

Review of The Mirage: Confronting the Hard Truth About Our Quest for Teacher Development

Reviewed By

Heather C. Hill Harvard Graduate School of Education

September 2015

Summary of Review

The Mirage: Confronting the Hard Truth About Our Quest for Teacher Development argues for fundamental changes in the way public school districts think about teacher growth. Using original data collected from teachers and administrators in three public districts and one charter network, the authors contend that although the public districts invest heavily in teacher professional development, what is offered is often a poor fit to teacher needs and ultimately ineffective as a means to improving teacher evaluation scores. Many descriptive portions of this study are strong – including evidence that public district teachers are doubtful about the utility of their own professional development and that public district offerings often lack coherence. The per-teacher cost estimate for professional development, however, was calculated by including teacher salary increases that result from professional development credits and master's degrees, a choice at odds with much of the prior research on this topic. As well, the analysis comparing growth in teacher evaluation scores to teachers' professional development experiences suffers from a number of issues, including a mis-match between the behaviors rewarded by teacher evaluation and the professional development features explored in this study. That said, readers who rely more on the report's empirical evidence and less on its hyperbolic statements will profit from reading this report.

Kevin Welner *Project Director*

William Mathis
Managing Director

Alex Molnar
Publishing Director

National Education Policy Center

School of Education, University of Colorado Boulder, CO 80309-0249 Telephone: (802) 383-0058

Email: NEPC@colorado.edu http://nepc.colorado.edu



This is one of a series of Think Twice think tank reviews made possible in part by funding from the Great Lakes Center for Education Research and Practice. It is also available at http://greatlakescenter.org.

This material is provided free of cost to NEPC's readers, who may make non-commercial use of the material as long as NEPC and its author(s) are credited as the source. For inquiries about commercial use, please contact NEPC at nepc@colorado.edu.

Review of The Mirage: Confronting the Hard Truth About Our Quest for Teacher Development

Heather C. Hill, Harvard Graduate School of Education

I. Introduction

The Mirage: Confronting the Hard Truth About Our Quest for Teacher Development, authored by TNTP (formerly known as The New Teacher Project),¹ offers tough lessons about the day-to-day reality of teacher professional development in three large districts and one mid-size charter network. Based on original data collected from teachers and administrators, the report provides descriptive details about teachers' professional development experiences – teachers' time investment, how they spend that time, and notably, the cost to the district. It also considers the coherence of district and charter network efforts to improve teaching. Finally, the authors seek to discern the teacher beliefs and professional development experiences that improve teacher evaluation scores.

The work is novel. Most academic scholars in this field focus on developing or studying high-profile, stand-alone professional development programs; only rarely do we inquire about the general offerings typically available to most teachers. The report's findings may also spark a much-needed public discussion regarding the effectiveness of teacher professional development.

II. Findings and Conclusions of the Report

The report begins with a description of professional development spending in the study's three public districts: about \$18,000 per teacher per year, or 6-9% of the annual operating budget (p. 8). This last figure is roughly double the estimates produced by scholars who investigated this issue nearly two decades ago, where costs running to 3% of the total budget were common and the range was roughly 1%-6%.² One possible reason for this discrepancy concerns the way the authors calculated these costs; the TNTP estimate includes the salary increase teachers receive after obtaining a higher degree or accumulating professional development credits, while scholars in the prior literature generally omitted this cost. As Goldhaber and Brewer show³, teachers receive an average pay increase of 11% after receiving a master's degree, making this a likely reason for the difference in estimates. However, the discrepancy may also exist because

the study districts appear to embrace newer, more expensive forms of teacher professional development. The cost of coaching, in particular, has been estimated at \$3,260 to \$5,220 per teacher by another source⁴, and the share of administrator time (and salary) dedicated to observation and feedback has likely increased as a result of new teacher evaluation requirements.

Regardless of the disjuncture with prior literature, it is clear that the districts studied do invest considerably in teacher professional development; depending upon district, there was one full-time support staff for every 14-37 teachers (p. 9). Teachers, for their part, also reported strong investments in professional development—on average 17 hours per month (p. 9), a figure that includes both district-offered and self-initiated professional development.

