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Comprehensive Teacher Induction

Supporting beginning teachers with a comprehensive induction program could compensate for their inadequate preparation and reduce high turnover. But after the first year, comprehensive induction made a difference only in the kind of support beginning teachers received. It had no impact on teacher practices, student test scores, teacher retention, or the characteristics of a district's teaching force.

One of the main policy responses to turnover and inadequate preparation among beginning teachers is supporting them with an induction program. Informal or low-intensity teacher induction programs are prevalent and include pairing each new teacher with another full-time teacher without providing training, supplemental materials, or release time for the induction. Much less common is induction that is intensive, comprehensive, structured, and delivered sequentially in response to a teacher's emerging pedagogical needs. But there is little evidence on whether investing more resources in a more comprehensive, and more expensive, induction program would help districts attract, develop, and retain beginning teachers.

This study examines whether comprehensive teacher induction programs lead to higher teacher retention rates and to other positive teacher and student outcomes compared with the prevailing, generally less comprehensive approaches to supporting new teachers.

The comprehensive induction programs tested in this study

Several features distinguish comprehensive teacher induction programs, including:

- Carefully selected and trained full-time mentors.
- A curriculum of intensive and structured support for beginning teachers.
- A focus on instruction, with opportunities for novice teachers to observe experienced teachers.
- Formative assessment tools that permit ongoing evaluations of practice and require observations and constructive feedback.
- Outreach to district and school administrators to educate them about program goals and garner their systemic support for the program.

Two induction programs—one developed by the Educational Testing Service and another by the New Teacher Center at the University of California, Santa Cruz—were selected for this study because their features most closely resembled the features listed above. Both programs included similar components. Mentor teachers had at least five years of teaching experience, were recognized as exemplary teachers, and typically had experience providing professional development or mentoring. Each mentor had a caseload of 8 to 14 beginning teachers. Mentors were trained by the program providers and were asked to meet weekly with teachers for about two hours. Conversations were expected to center

on the induction program's learning activities. But mentors also exercised professional judgment in selecting additional activities to meet beginning teachers' needs. Those activities included observing instruction, providing a demonstration lesson, interacting with students, and reviewing lesson plans, instructional materials, and student work.

Beginning teachers attended monthly professional development sessions to complement their interactions with mentors as well as mentor-facilitated peer support meetings. They also observed veteran teachers once or twice during the year. At the end of the school year, they took part in a colloquium celebrating the year's successes and the teachers' professional growth.

The two programs used for this study were modified to ensure that they were implemented in their entirety and as intended, to restrict provision of program components to one year, and to provide cross-district collaboration among mentors. The programs, thus, differ from what might have been delivered outside this study context.

The study

The study examined whether the two comprehensive teacher induction programs selected led to higher teacher retention rates and other positive teacher and student outcomes. More specifically, the study addressed five research questions on the impacts of teacher induction:

- What is the effect of comprehensive teacher induction on the types and intensity of induction services teachers receive compared with the services they receive from the current induction programs?
- What are the impacts on teacher classroom practices?
- On student achievement?
- On teacher retention?
- On the composition of the district's teaching workforce?

The study design used random assignment to create a group of teachers exposed to the comprehensive induction program (treatment) and an equivalent group exposed to the district's usual induction services (control). This design allowed the researchers to estimate the impacts of comprehensive induction compared with that of the district's usual induction services.

The study sample was composed of beginning teachers of grades K–6 in 17 school districts spread across 13 states and serving students from low-income households (more than 50 percent of each district's student population qualified for free or reduced-price lunch). Districts were assigned to one of the two programs based on district preferences, and participating elementary schools in the districts were randomly assigned to either receive the program selected by the district or to be part of the control group. The beginning teachers in treatment schools were given the opportunity to participate in comprehensive induction services.

Data used for the analyses included teacher surveys, teachers' college entrance examination scores (SAT or ACT), mentor surveys, classroom observations using the Vermont Classroom Observation Tool,[1] and test scores from district-administered assessments.[2]

The findings

After the first year, comprehensive induction made a difference only in the support received by beginning teachers. It had no impact on teacher practices, student test scores, teacher retention, or the characteristics of a district's teaching force.

Positive effects on induction support received

The researchers found statistically significant differences between the treatment and control groups in the amount, type, and content of induction support that teachers reported having received. This finding was similar in the fall and the spring of the intervention year.

Treatment teachers reported receiving more mentoring. Treatment teachers were significantly more likely than control teachers to report having a mentor (94 versus 83 percent) and having more than one mentor (29 versus 17 percent). The type of mentor also differed. Treatment teachers were significantly more likely than control teachers to report having a mentor assigned to them (93 versus 75 percent) and to report having a full-time mentor (74 versus 13 percent). They also reported spending significantly more time working with their mentors than control teachers did during the most recent full week of teaching: an average of 95 minutes per week in mentor meetings for treatment teachers, compared with 74 minutes for control teachers. The 21-minute difference was attributable entirely to differences in the duration of scheduled meetings. For a typical school year of

36 weeks, the treatment-control difference in the total hours of mentor contact time is estimated to be 12.5 hours.

Treatment teachers were more likely to report participating in specific induction activities. For the most recent full week of teaching, treatment teachers reported spending significantly more time being observed by their mentors (26 versus 11 minutes), observing mentors modeling lessons (11 versus 7 minutes), and meeting one on one with mentors (34 versus 21 minutes), or meeting with mentors and other first-year teachers (27 versus 7 minutes).

