

Revisiting The Turnaround Challenge: Lessons From the Field to Advance Pandemic Recovery in Low-Performing Schools

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Table of Contents

3		Executive Summary
6		Introduction
8		<i>The Turnaround Challenge's</i> Turnaround Model
10		Methodology
12		The Zones and Their Impact on Student Outcomes
15		Zone Implementation
26		Lessons Learned
29		Conclusion
30		Appendix A
35		Endnotes
37		About the Authors



iiiinsights Executive Summary

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— Sarah Phillips, Anna Braet, Susan Lusi, John Schneider, Rob Jentsch

It has long been the case that the nation’s lowest performing schools serve our highest needs students — students who are systemically marginalized by virtue of race, ethnicity, socioeconomic status, language, and/or ability.¹⁻³

But the COVID-19 pandemic has exacerbated the need to provide dramatically different supports to these schools. Between 2019 and 2022, too many students lost ground academically, and researchers estimate that it will take the average student three to five years to catch up to where they would have been pre-pandemic.⁴

Students, particularly those who are systemically marginalized, do not have three to five years to wait. For these children, restoring academic achievement to pre-pandemic levels will do nothing to address long-standing educational inequities. At this critical moment, improving low-performing schools cannot recede into the background.

Purpose

This report revisits the concept of school turnaround in order to identify critical lessons learned for school and district leaders and state education agency (SEA) staff working to accelerate pandemic recovery in low-performing schools and begin the difficult task of reinventing public education to better serve systemically marginalized students.

Methodology

This report uses quantitative and qualitative methods to examine the implementation and outcomes of

three turnaround zones established and implemented by urban public school districts in partnership with Mass Insight, the project organizer of *The Turnaround Challenge*,⁵ between 2012-2019.

The Turnaround Challenge

Released in 2007, *The Turnaround Challenge* was an influential and controversial report shaping state and national education policy during the early 2000s.^{5,6} Arguing that the United States’ best opportunity to dramatically improve student achievement lies in “turning around” low-performing schools, the report proposed a turnaround model rooted in the assumption that states and districts could engineer more effective turnaround at scale by creating “an appealing ‘space’ or zone for failing schools.”^{5(p4)}

To be effective, the report argues, zones must change conditions, cluster schools for support, and build capacity. According to *The Turnaround Challenge*, changing conditions is best accomplished by empowering school leaders with, “flexible authority over critical resources — people, time, money, and program — and professional incentives that actively encourage people to do their best work.”^{5(p44)}

Clustering entails grouping schools by need, type, or region for “intensive network support.”^{5(p52)} In *The Turnaround Challenge*, clustering is hypothesized to improve networking and resource allocation. It also requires a transparent and deliberate balance of decision-making authority between participating schools and the “lead turnaround partner” — an external organization or newly established district

office that assumes control over all aspects of zone management.^{5(p50)} Building capacity is one of the central functions of the lead turnaround partner, which involves “enhancing schools’ ability to recruit, train, assign, and support people with the right skills for the right jobs,”^{5(p48)} providing sufficient funding and resources, as well as coordinating the work of external organizations in zone schools.

Noting that, “failing schools serve mostly poor children,”^{5(p17)} a section of *The Turnaround Challenge* describes strategies “High Performing, High Poverty Schools” use to “bring highly challenged student populations to high achievement.”^{5(p9)} But there is nothing explicitly focused on diversity, equity, or inclusion in the report’s turnaround model. While reflective of the national discourse at the time, this is a shortcoming that must be addressed by school and district leaders and SEA staff working to transform low-performing schools and address the current educational crisis.

Key Findings

Of the three zones studied in this report, two (Districts 1 and 2) experienced statistically significant improvement in test scores and/or graduation rates during the intervention period. Increases to the graduation rate in District 3’s zone were also nearly significant during implementation years two and three. While descriptive results suggest that zone schools narrowed the test score gap with non-zone schools in District 1, trends in zone schools were only significantly different from those in non-zone schools during the first year of zone implementation in District 2.

Qualitative findings suggest that Districts 1 and 3 implemented their zones in a manner that was generally faithful to *The Turnaround Challenge* model. They gave zone schools new decision-making

authority to change conditions and established internal lead turnaround partners reporting directly to the Superintendent in order to build capacity and provide intensive network support to a cluster of schools. Although not explicitly a component of *The Turnaround Challenge* model, the Zone Office’s ability to provide streamlined central office support/buffer zone schools in these districts helped improve resource allocation within the zone.

