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Review of *Measuring School Turnaround Success*

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Summary of Review

Measuring School Turnaround Success contends that the lack of a shared definition for turnaround success makes it hard for reformers to learn from each other and determine true success. The report claims to develop a model for defining turnaround success with measures, metrics, and cut scores that reach beyond student achievement tests, to include indicators of engagement by students, parents and teachers, teacher and leader effectiveness, and short-term learning outcomes. Unfortunately, given the dearth of research evidence and sound methodological techniques incorporated into its analysis, as well as the omission of several rigorous, peer-reviewed studies that contradict the majority of its proposals, the report does not meet a minimal standard of evidence to support its claims. Ironically, the report focuses largely on standardized test scores, despite its stated intentions. The result is a report that distracts attention and potential resources from schools' other goals, including civic, social, emotional, and broader academic ones. In the end, the report puts forth yet another proposal, funded by public dollars, that encourages state leaders to continue over-relying on flawed, test-centered strategies. Policymakers and practitioners looking for guidance on measuring turnaround success will not few worthwhile recommendations. Instead, they will encounter several unsubstantiated ones and others that are contradicted by solid peer-reviewed research.on flawed, test-centered strategies. Policymakers and practitioners looking for guidance on measuring turnaround success will not find worthwhile recommendations. Instead, they will encounter several unsubstantiated ones and others that are contradicted by solid peer-reviewed research.

Disclosure: Tina Trujillo serves on the board of directors for WestEd, the publisher of the report under review.

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Review of *Measuring School Turnaround Success*

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I. Introduction

Measuring School Turnaround Success,[1] written by Public Impact[2] researchers Cassie Lutterloh, Jeanette P. Cornier, and Bryan C. Hassel for WestEd's Center on School Turnaround, asserts that the lack of a shared definition of turnaround success across states or districts makes it hard for districts to learn from each other and determine whether a turnaround is successful or "off-track." The report claims to develop and provide a model for defining turnaround success with associated measures, metrics, and cut scores that goes "beyond student achievement on state assessments to include leading indicators of increased student, parent, and teacher engagement; teacher and leader effectiveness; and short-term learning outcomes" (p. 4) that states, districts, and schools can adopt in their own contexts.

The Center on School Turnaround, funded by the U.S. Department of Education, represents a partnership among "WestEd, the Academic Development Institute, the Darden/Curry Partnership for Leaders in Education at the University of Virginia, and the National Implementation Research Network, [that] is part of the network of 22 federal comprehensive centers" (p. 18). The report comes at an opportune time, given the upcoming school turnaround efforts that are likely to expand under the recently reauthorization of the federal *Elementary and Secondary Education Act*, known as the *Every Student Succeeds Act*, which continues to require states to implement turnaround-style reforms in a manner similar to those reforms promoted under the *Race To The Top Program* and the *No Child Left Behind Act*.

The report relies on standardized test score data from schools ranked in the bottom decile of all schools statewide in 2009-2010 for proficiency in math or reading/ELA[3] in three states (Tennessee, Colorado, and Illinois), as well as input from state leaders and other "experts" to inform its claims. Based on these limited sources of evidence, its authors conclude that they have "developed an approach for defining school turnaround success in a way that incorporates achievement measures, leading indicators, and school-based practices, and [that they] have laid the foundation of measures, metrics, and targets for identifying schools that have made dramatic gains in student achievement on state assessments," (p. 15) which can be adapted across states.

II. Findings and Conclusions of the Report

The report's findings are essentially a framework of measures, metrics, and targets for academic test score gains, which the authors construct by analyzing standardized assessment data from three states and feedback from state and national leaders. Their definition of dramatic gains in academic achievement is based on three measures over four years: 1) Proficiency in reading and math on state assessments; 2) Growth in reading and math on state assessments; and 3) Graduation rate (for high schools). The metrics represent a school's rise in statewide percentile rankings on proficiency; its position on state-wide percentile ranking for growth; and, for high schools, its graduation rate (p. 7). The authors select a series of targets, or milestones along a school's turnaround trajectory, that are intended "to quantify the amount of improvement a school needs to achieve to provide evidence of progress toward turnaround success," (p. 7). These targets are labeled as *threshold* (no longer among the very lowest performing), *minimum* (not yet "successful," but on track for reaching high levels of performance), and *ambitious* (can be considered high performing and exceeds the median achievement for schools in the state).

