5-29-2014


William J. Mathis
University of Colorado Boulder, william.mathis@colorado.edu

Follow this and additional works at: https://scholar.colorado.edu/nepc

Part of the Education Commons

Recommended Citation

This NEPC Review is brought to you for free and open access by Centers and Research Institutes at CU Scholar. It has been accepted for inclusion in National Education Policy Center by an authorized administrator of CU Scholar. For more information, please contact cuscholaradmin@colorado.edu.
Summary of Review

This review addresses two different proposals for reforming teacher training, neither of which is grounded in research. Further, neither provides useful evidence that the proposed programs have been, or promise to be, effective. TNTP’s Fast Start initiative essentially replaces teacher preparation with a five-week pre-service program followed by a closely monitored internship. As proof that compressing teacher preparation into basic survival training is effective, the authors report three weak correlations between the performance of program participants and TNTP’s certification evaluation rubric. The report concludes with three self-evident aphorisms: practice improves teaching, teachers who master teaching skills do better, and inadequate performers should be weeded out. Unfortunately, the TNTP report fails to show its policy prescription is effective or superior to other approaches. New America Foundation’s Time to Improve proposes a federal regulatory approach, rating teacher preparation programs based primarily on the k-12 test scores of the pupils their graduates go on to teach. It doesn’t address why policymakers should favor extending the use of high-stakes student test scores to teacher preparation programs in light of the long string of uncontrolled intervening factors that invalidate this approach. In light of these weaknesses, neither proposal provides useful guidance for teacher preparation policy.
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 Two Alternative Teacher Preparation Proposals

William Mathis, University of Colorado Boulder

I. Introduction

Over the past few years, teacher quality has been a major focus of policymakers. Rallying around the claim that teachers, or a subsection of teachers, are of low quality, one of the main policy proposals has been to evaluate teachers using the test scores of their students. The two think tank reports examined here reflect the newest iteration of this push: extending the reform efforts to include teacher preparation programs. Both reports begin with an assumption that teacher preparation programs are deeply flawed, but their solutions are different. One basically does away with teacher education as commonly practiced, while the other recommends that teacher education programs be “held accountable,” primarily through the test scores of their graduates’ k-12 students.

The TNTP (formerly known as The New Teacher Project) report, Fast Start: Training Better Teachers Faster with Focus, Practice and Feedback, is characterized as a team project, with Ana Menezes and Adam Meier as lead authors and researchers.¹ This report contends that traditional teacher preparation is ineffective and supervised practice is the way to develop good teachers.

The New America Education Policy Program paper, Time to Improve: How Federal Policy Can Promote Better Prepared Teachers and School Leaders, by Melissa Tooley and Laura Bornfruend,² more explicitly bases its approach on what the authors see as the failure of traditional teacher and principal preparation. They propose a top-down, regulatory approach where teacher preparation programs are evaluated, with a strong criterion being student gain scores. They would like to see their plan included in Title II of the reauthorization of the federal Higher Education Act. Persistently poor-performing teacher³ education programs would have state approval revoked and federal funds withdrawn.

II. Findings and Conclusions of the Reports

TNTP’s Fast Start

The report describes itself as a “story” of the first two years of TNTP’s Fast Start program, which started with five sites in 2012 and expanded to 14 locations in 2013 and involved

http://nepc.colorado.edu/thinktank/review-fast-start-time-to-improve
3,453 participants. The authors report three lessons learned: (1) teachers can improve if given enough opportunities to practice; (2) teachers who master skills during the five week pre-service are more likely to be successful in their subsequent teaching; and (3) pre-service should be treated like a training camp, where not everyone makes the cut.

Over half of this colorful 24-page report is composed of photographs, charts and tables. While briefly nodding to the claimed deficiencies of teacher training in a footnote, the focus of the new plan is to teach the essential skills necessary for effectiveness and survival as a beginning teacher. Its main criticism of traditional teacher preparation programs is that they are too theoretical and conceptual to give new teachers the tools they need. It likewise criticizes TNTP’s own past alternative teacher-preparation programs as being no better (or worse) than traditional programs. Thus, the report also announces a new direction for TNTP.