In contrast to Districts 1 and 3, zone implementation in District 2 differed significantly from *The Turnaround Challenge* model. The district did not alter decision-making authority in its zones and embedded the lead turnaround partner within the district’s central hierarchy. Additionally, District 2 built capacity primarily by flooding the zones with resources.

While Districts 1 and 3 implemented their zones in ways that were more consistent with *The Turnaround Challenge* model than District 2, key differences between Districts 1 and 3 emerged in qualitative analyses. District 1’s prior experience collaborating with its teachers’ union to change conditions in a smaller subset of schools enabled District 1’s zone to use its decision-making authority more easily than the zone in District 3. District 1’s zone also appeared to benefit from a more collaborative district and zone climate than the zone in District 3. In District 3, bureaucratic and, to a lesser extent, union resistance hampered zone school leaders’ ability to use new decision-making authority they received from the state. Finally, while both zones implemented planned teacher and principal turnover, in which teachers and principals were invited/encouraged to transfer out of zone schools if they did not want to participate in zone implementation, they each used different strategies to improve the effectiveness of the teachers and principals remaining at or moving into zone schools. Whereas District 1 used

a competency-based hiring process to improve the overall effectiveness of the teacher and principal workforce in zone schools before implementation began, District 3 relied on a mix of one-year contracts and performance-based dismissal policies. However, District 3 zone schools experienced challenges in implementing these approaches. During qualitative analyses, several other key implementation differences emerged. District 1 stood out for its ability to establish a clear focus and align capacity building efforts to that focus, while District 3 stood out for implementing a spiderweb network model that appeared to be associated with improved resource allocation and networking in zone schools.

Lessons Learned

Triangulating quantitative and qualitative findings offers the following lessons for school and district leaders and SEA staff working to transform low-performing schools and address the current educational crisis:

- The extent to which a district has established the conditions (time, people, money, and program) for school transformation seems to matter more than the strategies by which conditions change occurs. While *The Turnaround Challenge* argued that school leaders need new decision-making authority to change conditions, the results of this study suggest that new decision-making authority is not always necessary or sufficient to alter conditions in low-performing schools.
- Context matters. School and district leaders and SEA staff working to transform low-performing schools and address the current educational crisis would do well to focus on strategies for improving conditions in low-performing schools that have the greatest likelihood of success in their local context.
- In addition to time, people, money, and program; school and district leaders and SEA staff should

add district and zone climate to the list of critical conditions to be leveraged or improved. Adapting Cohen's definition of school climate, district and zone climate may be thought of as the "quality and character"^{7(p180)} of district or zone life as expressed through interpersonal interactions.⁸⁻¹⁰

- The benefits of clustering — networking and resource allocation — appear related to the use of a spiderweb network model¹¹ and the establishment of a zone office with the structure and authority to offer streamlined central office support/buffer zone schools.
- While a large infusion of resources may significantly improve student outcomes in the short-term, school and district leaders and SEA staff working to transform low-performing schools and address the current educational crisis must combine additional resources with other capacity-building strategies if they are to affect long-term student outcomes in low-performing schools.
- School and district leaders and SEA staff would do well to use competency-based hiring processes, particularly when aiming to build capacity through planned teacher or principal turnover. They should also establish a clear focus and align their capacity building efforts to that focus.

While critics have rightly pointed out the faulty assumptions and limited success of the early 2000s school turnaround movement, the COVID-19 pandemic has exacerbated the need to dramatically reinvent public education in the United States. By applying the lessons learned from this study of school turnaround to the current educational crisis, school and district leaders and SEA staff can accelerate pandemic recovery in low-performing schools and begin the difficult task of reinventing public education to better serve systemically marginalized students.

Revisiting The Turnaround Challenge: **Lessons From the Field to Advance Pandemic Recovery in Low-Performing Schools**

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It has long been the case that the nation's lowest performing schools serve our highest needs students — students who are systemically marginalized by virtue of race, ethnicity, socioeconomic status, language, and/or ability.¹⁻³

But the COVID-19 pandemic has exacerbated the need to provide dramatically different supports to these schools. Between 2019 and 2022, too many students lost ground academically. National Assessment of Educational Progress (NAEP) scores

for 4th and 8th grade students dropped more than any year ever recorded in math. In reading, average scores at 4th and 8th grade were not significantly different from the first NAEP assessment in 1992.^{12,13}