Analyzing school data from the lowest decile schools in three states against this model, the report finds that 1.8 percent and 6.2 percent of schools met ambitious goals in reading and math respectively, which the authors interpret to indicate that the *ambitious* target is a meaningful marker of success across different states. Likewise, they determine that because 7.7 percent and 18.1 percent of schools across the three states – and three completely different tests – met minimum goals in reading and math, these schools therefore met the *minimum* target for being on track for success. The authors also found that, when analyzed through their model, more schools met targets in math than reading, more elementary schools met targets than middle and high schools, and a majority of schools did not meet even the lowest *threshold* target in reading.

Feedback from state and national "thought leaders" indicated that they agreed with the authors that multiple measures of outcomes, leading indicators, and practices are indeed required to evaluate school performance. While state and district officials agreed that the report's turnaround success analyses correctly identified schools that a state would identify as making gains, the "thought leaders" also noted the limitations of using percentile ranks and graduation rates as measures of turnaround success for high schools.

Based on this information, the authors conclude that their measures, metrics, and targets for identifying and monitoring schools are applicable across assessments and states. They also conclude that using these measures, etc. presents education leaders opportunities to share lessons about school turnarounds. They acknowledge, however, that there are challenges associated with applying the report's turnaround definition and that a need still exists for a "more thorough analysis of school-based practices and leading indicators to create a more robust and multifaceted definition of turnaround success" (p. 15) that moves beyond test score data.

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

Justifying the literature

To measure turnaround success, the authors assert that states, districts, and schools first need a "theory of action" that connects ultimate academic outcomes with necessary steps along the way, including inputs, school-based practices, and leading indicators. This theory of action is based on the premise that "*IF* schools and districts hire great leaders and teachers with turnaround competencies and provide them with adequate autonomy, funding, and support; and *IF* they implement effective school-based practices; *THEN* leader and teacher effectiveness and student engagement, behavior, and learning will increase; and *THEN* student achievement, graduation rates, and college and career success will improve" (p. 2). The authors claim that defining and measuring turnaround success requires measuring each part of this logic model, though the report admittedly focuses primarily on the model's endpoint, dramatic academic gains.

Unfortunately, this theory of action assumes the existence of several conditions in place that are required to support such a linear school transformation process – assumptions that are not supported by rigorous research on school change. For example, the authors propose a definition of successful school turnarounds that is essentially a list of within-school factors presumed to spur rapid test-based growth, such as "great leaders, great teachers, and the autonomy and funding those people need for success" (p. 2). These factors are, sometimes, supported by scattered references to non-peer reviewed literature—usually practitioner publications from other intermediary organizations like the ones the authors represent. In doing so, the authors overlook several scholarly publications that explain why the research field has not settled on a valid definition of what constitutes an effective turnaround, even insofar as test scores are concerned. This literature teaches us that there is no single, agreed-upon definition of how much growth should be required, the length of time in which this growth should occur, or the requisite sustainability of the results.[4] Tracking cohorts versus comparing different groups of students from year to year, for example, produces considerably different results. Moreover, given that a turnaround is, by definition, a case of swift, dramatic gains in test performance, identifying effective turnaround schools requires researchers to rely on single- or two-year fluctuations in test scores—patterns that research shows tend not to hold up from one year to the next.[5]

In another instance, the report recommends that turnaround leaders "[m]ake necessary staff and leader replacements," and that [s]uccessful turnaround leaders typically do not replace all or even most of the staff, but they often replace team leaders who hinder change efforts" (p. 4). However, the authors do not cite specific evidence from the research on staff layoffs for this prescription. In doing so, they omit rigorous research evidence on the detrimental effects of reconstituting even portions of school staff. This literature reveals that schools struggle to replace laid off personnel with higher quality staff; that more experienced, qualified teachers tend to voluntarily resign under turnaround-driven layoffs; that students' and

teachers' morale and localized knowledge declines; that collegiality, trust, and organizational stability wane; and that student performance does not necessarily improve.[6]

The report's other prescriptions, such as to "silence critics," "collect and analyze data," and "focus on a few early wins," are similarly unsubstantiated by any references to supporting literature.

