were due to restrictions placed on teachers from school administrators who were unfamiliar or resistant to the program’s implementation.
- **Program Leadership** – Because of the parameters of the study, there were no full-time induction program leaders to support the work of the mentors as is typical in NTC’s full model. A program coordinator was identified at each site, but as the report notes, “Given that the coordinator role was an addition to a full set of existing responsibilities, coordinators struggled to carve out the time needed for program implementation.” In addition, “schools and districts evidenced wide variation in the level of principal support, ranging from principals who were extremely supportive ... to principals who actively resisted participation and would not permit teachers to be released for program activities.”

2. Research Design

Our review raises questions about the overall research design, including comparisons between the control and treatment groups, measurement of student achievement and teaching practice, and restrictions required by such a design experiment that would not be present in “real world” contexts.

- **Control vs. Treatment Group** – The most important question we have with regard to the study design is whether the induction offered to teachers in the control schools was sufficiently distinct from the comprehensive induction treatment to enable a clear comparison likely to lead to differences in outcomes. We are not certain that it was. Such a similarity between groups could lead to what researchers call a type II error (a false negative).

	Treatment	Control
Having any mentor	94%	83%
Having an assigned mentor	93%	75%
Average time with mentor during most recent full week of teaching	95 mins.	74 mins.
Average time spent during most recent week teaching observing mentor modeling a lesson	11 mins	7 mins.
Average time spent during most recent week teaching meeting one-on-one with mentor	34 mins.	21 mins

Table adapted from **Table IV.9.** (*Teacher Reports on Professional Support and Duties (Spring)*) and **Table IV.11** (*Impacts on Teacher-Reported Mentor Services Received in the Most Recent Full Week of Teaching (Spring)*) from Mathematica report.

The existing induction programs in the control group turned out to be more intensive than expected. For example, 75 percent of the control group reported having an assigned mentor, as compared with 93 percent of the treatment group. In addition, the amount of time new teachers spent receiving support from their mentor in the control group (74 minutes per week) is significantly higher than what our experience suggests is the norm in urban schools. The difference in mentoring time between the treatment group and the control group – 21 minutes per week (or the equivalent of a day-and-a-half over the course of an entire school year) – is surprisingly small.

Some supports received by teachers in the control group appear to be no different from the comprehensive induction treatment, potentially masking any differences in outcomes that might exist. The report highlights there were no statistically significant differences between the two groups in the following kinds of activities experienced during three months prior to spring survey: keeping a portfolio, analysis of student work, meetings with principals, literacy or math coaches, or resource specialists.

There could be a variety of explanations for the similarities between the control and treatment groups. One is the fact that school districts were allowed to nominate schools to participate in the study. It would be important to learn about the criteria used to nominate these schools. In addition, although the study’s authors screened districts to participate in the study—to avoid including those with an experience with “comprehensive induction”—they identify that “it is possible that the screening was imperfect.” A possible explanation for this could be that district personnel who confirmed to researchers that their schools had no comprehensive induction supports in place may have had insufficient knowledge about individual schools. We know from studies in the Midwest and Hawaii that schools often operate induction programs unknown to district administrators.

- **Control-Group Mentors** – The study provides little information about the mentors in the control group, but we can assume that their background and experience is similar to that of treatment-group mentors. A key difference lies in the fact that the impact of the treatment-group mentors was compared to control-group mentors who already had experience and familiarity with the existing induction programs and structures within their school.
- **Design Experiment** – This design experiment featured the implementation of an induction treatment that operated in isolation and which was disconnected from the broader teaching community and school and district leadership. The NTC’s typical long-term engagement strategy involves working with districts to embrace a high-quality vision of new teacher support and then implement aligned approaches to teacher development. Because of the study’s constraints, the NTC could not interact with the school board, unions, or pre-service groups – an essential condition for such systemic work.

In this study, 2-3 mentors per district were invited to participate in the implementation of a one-year-long induction treatment—a far different prospect than making a three-year commitment to pursue leadership within a community of teacher mentors. NTC mentors in this experiment operated in isolation, unable to share experiences beyond their tiny cohort. NTC mentor trainings – which are usually ‘open door’ affairs conducted on site within the school district – were restricted to participating mentors and were hosted off-site and away from local colleagues.

- **Impact on Student Achievement** – Treatment teachers reported spending significantly less time than control teachers in one area: preparing students for standardized testing (43 vs. 53 minutes). This may have impacted the student achievement results in the control group. Despite such potential for bias, the study measured student learning gains based on the student assessment normally administered by the district. As the National Council on Teacher Quality wrote about this study, “If the treatment at issue can influence any classroom practices associated with testing itself, researchers would be well-advised to find a test that is aligned relative to content but not overly familiar to teachers to measure the impact of the treatment on student achievement.”
- **Impact on Teacher Practice** – The report makes conclusions about the impact of comprehensive induction on teaching practice based on the observation of a single classroom lesson. Teachers were observed once giving a literacy lesson and scored using an instrument called the Vermont Classroom Observation Tool. This observation took place in March or April, after only a few months of treatment. This might be too soon for differences to be realized in classroom practices. In addition, a significant body of research suggests limitations on the analysis of teaching practice and highlights the importance of multiple observations of teachers over time.

3. Year-One Results

As the authors stress, this report analyzes only the impacts of new teacher induction after a single year. Putting aside our concerns about the study design and its implementation, this length of time in and of itself may well be too short to capture statistically significant impacts of comprehensive teacher induction.

In sum, we recognize that this study compares the effect of an isolated induction treatment to existing induction programs in selected urban schools. This was an experiment, not an induction program. For the reasons specified above, we believe that the study may not reflect the significant outcomes that can be achieved when districts have time and capacity to focus on an in-depth, universal implementation of all elements of high-quality induction.

Despite the lack of statistically significant impacts identified in the first-year report, five of the eight school districts with whom we worked during the course of the study have engaged NTC to provide induction program services beyond the study.

For those interested in taking a closer look at this study, the first-year report (*Impacts of Comprehensive Teacher Induction: Results from the First Year of a Randomized Controlled Study*) can be accessed at this link: <http://ies.ed.gov/pubsearch/pubsinfo.asp?pubid=NCEE20094034>.

If you have specific questions or concerns about the study or about the NTC in general, please do not hesitate to contact us at (831) 459-4323 or info@newteachercenter.org. Thank you.

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