Pandemic-related interrupted learning has hit systemically marginalized fourth grade students particularly hard. At this grade level, the decline in average scores between 2019 and 2022 was 2.33 times larger for Black and Latino students in math and respectively 1.67 and 1.33 times larger in reading than the comparable decline for White students. Similarly, while fourth grade students eligible and not eligible for the National School Lunch Program experienced similar declines in average reading scores, the decline in math scores among students eligible for the National School Lunch Program was 1.2 times larger than the corresponding decline among students not eligible for the National School Lunch Program.^{12,13}

Efforts to help students catch up academically, whether through tutoring, extending the school day or year, providing greater social and emotional supports, or other such strategies, need to be a priority. However, these individual interventions may not be sufficient to address the interrupted learning students experienced over the last two years, especially given the challenges of bringing these models to scale.¹⁴ This is especially true for students attending the lowest performing five percent of schools in the country. Many of these schools have been struggling to improve student

Key Takeaways

- The extent to which a district has established the conditions (time, people, money, and program) for school transformation seems to matter more than the strategies by which conditions change occurs.
- Those working to transform low-performing schools should focus on strategies for improving conditions that have the greatest likelihood of success in their local context.
- In addition to time, people, money, and program, district and zone climate should be added to the list of critical conditions to be leveraged or improved.
- The benefits of clustering appear related to the use of a spiderweb network model and the establishment of a zone office with the structure and authority to offer streamlined central office support/buffer zone schools.
- While resources may significantly improve student outcomes in the short-term, additional resources must be combined with other capacity-building strategies if they are to affect long-term student outcomes in low-performing schools.
- School and district leaders and SEA staff would do well to establish a clear focus and align their capacity building efforts to that focus.

outcomes for years. At this critical moment, improving low-performing schools cannot recede into the background. Providing dramatically different supports to these schools and their students must be a central component of state and district pandemic recovery and reinvention.

This report revisits the concept of school turnaround in order to identify critical lessons learned for school and district leaders and state education agency (SEA) staff working to accelerate pandemic recovery in low-performing schools and begin the difficult task of reinventing public education to better serve systemically marginalized students. It examines the way three districts implemented the turnaround model proposed in *The Turnaround Challenge* — an influential and controversial report shaping state and national turnaround policy during the early 2000s,^{5,6} and the changes to test scores and graduation rates that ensued. While the turnaround movement's underlying assumptions and mixed outcomes have led many to brand it as a failure,¹⁵⁻¹⁷ education leaders must learn from the past to improve their efforts today. This report contributes to the process of continuous learning.

Quantitative findings are consistent with a growing body of evidence suggesting that school turnaround interventions can improve standardized test scores¹⁸⁻²² and positively impact graduation rates¹⁹ but often have mixed or null effects.^{19,21,23-30}

Qualitative findings highlight key differences in zone implementation across districts, including the way districts established the conditions for school improvement, clustered schools to improve networking and resource allocation, and built capacity. Examined in concert, qualitative and quantitative findings suggest the following lessons for school and district leaders and SEA staff working

to transform low-performing schools and address the current educational crisis:

- The extent to which a district has established the conditions (time, people, money, and program) for school transformation seems to matter more than the strategies by which conditions change occurs. While *The Turnaround Challenge* argued that school leaders need new decision-making authority to change conditions, the results of this study suggest that new decision-making authority is not always necessary or sufficient to alter conditions in low-performing schools.
- Context matters. School and district leaders and SEA staff working to transform low-performing schools and address the current educational crisis would do well to focus on strategies for improving conditions in low-performing schools that have the greatest likelihood of success in their local context.
- In addition to time, people, money, and program, school and district leaders and SEA staff should add district and zone climate to the list of critical conditions to be leveraged or improved. Adapting Cohen's definition of school climate, district and zone climate may be thought of as the "quality and character" ^{7(p180)} of district or zone life as expressed through interpersonal interactions. ⁸⁻¹⁰
- The benefits of clustering — networking and resource allocation — appear related to the use of a spiderweb network model¹¹ and the establishment of a zone office with the structure and authority to offer streamlined central office support/buffer zone schools.
- While a large infusion of resources may significantly improve student outcomes in the short-term, school and district leaders and SEA staff working to transform low-performing schools and address the current educational crisis must combine additional resources with other

capacity-building strategies if they are to affect long-term student outcomes in low-performing schools.