The authors also claim that "multiple sources were used to identify school-based practices, including "the Elementary and Secondary Education Act (ESEA) turnaround principles (U.S. Department of Education, 2012), research on turnaround leader actions (Brinson, Kowal, & Hassel, 2008; Public Impact, 2015a), research on high-yield instructional strategies (Marzano, Pickering, & Pollock, 2001; Schon, 2014), research on school improvement grants (Redding, Dunn, & McCauley, 2015), the Reform Support Network's (RSN) School Turnaround Performance Management Framework (RSN, 2014) and Toolkit (RSN, 2015a), and feedback from state education leaders on which school-based practices would be most meaningful in measuring turnaround success" (p. 3). However, none of these sources represent peer-reviewed scholarly work. In doing so, the authors reproduce the same pattern that scholars of intermediary organizations and research use have referred to as an "echo chamber," or the dynamics at play when coalitions of advocacy organizations and ideologically identifiable think tanks, like the ones that supported this report, cite particular sources of literature to each other and to policymakers "in an attempt to contribute to "common-sense understandings of incentivist reforms."[7]

Justifying the findings

The report's "findings" are as unsupported as their claims about the literature. For example, with regard to the identified "leading indicators" of successful school turnarounds, the authors explain that, "Leading indicators of school turnaround success…were identified through prior research (Kowal & Ableidinger, 2011; RSN, 2015b) and input from state and national leaders" (p. 6). Another footnote states that "Participants at the June 2015 Council of Chief State School Officers convening provided feedback and input on the proposed definition of turnaround success," (p. 6). From a research perspective, this evidence is insufficient for at least two reasons. First, these indicators are based only on non-scholarly, non-peer reviewed literature. Second, the rationale for compiling a sample of relevant leaders is ambiguous; evaluating the appropriateness of these informants is impossible with such limited information.

Another part of the report's theory of action, academic achievement outcomes, is equally unjustified. It includes short-term, intermediate, and long-term outcomes related to assessments, as well as "college and career readiness" and "college and career success." However, no clear definition of these growth outcomes or evidence base for their selection is provided.

Finally, with respect to the report's proposed targets, the authors provide an equally unconvincing reason for selecting them. It reads, "Targets were set after reviewing how states and

other researchers defined schools in need of turnaround interventions and schools identified as turnaround successes" (p. 7). Unfortunately, this logic ignores the research evidence on the arbitrariness and wide variability in states' target-setting criteria used to identify schools in need of dramatic improvement. It also fails to identify which researchers' definitions they relied upon and why.

Taken as a whole, the report's findings are largely unjustified, which undermines the entire theory of action that its authors propose state leaders use to inform their turnaround efforts.

IV. The Report's Use of Research Literature

Despite the authors' claim that they base their turnaround success definition on the literature and input from experts, the report's use of scholarly literature and research expertise is minimal. The authors inconsistently cite 19 non-peer reviewed documents. Nearly half were produced by organizations affiliated with the Center for School Turnaround. Cited institutions include the Academic Development Institute, the University of Chicago Consortium on Chicago School Research, Public Impact (3), WestEd (3), the University of Virginia's Darden/Curry Partnership for Leaders in Education, Institute for Strategic Leadership and Learning, U.S. Department of Education (2) Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West, a paper presented at the annual meeting of the National Council on Measurement in Education, Association for Supervision and Curriculum Development, Reform Support Network (3), Teachthought, and Achievement School District.org.

While the reliance on non-peer reviewed sources may not necessarily be an indication of thin evidence in and of itself, existing evidence from peer-reviewed sources directly contradicts many of the claims in this report. For example, the report's theory of action is based on the premise that if within-school factors are improved, academic achievement will improve within a four-year time frame. Yet, rigorous empirical evidence calls this assertion into question.[8] In addition, a strict focus on within-school factors neglects decades of research that confirms the importance of out-of-school social, political, and economic factors in determining a school's performance trajectory.[9]

Second, a focus on standardized test score data as the key indicator of school health neglects a well-rounded body of evidence that points to the methodological problems inherent in these scores as valid, reliable measures of student learning. It also implies a fairly narrow conception of student success or school effectiveness, even when other measures are marginally factored in, as the authors propose. What is more, such a heavy reliance on standardized test scores as evidence of success distracts attention and resources from schools' other goals, including civic, social, emotional, and broader academic ones.[10]

Overall, the report's superficial and unsystematic treatment of non-peer reviewed work, coupled with its dismissal of decades of research on school chance and the limitations of

high-stakes testing and accountability to drive meaningful school improvements, reveals a weak base of research support for its proposed theory of action.[11] Even the business literature on school turnarounds, the field from which "turnaround" reforms derived, finds that such changes rarely yield the results their architects expect.[12]

V. Review of the Report's Methods

The report's methodology is also unclear and, as a result, lacks credibility as well. The authors list four steps they took when creating, testing, and refining their turnaround success definition model: (1) Identified sample cohorts of low-performing schools based on school-level data, (2) Set threshold, minimum, and ambitious targets for school performance on academic outcomes, which included state measures of proficiency, growth, and graduation rate (for high schools), (3) Analyzed school data to identify schools that met the targets, and (4) Gathered feedback from state and national thought leaders to refine the definition.