The description of district and teacher investment in professional development is followed by an analysis linking improvement in teacher evaluation scores to particular formats of

...teachers did not place much stock in formal teacher evaluation systems as a means of instructional improvement professional development. The authors begin by noting that teachers seldom improve; only about 30 30% of public school teachers raised their standardized test scores during the years of the study, around 20% declined in performance, and approximately 50% remained

stable (p. 13). Comparing survey responses from teachers whose evaluation scores improved to those who did not improve, the authors found no substantial differences in the amount of formal observation and coaching, in the number of hours invested in formal collaboration with other teachers, in extended professional development experiences, in peer observation and coaching, and in the total hours invested in professional development (p. 21). There were also no differences between improvers and non-improvers in teacher satisfaction with professional development and in teacher reports of self-reflection (p. 19). The major exception to this pattern of null results was evidence that when teachers' and evaluators' assessment of instructional quality aligned, teacher scores appeared to improve over time (p. 23).

Next, the authors summarize teachers' own reports about their instruction and professional development experiences. Most teachers rated themselves as providing strong instruction – even those whose evaluation scores were quite low (p. 25). Most were also skeptical that professional development had proven a worthwhile investment towards improving their instruction; for instance, only 40% of teachers reported that their professional development had been a good use of their time (p. 26). Survey responses and follow-up focus groups suggest that teachers identify a lack of customization to their needs as a major cause of dissatisfaction (p. 26). Strikingly, teachers did not place much stock in formal teacher evaluation systems as a means of instructional improvement; just over one-third agreed that such systems would improve practice (p. 27). Finally, during interviews and focus groups, teachers and administrators described a disjointed system of professional development; on average, teachers interacted with 10 different teaching professionals and departments during an average year, and many described the messages

received as conflicting and lacking coherence (p. 28).

After concluding the presentation of district data, the authors describe professional development within the charter network. Although here, too, teacher score improvement did not correspond to any particular professional development format, the authors found a much more coherent system, one in which teachers were expected to improve, where teachers had regular (often weekly) feedback and opportunities for out-of-classroom practice in instructional techniques, and where principals and assistant principals had primary responsibility for helping teachers meet instructional expectations (pp. 31-32). Notably, teachers in the charter network were much less likely than public school teachers to rate themselves highly on the instructional practice scale, and much more likely to identify weaknesses in their instruction. Finally, the authors present evidence that teachers in the charter network were more likely to improve both the quality of their instruction and their ability to raise student test scores (p. 30).

III. The Report's Rationale for Its Findings and Conclusions

The report's findings and conclusions are based on responses from roughly half of the contacted teachers in the public districts and the charter network, and on administrative data, including teacher observations, student test results, and summative evaluation scores. The report also links teachers' survey responses to these evaluation scores, as well as to data on student populations at their school.

IV. The Report's Use of Research Literature

The report seldom references the research literature.

V. Review of the Report's Methods

Mirage is at its strongest when providing descriptive information regarding district expenditures, teachers' experiences with professional development, and the coherence of public district and charter network efforts around teacher improvement. Using only interview data and tabulations of teacher survey responses, the authors make a compelling case that teacher development in the public systems is unlikely to be a source of instructional improvement. For instance, that 10 professional developers working in different departments have touch points with the average teacher each year suggests a system that is as shallow as it is uncoordinated. Districts clearly fund these programs well; although it seems unlikely that \$18,000 per teacher per year would be freed by dismantling

existing professional development, it is tempting to imagine how even a more modest figure of \$10,000 per teacher could be repurposed to support real teacher improvement. Strikingly, these patterns – significant district investment in a system that lacks coherence – have been on display for over twenty-five years; Judith Warren Little, writing in 1989 about California districts' professional development systems, painted almost the same picture. That so little has changed in the interim suggests that this sector requires truly innovative thinking.

Another area of strength is the report's descriptions of teacher beliefs about their instruction and professional development. Although responses to survey questions suggest that many embrace feedback and reflection as a means of improvement (p. 51), teachers generally rate themselves as already strong in the classroom, even when their supervisors disagree. As well, evidence that less than half of public school teachers think they have weaknesses in their instruction is at odds with results from the Measuring Effective Teaching and similar observational studies⁷, which find most classrooms to be well-managed but pedagogically flat, with few opportunities for student thinking and reasoning. The pervasive belief that one's own instruction is good or at least "good enough" is a fundamental barrier to improvement, not only because teachers lack incentive to experiment pedagogically, but also because it indicates that teachers lack a clear vision for how their own practice differs from high-quality instruction.