- School and district leaders and SEA staff would do well to use competency-based hiring processes, particularly when aiming to build capacity through planned teacher or principal turnover. They should also establish a clear focus and align their capacity building efforts to that focus.

At this writing, signs of academic recovery have been observed across the country, but researchers estimate that it will take students three to five years to catch up to where they would have been pre-pandemic.⁴ Students, particularly those who are systemically marginalized, do not have three to five years to wait. For these children, restoring academic achievement to pre-pandemic levels will do nothing to address long-standing educational inequities. By applying the lessons learned from this study of school turnaround to the current educational crisis, school and district leaders and SEA staff can accelerate pandemic recovery in low-performing schools and begin the difficult task of reinventing public education to better serve systemically marginalized students.

The Turnaround Challenge's Turnaround Model

Arguing that the United States' best opportunity to dramatically improve student achievement lies in "turning around" low-performing schools, Mass Insight (Mi) released *The Turnaround Challenge* in 2007.^{5(p4)} The report was "highly influential" and "highly touted."^{6(p23,25)} For example, the state of Indiana used it to develop a school quality review rubric to inform school accountability decisions required by state law.³¹ At the federal level, Mi was invited to help U.S. Secretary of Education Arne

Duncan develop a national strategy for turning around low-performing schools — a strategy that was later embedded in the federal School Improvement Grant (SIG) and Race to the Top initiatives according to Mi's former president.

The Turnaround Challenge's turnaround model is rooted in the assumption that states and districts can engineer more effective turnaround at scale by creating "an appealing 'space' or zone for failing schools."^{5(p4)} To be effective, the model maintains, zones must change conditions, cluster schools for support, and build capacity. Together, these strategies are collectively referred to as the "3 C's of Effective Turnaround."^{5(p12)}

The First C: Changing Conditions

According to *The Turnaround Challenge*, turning around a low-performing school requires changing conditions, which is best accomplished by empowering school leaders with, "flexible authority over critical resources — people, time, money, and program — and professional incentives that actively encourage people to do their best work."^{5(p44)}

Districts, *The Turnaround Challenge* contends:

must be able to install new principals, if needed; principals must in turn have control over who is working in their building, along with the allocation of money, time, and programming (including curriculum and partnerships with social services.) Schools must be freed to take on professional norms, including differentiated roles for teachers and differentiated compensation.^{5(p12)}

To encourage schools and districts to change conditions in this manner, *The Turnaround Challenge* proposes that policymakers, parents, and community members use a variety of incentives.⁵ Whereas

resource incentives can act as a carrot, inducing schools and districts to undertake prescribed turnaround strategies in exchange for new staff or funds, accountability incentives act as a stick, requiring an identified subset of schools or districts (e.g., the lowest performing five percent statewide) to adopt particular school improvement strategies.

The Second C: Clustering Schools for Support

The Turnaround Challenge argues that turnaround efforts are more effective and efficient when they provide “failing schools...intensive network support.”^{5(p52)} This support is theorized to be most effective and efficient when schools are clustered or grouped by need, type, or region.

Clustering schools by a common characteristic is hypothesized to improve networking and resource allocation and is thought to require a transparent and deliberate balance of decision-making authority between schools and the “lead turnaround partner” – an external organization or newly established district office that assumes control over all aspects of zone management.^{5(p50)} Specifically, *The Turnaround Challenge* contrasts “loose” and “tight” decision-making.^{5(p52)} In a loose model, schools have wide latitude to make decisions. In a tight model, control is more centralized. Arguing that, “There is no one right ‘blend’ that will serve every circumstance,”^{5(p54)} *The Turnaround Challenge* contends that, “Turnaround requires a careful balance that doesn’t undercut the power of site-based decision-making, but provides strong support, backed by shared authority, for the work from the cluster-network provider and the state.”^{5(p54)}

The Third C: Building Capacity

The Turnaround Challenge maintains that districts and schools must build the capacity to lead turnaround

as well as attract, retain, and develop highly effective turnaround teachers and leaders. At its most basic, building the capacity to lead turnaround requires establishing the management structure by which zone schools are selected, supported, and held accountable. In *The Turnaround Challenge*, this function is the central task of the lead turnaround partner.^{5(p50)} “Enhancing schools’ ability to recruit, train, assign, and support people with the right skills for the right jobs; and building...new capacity...in the specialized skills of school turnaround management”^{5(p48)} are critical components of this effort along with providing sufficient funding and resources and coordinating the work of external organizations in zone schools.