Based on “the latest research and our experiences with tens of thousands of new teachers” (p. 1), the authors propose that teacher preparation be concentrated into a five-week pre-service program, evening seminars and a year-long supervised internship. This is guided by three core principles, four key skills, and four techniques. The core principles are: (1) focus on only a narrow range of skills, (2) practice these skills, and (3) provide intensive feedback. The four key skills are defined as delivering lessons clearly, maintaining high academic expectations, holding high behavioral expectations, and maximizing instructional time. These are achieved through four techniques: 100% of students will follow directions; student behavior will be consistently and positively corrected; authority will be established in the classroom; and students will be provided with clear, consistent and sequential directions.

**New America’s Time to Improve**

This 16-page (also colorful) report starts with a far stronger critique of “the state of educator preparation.” This is presented in a string of 11 bullet points that assert current failures. For example, “Many states . . . [c]reate preparation program approval/reauthorization processes that do not consider whether program graduates are well-prepared to succeed once they are employed in PreK-12 schools” (p. 2). The New America report levels its criticisms not only at teacher preparation programs; it also explicitly decries the shortcomings of state governments. Among the listed failings are that teacher preparation teaches the wrong knowledge, is misaligned, lacks proper input, does not focus on employment, is non-responsive, and does not integrate in-service training.

This series of complaints about preparation programs and state governments is followed by a dense page of criticisms directed at the federal government noting its failure to lead, collection of the wrong data, failure to identify weak programs, not enforcing quality provisions in grant programs, and ignoring principal preparation programs (see p. 3).

Without further elaboration, the report then launches into recommendations calling for a much stronger, top-down, regulatory federal role. Specifically, the authors advocate more data on teacher preparation programs, with a focus on “performance measures” (p. 4).
Programs should be scored on quality based on these performance measures, and programs are to be held accountable “through a combination of incentives and consequences” (p. 4). A new competitive program would allow “successful” states to use some of their federal HEA Title II money to “encourage state innovation.”

The recommendations also explain what government policy should not do. Specifically, federal student financial aid should not be withdrawn just because the institution’s alumni are not producing good test scores—at least not until the assessment system is well-functioning. Also, states should not be allowed to sub-grant federal monies to low-performing programs.

A timeline included in the report pushes full implementation out to 2023, with interim benchmarks along the way. Specific guidelines for the data that must be collected are provided in an appendix, which emphasize the use of test scores and gain scores. The extensive list of outcome measures to be collected does include two bullets calling for the collection of the number and percentage of graduates who teach and remain teaching in “high-need schools.” Although such measures are, indeed, strong predictors of test scores, how they will be used to assess the quality of preparation programs is not addressed.

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

TNTP’s Fast Start

The TNTP rationale is implicit but clear: teaching is a relatively quickly learned trade, and only a few key skills are necessary, at least for beginning teachers. It emphasizes “learning by doing” and relies on a formulaic approach based on key principles, short preparation, practice and extensive feedback. Little or no heed is paid to pedagogical content knowledge or to understanding the reasoning (or context or history) behind teaching practices. That is, the rationale is reductionist and deprofessionalizing.5

New America’s Time to Improve

The New America proposal’s rationale also moves away from treating teaching as a profession, but its approach is quite different. Teacher education programs are still valued, but they are placed within an accountability mechanism with now-familiar attributes—program effectiveness and quality are measured by looking at student outcomes. As such, part of the rationale is that quality should be driven by top-down and even punitive approaches. Teacher preparation is described as being in dire disrepair, and people and institutions should be “held accountable.” Small rewards, paid from a 2.5% set-aside of a state’s own ESEA Title II grant, would be reserved for successful programs.

For such a direct report, it is surprising to see the use of test-based gain scores treated somewhat euphemistically (e.g., “Quality Assessment System”) in the body of the report.
is only in the data appendix that the reliance on statewide measures of student growth, teacher evaluation measures based on gain scores, student test scores, state licensure test scores, and the like are clearly explicated. While other measured outcomes are included, such as the “number and percent of recent graduates who teach in state-identified high-need subject areas” (p. 11), the clear emphasis is on measuring teacher “impact” on students’ academic growth.

IV. The Report’s Use of Research Literature

TNTP’s Fast Start

Presented as a “story,” this report reads as an advocacy document and a selective evaluation report of the first two years of the Fast Start program. It makes only minimal use of references and is not a research-based document. Instead, it is aimed at selling the program and is similar in style and form to presentation hand-outs.