Regarding the first methodological step, identifying cohorts of low-performing schools, the authors write, "Research on failing schools and how low-performing schools (see Table 3 on page 10) are identified informed the criteria for selecting the sample cohort for analysis." However, Table 3 includes three examples of how other non-peer reviewed studies measured *success*, not initial failure. Even so, how these criteria were derived is not explained.

In another instance of this contradictory logic, the authors include a footnoted caveat about the methodological flaws inherent in using percentile ranks to measure growth, yet they still propose comparing these same flawed annual percentile rankings as one measure of test-based growth. This reasoning ignores measurement experts' research on the volatility of year-to-year growth[13] and completely disregards the errors that result from comparing unequal intervals, or percentile ranks, to estimate growth.[14]

The report also states at the outset that the authors analyzed school data to identify schools that met the targets from four states, though the rest of the report refers only to three states (Tennessee, Colorado, and Illinois). While this disparity may simply reflect an editing oversight, it also casts further doubt on the accuracy of the researchers' analyses.

With respect to another methodological step, gathering feedback from state and national thought leaders, the authors fail to provide more detailed descriptions of their methods for soliciting feedback. In one footnoted explanation, they write that "Participants at the June 2015 Council of Chief State School Officers convening provided feedback and input on the proposed definition of turnaround success. Members of the State Collaborative on Assessment and Student Standards (SCASS) and Strategies and Interventions (S & I) groups reviewed the proposed definition and provided feedback on the measures and metrics, and on which school-based practices and leading indicators should be included in a more robust turnaround definition" (p. 6). Unfortunately, no information is provided for the rationale behind this sample of informants, the criteria for selection, or the analytical processes used

to evaluate their feedback.

Similarly, another footnote explains that these same groups were surveyed to provide input on which school-based practices and leading indicators should be included in a more robust turnaround definition," (p. 3). Yet, no information is provided about the survey instrument and its validity or reliability, or their methods of analysis. This lack of transparency undercuts the trustworthiness of the report's overall claims based on leaders' feedback.

VI. Review of the Validity of the Findings and Conclusions

Given the dearth of research evidence used and the lack of methodological specificity, it is impossible to assess the validity of certain portions of the report's findings and conclusions with any certainty. Because the authors also omit several sources of rigorous, peer-reviewed research evidence that contradict the majority of report's proposals, including evidence on the limitations of using percentile rankings and other indicators to measure growth (which they acknowledge), the report does not meet even a minimal standard of evidence to support its claims.

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

Unfortunately, policymakers and practitioners looking for guidance on measuring turnaround success will not just find little worthwhile recommendations in this report, they will encounter several misguided ones, such as focusing heavily on standardized test scores and using percentile ranks, that are contradicted by solid evidence.

The report almost takes an important first step toward attempting to develop a theory of action for school turnarounds that acknowledges the importance of family and community engagement in school-based practices, but it falls short of achieving its stated goals. In fact, the report focuses overwhelmingly on unsubstantiated proposals for evaluating changes in standardized test scores, while only briefly mentioning various non-test related indicators of improvement.

As in most of the non-peer reviewed literature that advocates for heavily test-focused, market-like school reforms, the report essentially dismisses the social contexts (such as the influences of poverty, health, and other structural disparities) in which these schools are embedded. As a result, it mistakenly focuses decision-makers' sights too narrowly on the technical dimensions of school change (e.g., personnel practices), which precludes important social and political considerations about these changes.

Consequently, the report contributes yet another misguided set of recommendations that erroneously focuses primarily on flawed standardized test scores as a measure of schools' "turn-

around" success. What is more, the report does not contribute any novel, evidence-backed ideas to a policy arena in need of solid proposals that are grounded in rigorous research. In this sense, the report represents a case of inefficient, wasteful use of federal grant dollars – public monies – to generate a set of proposals for state leaders to continue to rely too heavily on flawed, test-centered strategies to guide their practice.

Notes and References

1 Lutterloh, C., Cornier, J.P., & Hassel, B.C. (2016). *Measuring School Turnaround Success*. San Francisco, CA: WestEd. Retrieved July 11, 2016, from http://www.schoolturnaroundsupport.org/sites/default/files/resources/Measuring_School_Turnaround_Success.pdf

2 Public Impact, http://publicimpact.com/about-public-impact/

3 Table 4 of the report explains that the authors analyzed test score proficiency data from 867 schools, test score growth data from 444 schools (reading) and 442 schools (math), and graduation rates from 155 schools.

4 Hansen, M. (2012). Key issues in empirically identifying chronically low-performing and turnaround schools. *Journal of Education for Students Placed at Risk (JESPAR), 17*(1-2), 55-69.