From The Turnaround Challenge to This Report

Noting that, “failing schools serve mostly poor children,”^{5(p17)} a section of *The Turnaround Challenge* describes strategies “High Performing, High Poverty Schools” use to “bring highly challenged student populations to high achievement.”^{5(p9)} But there is nothing explicitly focused on diversity, equity, or inclusion in the report’s turnaround model. While reflective of the national discourse at the time, this is a shortcoming that must be addressed by school and district leaders and SEA staff working to transform low-performing schools and address the current educational crisis.

Additionally, it is important to note that *The Turnaround Challenge*’s turnaround model had not been tested rigorously at scale when the report was published. As one reviewer explained, “there is a clear logic to the report’s turnaround strategies, but its proposals are not fully supported by the literature; they could not be, simply because of the limited research on [high-performing, high-poverty] schools and successful state interventions.”³² Indeed, this is

the first empirical study to examine *The Turnaround Challenge's* turnaround model. The following section describes the methodology used to understand how study districts implemented *The Turnaround Challenge's* turnaround model and the corresponding changes to student test scores and graduation rates in their zones.

Methodology

This report is a mixed-methods, multiple case study of three turnaround zones established and implemented by urban public school districts in partnership with Mi between 2012-2019. Quantitative data were drawn from publicly available school-level reports of demographic composition, standardized test scores, and graduation rates. Qualitative data were collected during interviews with eight current and former Mi staff and a document review of Mi's files related to each zone. District names and other identifying information have been masked to protect anonymity. Research methods are summarized below; additional details are included in Appendix A.

Participants

Cases were selected from the universe of urban public school districts partnering with Mi to establish and implement zones between 2012 and 2019 (N =

7). All districts implementing a zone for at least three years were included in the study (n = 3), as three years is the minimum number of post-intervention time periods recommended for short, interrupted time series analyses.²⁶ Intervention years and descriptive information about zone and non-zone schools are provided in Tables 1 and 2.

Eight out of ten current or former Mi staff members identified as having worked on one of the zones studied here consented to participate in the qualitative portion of this study. All staff members worked extensively with at least one zone. Five participants worked with or had significant familiarity with at least one other zone. Collectively, they conducted an initial assessment of school conditions in each district, supported the establishment of a Zone Office to oversee the initiative, and helped facilitate school improvement planning and progress monitoring. As part of this work, Mi staff helped zone leaders monitor and improve leading indicators such as changes to adult behavior, student culture, and attendance. In District 1, Mi staff also helped develop a competency-based hiring process for teachers and principals and wrote SIG grants for zone schools. In District 3 they developed a competency-based hiring process for Zone Office staff, and, in Districts 2 and 3, Mi staff supported zone efforts to improve on-

Table 1: Zone Overview

Component		District 1	District 2	District 3
Study Years	Pre-Intervention	SY2010-2011 SY2011-2012 SY2012-2013**	SY2012-2013 SY2013-2014* SY2014-2015**	SY2013-2014 SY2014-2015 SY2015-2016**
	Post-Intervention	SY2013-2014 SY2014-2015 SY2015-2016	SY2015-2016 SY2016-2017 SY2017-2018	SY2016-2017 SY2017-2018 SY2018-2019
Number of Schools	Non-Zone Schools	31	67	53
	Zone Schools	5	7	5

Note: * = Superintendent transition, ** = Planning year.

going teacher development.

Measures

The outcome of interest in quantitative analyses was either standardized test scores or graduation rates. Independent variables included years pre- and post-intervention and a dichotomous variable indicating whether a school was included in the zone. Models predicting test scores also included covariates for test subject (reading or math) and test name, as several districts administered multiple standardized tests during the study period.

Qualitative measures included interview questions asking participants how the zone changed conditions, clustered schools for support, and built capacity

as well as the specific strategies the zone used to improve students’ access to highly effective instruction and provide wraparound services, features of effective turnaround highlighted in the literature but not *The Turnaround Challenge’s* turnaround model.¹⁹

Analyses

Quantitative analyses utilized the multi-level piecewise growth model described in Heck et al.³³ and Appendix A to examine changes in test scores or graduation rates three years prior to zone implementation, two and one year prior to zone implementation, the first year of zone implementation, and years two and three of zone implementation. Analyses also compared levels and