New America’s Time to Improve

In the introduction, the report lists criticisms of teacher education voiced by recognized sources (e.g., U. S Department of Education, Council of Chief State School Officers). However, the first 13 references (of the total of 18) appear to be cherry-picked to support the negative characterizations noted earlier. None of the 18 references appear to be from a peer-reviewed source.

Research supporting the policy recommendations is, with perhaps two exceptions, drawn from advocacy think-tanks or vested interests. The research and recommendations are not drawn from the research literature. Sources employed also include Education Sector, the National Council on Teacher Quality, the Bush Institute, Oral Roberts University and the New American Foundation.

Notably absent is any consideration of the vast literature on socio-economic, fiscal-adequacy, or school-related factors.

V. Review of the Report’s Methods

TNTP’s Fast Start

The TNTP publication is in the style of a testimonial document designed with the purpose of advancing a particular programmatic approach. The formulaic approach of three principles, four skills and four techniques in five weeks is more akin to a power-point platform presentation than to a thoughtful presentation of research evidence.
While the principles are clearly explained and have some obvious face validity, they are supported almost exclusively by the use of vignettes such as references to Doug Lemov’s “Uncommon Schools,” Norma Toner’s middle-school case study, Corrine Handy’s day in pre-service training, and various blocked quotes from teachers and administrators that embellish the margins of the report. These all have some rhetorical appeal, but they do not represent a considered policy study.

No meaningful systemic or serious evidence is provided evaluating the effectiveness of Fast Start, particularly as compared to traditional teacher preparation. In small print with ill-defined acronyms and terms, the authors report three simple correlations between their own composite evaluation model and the TNTP pre-service training program: correlations of .06, .16 and .18 (p. 16). While the report’s bar chart collapses the data into quartiles, which visually exaggerates the strength of the findings, the actual effect is apparently much less. The meagre correlation coefficients account for, in the best case, only 3.24% of the variance, which is trivial. The presentation is confounded by lumping total pre-service participants in with “school-year” participants in some unexplained way. Although the correlations are reported as statistically significant, this merely means that—given the larger sample size—the small differences are probably not due to chance. Furthermore, as the analysis is based on correlations, this weak relationship may be due to any number of other factors. For example, the higher-performing students may simply be more capable people—rather than beneficiaries of the program’s effects.

Closer review of the earlier-noted conclusions from the two implementation years is instructive. These “lessons” were (1) teachers can improve if given enough opportunities to practice, (2) teachers who master skills during pre-service are more likely to be successful, and (3) pre-service should be treated like a training camp where not everyone makes the cut. To be sure, some traditional programs probably do not provide sufficient rigor, practice, feedback, or coaching. The obvious point, however, is that these aphorisms could be justifiably applied to most any human enterprise. While presented as evaluation findings, they do not serve as proofs for Fast Track and they plow no new ground.

The Time to Improve authors repeatedly discuss test scores and gain scores but indicate no appreciation for the limitations of either the tests or of growth models.

New America’s Time to Improve

While the TNTP report’s tone is positive and persuasive, the same cannot be said of the New America report. Its opening 11-point denunciation of contemporary teacher education programs sets a tone to establish a platform for a punitive solution. Little time, transition, development of arguments or examination of subtleties is provided, as the report leaps directly from condemnations to recommendations.
The authors repeatedly discuss test scores and gain scores but indicate no appreciation for the limitations of either the tests or of growth models. The National Academy of Sciences tells us that we do not know how to employ such incentives or sanctions in a positive way. The American Statistical Association (ASA) warns that these approaches are ineffective in high-stakes circumstances. Likewise, three major educational research organizations (APA, AERA, and NCME) advise us on the appropriate uses of high-stakes assessment, and this report falls well below acceptable use. The New America report apparently assumes that correlation is causality; it does not measure the broader outcomes of education; it does not demonstrate an ability to achieve even correlations sufficiently strong to justify high-stakes decisions; it demonstrates no control method for intervening variables; and it reports no level of precision. In concrete terms, the ASA publication cautioned that only 1% to 14% of test-score variability can be attributed to teachers. To then carve out the effect of teacher preparation programs—some small fraction of this already small share—means that the system would report far more noise than signal. The consequence is that the results would be extremely untrustworthy and, therefore, invalid.