Mirage is less strong when analyzing the relationship between professional development and growth in teacher evaluation scores, making questionable the authors' conclusions regarding the inefficacy of various forms of professional development. One reason for doubt is the likely unreliability and potential inaccuracy of the evaluation data, which is composed primarily of evidence from student test scores and observations by supervisors. The wider literature has established that teacher value-added rankings are very often inconsistent between years, between tests administered in the same year, or even inconsistent between sub-sections of the same test; student learning objectives, now used in non-tested grades and subjects in many locations, appear to follow suit. Even under the best of circumstances, teacher observation scores are similarly limited in their reliability owing to the typically small number of lessons observed per teacher and variability in observer accuracy. With this amount of noise in evaluation scores, it is not surprising that professional development formats failed to predict substantial teacher change over time.

Another issue with the analytic portion of the report relates to long-standing difficulties in measuring professional development experiences. Such experiences can be defined by their format (e.g., coaching, collaboration), by their topic (e.g., math content, general pedagogy, how to use new curriculum materials, formative assessment, new observational rubrics), by their fit to their environment (e.g., collective participation with colleagues, coherence with district policy) and – importantly – by their quality. The

last, likely the most salient to teachers' growth, is the hardest to measure, though evidence elsewhere suggests strong differences in quality across professional development providers.¹¹ In that this report focuses on only formats rather than topic, fit, and quality,

it tests only a fraction of the different factors that might impact the effectiveness of professional development.

A final reason to doubt the conclusions regarding the relationship between professional development and teacher improvement relates to the authors' findings on coherence. If teachers are to improve their overall evaluation scores, they would need professional development tightly aligned to the student tests and observational rubrics that comprise those scores, rather than the multitude of other topics typically available in districts. However, the authors do not present evidence on the degree to which teachers' professional development actually focused on student tests or the rubric dimensions on which teachers score poorly (e.g., critical thinking, engaging students, checking for understanding, p. 14). It may be that the formats dismissed in this report – coaching, collaboration – are quite effective when focused on the topics rewarded in teacher evaluations.

The report's conclusions are problematic in several other places — most notably in its assertion that teachers are static with regard to performance. Because a sizeable portion of evaluation scores are based on norm-referenced metrics (for instance, value-added scores rank teachers with regard to one another), it is not surprising that scores improve little. The report also presents no data regarding the validity of their survey items — that is, whether they actually measure the kinds of professional development they are intended to measure — and whether the roughly 50% of contacted teachers who responded to their survey were representative of teachers in the districts and charter network more broadly.

The reasoning above suggests that declarative statements such as "it's impossible to pinpoint a particular type, amount or combination of development activities that is currently helping the average teacher improve more than any other" (p. 22) and "Most teachers in the districts we studied seem to be marching in place when it comes to their development" (p. 13) are overly broad and not supported by the study's methods or evidence. That said, readers who rely more on the report's empirical evidence and less on its hyperbolic statements will profit from reading this report. The authors were also able to rule out the possibility that the format of professional development predicts teacher improvement in these districts; this should help correct a widespread perception in the field that format guarantees quality. Instead, the ingredients for effective professional development likely involve content, delivery quality, and alignment between that content and the metrics used to gauge teacher growth.

VI. Review of the Validity of the Findings and Conclusions

The report concludes with recommendations for reinventing the professional development system in public schools, including re-setting norms and expectations regarding instructional improvement, providing teachers with more compelling information regarding their instructional strengths and weaknesses, rigorously evaluating and

culling out weaker district-supported professional development options, and investing in system-level changes, such as targeted recruitment and retention, certification based on competency rather than examinations, and allowing for more on-the-job learning for new teachers. While some of the report's recommendations seem appropriate to what can be gleaned from the study (e.g., more rigorous evaluation of in-district offerings), others are much farther afield (e.g., targeted recruitment and retention; redesigning schools such that good teachers have significantly larger class sizes). This conclusion creep is surprising, especially given the omission of one of the main lessons from the charter network: that increasing the coherence of guidance and 'instructional press,' so to speak, on teachers appears to result in gains in teacher effectiveness.

VII. Usefulness of the Report for Guidance of Policy and Practice

This report will undoubtedly contribute to discussions regarding teacher development. Issues with analyses and interpretation aside, evidence from recent cluster randomized trials and testimony from teachers themselves points to the fact that this sector of the educational marketplace vastly underperforms expectations. Re-imagining this marketplace will be a serious and significant endeavor, one that will require districts to undo decades of accreted professional development practices, and that will require significant investments in novel forms and research.