Table 2: Demographic Characteristics of Non-Zone and Zone Schools by District

District	Demographic Characteristic	Non-Zone Schools		Zone Schools		Independent Samples T-Test		
		Mean	SD	Mean	SD	t	df	p
District 1	Percent White	73.28	15.90	38.65	11.08	4.66	34	<.001
	Percent Black	12.02	10.46	38.75	13.34	-5.12	34	<.001
	Percent Latino	3.39	2.48	4.64	2.52	-1.04	34	NS
	Percent Asian	1.34	1.33	0.43	0.15	1.51	34	NS
	Percent FRPL	57.60	21.42	91.72	3.75	-3.51	34	<.01
District 2	Percent White	21.81	19.67	13.80	13.45	1.05	71	NS
	Percent Black	50.39	22.55	58.48	29.18	-0.88	71	NS
	Percent Latino	22.14	15.97	23.45	16.14	-0.21	71	NS
	Percent Asian	0.80	0.88	1.01	1.14	-0.59	59	NS
	Percent FRPL	82.02	14.37	83.87	6.83	-0.33	66	NS
District 3	Percent White	16.58	10.74	3.81	1.09	2.64	57	<.05
	Percent Black	18.82	6.74	13.96	2.70	1.59	57	NS
	Percent Latino	54.31	15.14	66.82	6.65	-1.82	57	NS
	Percent Asian	4.07	3.22	12.27	7.45	-4.77	57	<.001
	Percent FRPL	70.73	16.76	85.70	8.70	-1.96	57	NS

Note: Demographic characteristics are the school-level average across all study years. FRPL = eligible for free or reduced price lunch. NS = not statistically significant. In Zone 2, one school did not meet state reporting thresholds for any subgroup, six schools did not meet state reporting thresholds for percent low-income, and 13 schools did not meet state reporting thresholds for percent Asian. These schools are not included in respective t-tests.

* p < .05, ** p < .01, *** p < .001

trends in zone schools to those in non-zone schools.

Qualitative analyses examined the way each zone attempted to change conditions, cluster schools for support, and build capacity. In addition to examining patterns within zones, a cross-case analysis examined patterns across zones. Finally, analyses triangulated qualitative and quantitative findings to identify lessons learned for state and education leaders and SEA staff working to transform low-performing schools and address the current educational crisis

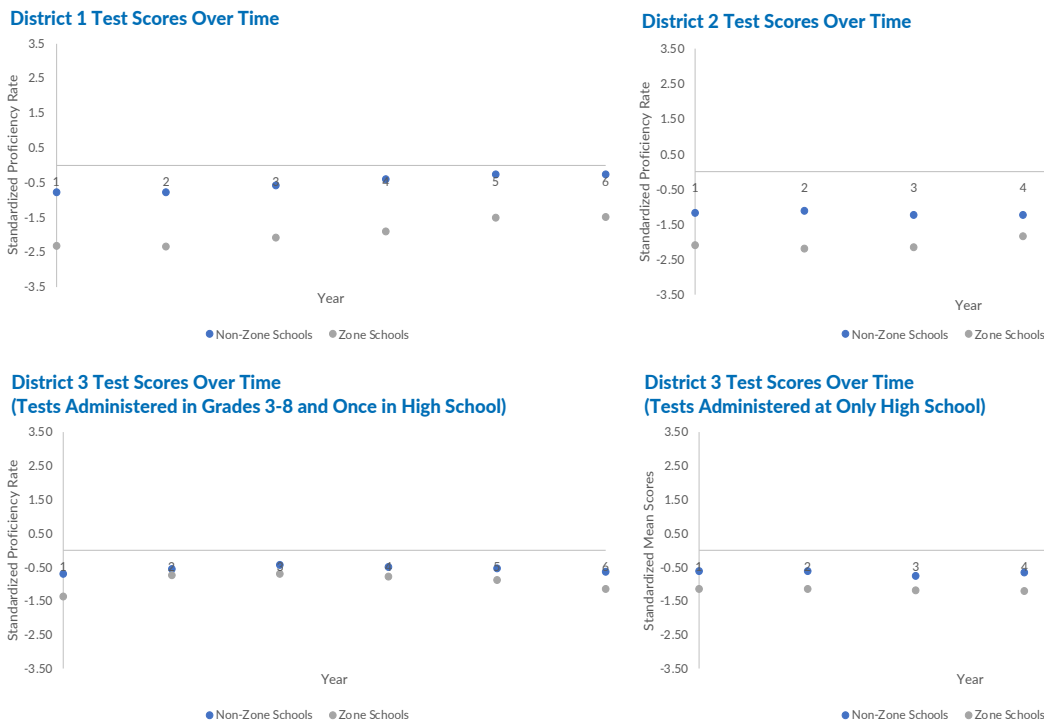
The Zones and Their Impact on Student Outcomes

This section provides a brief overview of the three zones. It describes each district's impetus for

forming a zone as well as zone goals, objectives, and composition alongside descriptive and quasi-experimental findings about changes to test scores and graduation rates among zone schools and between zone and non-zone schools over time.