This report does not have an effective methodology either in its organization or in its conclusions. Given the current state of the art, any application of these approaches in high-stakes circumstances, such as recommended here, may result in extensive litigation primarily on due-process grounds.

Given the similar test-driven, top-down nature of NCLB and related policies, and given that these policies have failed to achieve their goals and have generated considerable and negative unintended consequences, doubling down on this same strategy, as this report does, provides little reason to expect that such a program would be successful.

**VI. Review of the Validity of the Findings and Conclusions**

The TNTP results are sound in so far as they recommend a focused and organized approach to teaching. A concentration on necessary skills and the provision of structured, continuous and on-going supervision and feedback would likely be broadly embraced by people from diverse perspectives. These elements of the report, while sensible, are not particularly illuminating and add little to the ongoing debates. While doing an adequate job of explaining its approach, the report simply fails to support the validity of its findings. Whether this was because the authors failed to collect the right data or failed to analyze and report it cannot be determined from the report. The limited findings provided are weak and do nothing to address whether students do better as a result of the program. The results also fail to address the efficacy of the program as compared to TNTP’s prior programs or to traditional programs.
The New America report’s federal policy recommendations consist of a condemnation of existing programs accompanied by recommendations ungrounded in the research literature. To some extent, this is not surprising, since the literature on this sort of high-stakes use of student test scores would lead us away from its recommendations. Even if readers accept the plausible premise that there are many lower-caliber teacher (and principal) education programs, there is little reason to believe that these recommendations will result in improvements.

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

To the degree that TNTP’s Fast Start program brings a new focus and concentration of resources on deep and sustained supervision of new teachers in training, the report provides utility. As for whether a five-week teacher training program is a wise way to train teachers, the report simply does not address this question in a meaningful way. The report’s lessons learned are useful aphorisms for daily life but do not provide any significant new knowledge on the best way to prepare teachers.

The New America report is a bridge too far. Using licensing examinations to rate teacher education programs has a long research history but has yet to find a particularly strong or conclusive relationship. To then propose that aggregated test scores from k-12 students validly measure the quality of a teacher or principal preparation program is to follow a twisting path that is too attenuated and far too weak. There are simply too many intervening factors that are too weakly controlled—or not even measured—to make such a proposal acceptable.
Notes and References


3. This review focuses on the New America report’s teacher preparation elements, but the principal preparation elements are similar, as is the critique.

4. Lee Schulman defines “pedagogical content knowledge” as
   The understanding of how particular topics, principles, strategies, and the like in specific subject areas are comprehended or typically misconstrued, are learned and likely to be forgotten. Such knowledge includes the categories within which similar problem types or conceptions can be classified (what are the ten most frequently encountered types of algebra word problems? least well-grasped grammatical constructions?), and the psychology of learning them.


   That is, subject area knowledge (e.g., knowing algebra) combines pedagogical content knowledge (e.g., knowing how children learn algebra) as key elements of a high-quality teacher.


<table>
<thead>
<tr>
<th>FIRST DOCUMENT REVIEWED:</th>
<th><strong>Fast Start: Training Better Teachers Faster, with Focus, Practice and Feedback</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTHORS:</td>
<td>Ana Menezes and Adam Maier (primary authors)</td>
</tr>
<tr>
<td>DOCUMENT RELEASE DATE:</td>
<td>March 2014</td>
</tr>
<tr>
<td>PUBLISHER/THINK TANK:</td>
<td>TNTP</td>
</tr>
<tr>
<td>AUTHORS:</td>
<td>Melissa Tooley and Laura Bornfruend</td>
</tr>
<tr>
<td>PUBLISHER/THINK TANK:</td>
<td>New America Education Policy Program, New America Foundation</td>
</tr>
<tr>
<td>DOCUMENT RELEASE DATE:</td>
<td>March 2014</td>
</tr>
<tr>
<td>REVIEW DATE:</td>
<td>May 29, 2014</td>
</tr>
<tr>
<td>REVIEWER:</td>
<td>William J. Mathis, University of Colorado Boulder</td>
</tr>
<tr>
<td>E-MAIL ADDRESS:</td>
<td><a href="mailto:wmathis@sover.net">wmathis@sover.net</a></td>
</tr>
<tr>
<td>PHONE NUMBER:</td>
<td>802-383-0058</td>
</tr>
</tbody>
</table>