Hansen, M. & Choi, K. (2011). *Chronically low-performing schools and turnaround: Evidence from three states* (CALDER Working Paper #60). Washington, DC: Center for the Analysis of Longitudinal Data in Education Research.

Huberman, M., Parrish, T., *et al.* (2011). *Turnaround schools in California: Who are they and what strategies do they use?* Sacramento, CA: California Comprehensive Center at WestEd, American Institutes for Research, and School Services of California.

Meyers, C., Lindsay, J., *et al.* (2012). A statistical approach to identifying schools demonstrating substantial improvement in student learning. *Journal of Education for Students Placed at Risk (JESPAR), 17*(1-2), 70-91.

5 Bowers, A. (2010). Toward addressing the issues of site selection in district effectiveness research: A two-level hierarchical linear growth model. *Educational Administration Quarterly, 46*(3), 400.

6 Mathis, W. (2009). *NCLB's ultimate restructuring alternatives: Do they improve the quality of education?* Boulder, CO and Tempe, AZ. Education and the Public Interest Center & Education Policy Research Unit. Retrieved July 11, 2016, from http://nepc.colorado.edu/publication/nclb-ultimate-restructuring

Mintrop, H. & Trujillo, T. (2005). Corrective action in low performing schools: Lessons for NCLB implementation from first-generation accountability systems. *Education Policy Analysis Archives, 13*(48). Retrieved July 11, 2016, from http://epaa.asu.edu/ojs/article/view/153/279

Weiss, E., & Long, D. (2013). *Market-oriented education reforms' rhetoric trumps reality: The impacts of test-based teacher evaluations, school closures, and increased charter school access on student outcomes in Chicago, New York City, and Washington, D.C.* Washington DC: Broader, Bolder Approach to Education.

Hess, G.A. (2003). Reconstitution—three years later: Monitoring the effect of sanctions on Chicago high schools. *Education and Urban Society, 35*(3), 300–327.

Malen, B., Croninger, R., Muncey, D., & Jones, D. (2002). Reconstituting schools: "Testing" the "theory of action." *Educational Evaluation and Policy Analysis, 24*(2), 113-132.

7 Lubienski, C., DeBray, E. & Scott, J. (2014). The politics of research production, promotion, and utilization in educational policy. *Educational Policy, 28*(2), 131-144.

See also Goldie, D., Linick, M., Jabbar, H., & Lubienski, C. (2014). Using bibliometric and social media

analyses to explore the “echo-chamber” hypothesis. *Educational Policy, 28*(2), 281-305.

8 See Trujillo & Renee (2015) for a full discussion of the limitations of this turnaround model of school improvement.

9 Trujillo, T. & Renée, M. (2012). *Democratic school turnarounds: Pursuing equity and learning from evidence*. Boulder, CO: National Education Policy Center. Retrieved July 11, 2016, from http://nepc.colorado.edu/publication/democratic-school-turnarounds

10 For example, see:

Rose, M. (1995). *Possible Lives: The Promise of Public Education in America*. New York: Penguin Books.

Trujillo, T. & Renée, M. (2015). Irrational exuberance for market-based reform: How federal turnaround policies thwart democratic schooling. *Teachers College Record 117*(6).

11 Trujillo, T. & Renée, M. (2012). *Democratic school turnarounds: Pursuing equity and learning from evidence*. Boulder, CO: National Education Policy Center. Retrieved July 11, 2016, from http://nepc.colorado.edu/publication/democratic-school-turnarounds

12 Altman, E. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *Journal of Finance, 23*(4), 589-609.

Nystrom, P. & Starbuck, W. (1984). To avoid organizational crises, unlearn. *Organizational Dynamics, 12*(4), 53-65.

David, J. (2010, October). Drastic school turnaround strategies are risky. *Educational Leadership, 68*, 78-81.

Staw, B. & Epstein, L. (2000). What bandwagons bring: Effects of popular management techniques on corporate performance, reputation, and CEO pay. *Administrative Science Quarterly, 45*(3), 523-556.

13 Bowers, A. (2010). Toward addressing the issues of site selection in district effectiveness research: A two-level hierarchical linear growth model. *Educational Administration Quarterly, 46*(3), 400.

Kane, T.J. & Stager, D.O. (2002). *Volatility in school test scores: Implications for test-based accountability systems*. Brookings Papers on Education Policy. Washington, DC: The Brookings Institution.

14 Glass, G. & Hopkins, K. (2008). *Statistical Methods in Education and Psychology, 3rd Edition*. Boston, MA: Allyn and Bacon.

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