Figures 1 and 2 present the average test score or graduation rate observed in zone and non-zone schools during each study year. In these figures, Years 1-3 correspond to the pre-intervention period. Years 4-6 correspond to the three years of zone implementation. The text supplements this descriptive information with statistically significant results from quasi-experimental analyses presented fully in Appendix A.*

Figure 1: Average Test Scores Over Time in Zone and Non-Zone Schools



Note: Test scores are either the average proficiency rate or mean score on state standardized tests in mathematics and English/language arts, standardized around the state mean for a given test in a given subject during a given year at a given grade level (three to eight or secondary.) Years 1-3 correspond to the pre-intervention period. Years 4-6 correspond to the three years of zone implementation.

* Although focusing on statistically significant results enables us to say with 95% confidence that observed changes are greater than or less than zero, it is important to note that sample sizes were very small. This resulted in large standard errors that make it difficult to detect statistically significant variation with precision. It is also important to note that treatment and comparison groups were not comparable. Consequently, we cannot be certain that quantitative findings comparing trends in zone and non-zone schools are capturing intervention effects rather than systematic differences between treatment and comparison group schools.

District 1

The initial impetus for District 1’s zone was the threat of state intervention. According to an undated Mi report, “by 2012, several of the district’s schools were potentially in line for state intervention...” However, the zone also built off the success of the district’s Excellent Schools Initiative, which was established in partnership with the district’s teachers’ union and jointly funded by its national union and the state department of education. Launched during SY2010-2011, the Excellent Schools Initiative gave three low-performing elementary schools greater autonomy over school staffing, calendars, schedules, course offerings, and professional development. By the end of the initiative’s first year, two of the three participating schools reported a large increase in the percent of students scoring proficient or advanced on state standardized tests in math. This partial success coupled with the risk of state intervention at several other schools and the availability of SIG funding led the district to establish a Turnaround Zone in SY2013-2014.

District 1’s Turnaround Zone included the two lowest performing Excellent Schools along with three additional elementary and middle schools. The goal was “dramatically improving student outcomes... to inspire district-wide transformation and reform.”

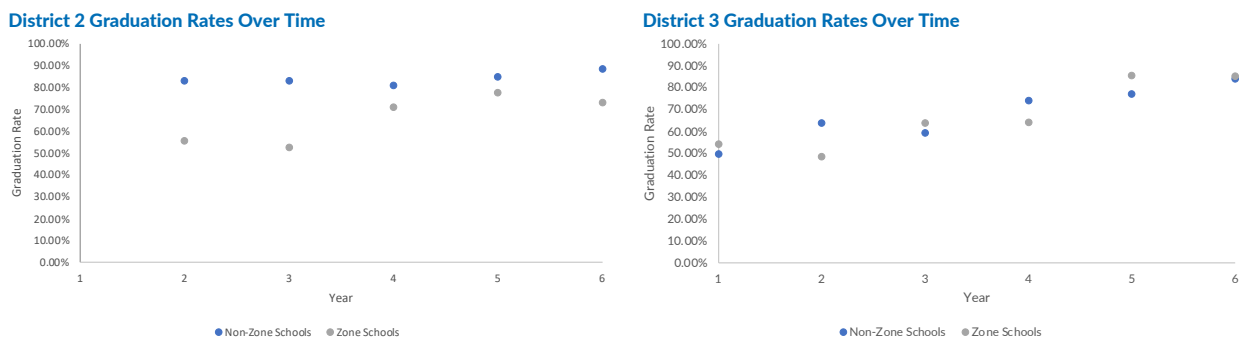
Objectives included designing and implementing a robust performance monitoring system in zone schools; managing contracts with external supporting partners; and implementing principal management, leadership capacity building, and teacher development.