Also, for the most recent full week of teaching, treatment teachers were 15–26 percentage points more likely than control teachers were to report having received mentors' assistance in a variety of areas, with a difference of more than 20 percentage points in discussing instructional goals and how to achieve them (70 versus 44 percent), receiving suggestions to improve practice (74 versus 52 percent), and receiving guidance on assessing students (62 versus 40 percent).

In a broader window of three months prior to the spring survey, treatment teachers were a significant 7 to 36 percentage points more likely than control teachers to receive each type of guidance asked about, with a difference of 25 percentage points or more in:

- Reflecting on instructional practice (68 versus 33 percent).
- Managing classroom activities, transitions, and routines (65 versus 40 percent).
- Reviewing and assessing student work (55 versus 30 percent).
- Using student assessments to inform their teaching (54 versus 29 percent).

Treatment teachers spent more time in certain professional activities during the three months prior to the spring survey. During the three months prior to the spring survey, treatment teachers were significantly more likely than control teachers to report:

- Keeping written logs (40 versus 28 percent).
- Working with study groups of new teachers (68 versus 27 percent) and study groups of new and experienced teachers (47 versus 37 percent).
- Observing others teaching both in their classrooms (70 versus 42 percent) and in the beginning teacher's classroom (47 versus 38 percent).

Treatment teachers were significantly more frequently observed by mentors (3.4 versus 1.5 times), though not by principals, and more frequently given feedback on teaching both as part of a formal evaluation (1.7 versus 1.5 times) and at other times (2.5 versus 2.0 times) than control teachers were during this period.

Of 17 areas of professional development asked about, treatment teachers were significantly more likely to report having attended professional development in three areas: lesson planning (38 versus 26 percent), analyzing student work (56 versus 42 percent), and differentiated instruction (55 versus 46 percent).

Treatment teachers reported spending significantly more time in professional development in 4 of the 17 areas:

- Analyzing student work/assessment (58 versus 41 minutes).
- Planning lessons (36 versus 26 minutes).
- Engaging in parent and community relations (23 versus 15 minutes).
- Assigning grades and keeping records (17 versus 10 minutes).

Treatment teachers reported spending significantly less time than control teachers in preparing students for standardized testing (43 versus 53 minutes).

No impacts on teacher practices in the first year

No statistically significant differences were observed between treatment and control teachers' performance on any of the three domains of classroom practices. Observers scored teachers on a set of 16 indicators of teaching practice using a five-point scale. The indicators were grouped in three domains: lesson implementation, lesson content, and classroom culture. The analysis controlled for teacher demographic characteristics, teacher education and professional background, teaching assignments, school characteristics, and district and grade fixed effects.

No positive impacts on student test scores in the first year

The average impacts across all grades were not significantly different from zero for math or reading. The test score analysis was based on standardized achievement tests that the district normally conducts. While district-administered test scores may not cover every domain of student

achievement that induction might affect, they do capture the content that school districts or states deem most important and worthy of assessing.

No impacts on teacher retention after one year

Relative to prevailing induction practices, comprehensive teacher induction had no statistically significant impact on teacher retention, measured as the percentage of teachers who remained in their originally assigned school, in their district, and in the teaching profession.

The researchers also examined the reasons that teachers who left their districts (movers) or left the teaching profession (leavers) gave for leaving and found no statistically significant impacts. When leavers were asked whether they expected to return, and if so, when they would do so, there was no evidence of a treatment-control difference. Nor did treatment teachers report feeling more satisfied with or better prepared for their jobs than did control teachers.

No positive impacts on composition of the district teaching workforce after one year

As teachers leave a district, the average qualifications of the teachers who remain in the district might begin to change, perhaps differentially for the treatment and control groups. The researchers tested this hypothesis by comparing the characteristics of district stayers between the treatment and control groups along three dimensions: observed classroom practices, effect on student achievement, and professional characteristics, such as SAT/ACT scores and advanced degrees.

Comprehensive teacher induction had no positive impacts on the classroom practices of stayers, no positive impacts on their students' achievement (and one statistically significant negative impact), and no significant impacts on their professional background characteristics.

NCEE developed the Evaluation Briefs to offer short synopses of complex technical evaluation reports. This brief was not prepared by the study authors.

Second year of study

This report focused only on the first year of findings. The research team is conducting a longer term follow-up to collect more data on test scores and teacher mobility. In addition, the program was expanded to include a second year of services for all treatment teachers in seven districts that were selected for their willingness and ability to continue the program. Future reports will therefore provide evidence on the longer term effects of a one-year program in 10 districts and a two-year program in 7. A second report is expected in late 2009.

For the full report, please visit:

http://ies.ed.gov/pubsearch/pubsinfo.asp?pubid=NCEE20094034

Glazerman, S., Dolfin, S., Bleeker, M., Johnson, A., Isenberg, E., Lugo-Gil, J., Grider, M., Britton, E., and Ali, M. (2008). *Impacts of Comprehensive Teacher Induction: Results from the First Year of a Randomized Controlled Study* (NCEE 2009-4034). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.

Notes

1. Saginor, Nicole, and Phil Hyjek. (2005). *Observing Standards-Based Classrooms: The Vermont Classroom Observation Tool (VCOT).* Montpelier, VT: Vermont Institutes.

2. The specific test varied from district to district and in some cases by grade. All treatment-control comparisons were made using a common set of tests (within grade within district). The researchers standardized all test scores to have a mean of zero and a standard deviation of one to pool the findings across grades and districts.

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