Notes and References

- 1 TNTP (2015). The mirage: Confronting the hard truth about our quest for teacher development. Washington, DC: Authors.
- See Corcoran, T. B. (1995). Helping teachers teach well: Transforming professional development. Philadelphia, PA: CPRE Policy Briefs; Miller, B., Lord, B., & Dorney, J. A. (1994). Staff development for teachers: A study of configurations and costs in four districts. Education Development Center; Miles, K. H., Odden, A., Fermanich, M., & Archibald, S. (2004). Inside the black box of school district spending on professional development: Lessons from five urban districts. Journal of Education Finance, 1-26.
- 3 Goldhaber, D. D., & Brewer, D. J. (1998). When should we reward degrees for teachers?. *Phi Delta Kappan*, 134-138.
- 4 Knight, D. S. (2010). *The Economic cost of instructional coaching* (Doctoral dissertation, University of Kansas).
- 5 Between two and four academic years, depending upon the availability of district data.
- 6 Little, J. W. (1989). District policy choices and teacher's professional development opportunities. *Educational Evaluation and Policy Analysis*, 11(2), 165-179.
- 7 Kane, T. J., & Staiger, D. O. (2012). Gathering Feedback for Teaching: Combining High-Quality Observations with Student Surveys and Achievement Gains. Research Paper. MET Project. *Bill & Melinda Gates Foundation*. Grossman, P., Loeb, S., Cohen, J., Hammerness, K., Wyckoff, J., Boyd, D., & Lankford, H. (2010). *Measure for measure: The relationship between measures of instructional practice in middle school English language arts and teachers' value-added scores* (No. w16015). National Bureau of Economic Research.
- 8 Lockwood, J. R., McCaffrey, D. F., Hamilton, L. S., Stecher, B., Le, V., & Martinez, J. F. (2007). The sensitivity of value-added teacher effect estimates to different mathematics achievement measures. *Journal of Educational Measurement*, 44(1), 47-67. Lockwood, J. R., Louis, T. A. & McCaffrey, D. F. (2002). Uncertainty in rank estimation: implications for value-added modeling accountability systems. *Journal of Educational and Behavioral Statistics*, 27 (3), 255-70. Papay, J. P. (2009) Different tests, different answers: The stability of teacher value-added estimates across outcome measures. Cambridge, MA: Harvard Graduate School of Education.
- 9 Buckley, K. H. (2015) Separating the signal from the noise: Examining teacher evaluation scores based on student learning objectives. Unpublished doctoral dissertation, Harvard Graduate School of Education.
- 10 Bell, C. A., Gitomer, D. H., McCaffrey, D. F., Hamre, B. K., Pianta, R. C., & Qi, Y. (2012). An argument approach to observation protocol validity. *Educational Assessment*, 17(2-3), 62-87; Hill, H. C., Charalambous, C. Y., & Kraft, M. A. (2012). When rater reliability is not enough teacher observation systems and a case for the generalizability study. *Educational Researcher*, 41(2), 56-64.
- 11 Blazar, D., & Kraft, M. A. (in press). Exploring mechanisms of effective teacher coaching: A tale of two cohorts from a randomized experiment. *Educational Evaluation and Policy Analysis*; Hill, H. C. & Ball, D. L. (2004). Learning mathematics for teaching: Results from California's Mathematics Professional Development Institutes. *Journal of Research in Mathematics Education*, 35, 330-351.

Document(S) Reviewed: The Mirage: Confronting the Hard

Truth About Our Quest for Teacher

Development

Author(s): TNTP

Publisher(S)/Think Tank(S): TNTP

DOCUMENT RELEASE DATE(S): August 4, 2015

Review Date: September 15, 2015

Reviewer(S): Heather C. Hill, Harvard Graduate School of

Education

E-Mail Address: heather_hill@harvard.edu

Phone Number: (617) 495-1898

SUGGESTED CITATION:

Hill, H.C. (2015). Review of "The Mirage: Confronting the Hard Truth About Our Quest for Teacher Development." Boulder, CO: National Education Policy Center. Retrieved [date] from http://nepc.colorado.edu/thinktank/review-tntp-mirage.