Quantitative analyses revealed that test scores in District 1’s zone schools were significantly lower than corresponding scores in non-zone schools three years prior to zone implementation. Descriptively, test scores in zone schools improved and the gap between zone and non-zone schools narrowed during the three years prior to and the three years after zone implementation began, with the improvement to test scores in zone schools becoming statistically significant in implementation years two and three. However, trends in District 1’s zone schools were never significantly different from corresponding trends in non-zone schools.

District 2

Accountability incentives — e.g., the threat of state intervention — helped inspire District 2 to establish zones. The State Board of Education also provided resource incentives by agreeing to fully fund the zones through a mix of state support and federal funds. As an article from winter 2016 explained,

Figure 2: Average Graduation Rate Over Time in Zone and Non-Zone Schools



Note: Years 1-3 correspond to the pre-intervention period. Years 4-6 correspond to the three years of zone implementation. District 1 is omitted from this analysis because there were no high schools in its zone. Graduation rates were not publicly available for the first pre-intervention year in District 2.

“With the state’s blessing, the district has assigned seven of its lowest-scoring schools...to new ‘Turnaround Zones’ where they get extra support from the district. The idea is to turn them around without the state taking charge.”

Established in SY2015-2016, District 2’s zones included seven of the district’s 74 schools. There was an elementary school zone comprised of four elementary schools and a high school zone that included three high schools. As explained in a Grant Planning Application Form submitted to the state in 2015, District 2’s goal was “to design and deliver innovative, flexible structures and services that are responsive to school-site needs in order to drive dramatic, transformational improvement in student achievement.” Objectives included developing the instructional leadership capacity of principals; developing teachers’ ability to focus on student learning; implementing an effective coaching-centered professional development model; creating a culture of reflective practitioners; and cultivating positive school morale and impactful student-teacher relationships.

In quantitative analyses, test scores and graduation rates in zone schools were significantly lower than corresponding outcomes in non-zone schools three years prior to zone implementation. Test scores and graduation rates in District 2’s zone schools remained low and without significant change throughout the pre-intervention period but improved significantly during the first year of zone implementation. Moreover, this improvement significantly outpaced corresponding improvement among non-zone schools. During implementation years two and three, test scores and graduation rates in zone schools remained stable, a trend that was not significantly different from the corresponding trend in non-zone

schools but still an improvement from the pre-intervention period.

District 3

Like Districts 1 and 2, District 3’s decision to establish a zone was motivated by the threat of state takeover. In SY2013-2014, the entire district moved one step closer to state intervention. In response, the district’s strategic plan prioritized building capacity and experience with “innovation.” Drawing on state law, which enabled school districts to establish Turnaround Zones of schools sharing a common interest with the ability to exercise broad autonomy in the four conditions highlighted by *The Turnaround Challenge*, the district developed a zone proposal, which the staff of each zone school, the district’s local school board, and the state department of education approved before the start of SY2016-2017, giving the zone and its schools formal, “innovation status.”

District 3’s zone included five of the district’s 58 schools: two elementary schools, one elementary/middle school, one middle/high school, and one high school. In its 2016 Turnaround Zone application to the state, the district described the goal of its zone as follows: “after five years, through their individual and collective efforts, each school will be a performance school.” In other words, after five years zone schools would be among the most highly performing in the state. Objectives included creating a positive school climate for every student with a theme of international leadership; focusing on student-centered, data-driven instruction; developing a comprehensive talent strategy; and developing strong family and community partnerships.

Quantitative analyses using tests administered in all District 3’s schools indicate that three years prior to zone implementation, standardized test scores

were significantly lower in zone schools compared to non-zone schools.* During the two years prior to zone implementation, test scores increased significantly in zone schools, and this improvement outpaced corresponding improvement to test scores in non-zone schools. However, standardized test scores from tests administered in zone schools did not change significantly during the first year of zone implementation and declined significantly during implementation years two and three – trends that were also observed with no significant difference in non-zone schools.

Standardized test scores from tests administered only at high schools were significantly lower in District 3's zone schools compared to its non-zone schools three years prior to zone implementation. Although graduation rates in zone schools were descriptively higher than those in non-zone schools during the same time period, this difference was not statistically significant. Further, while scores and graduation rates in zone and non-zone high schools did not change significantly during the study period, a large increase to the graduation rate in zone schools during implementation years two and three was nearly significant.

Summary

As suggested by *The Turnaround Challenge*, the threat of state intervention and the availability of new resources motivated the three districts studied here to establish zones. Improving student outcomes and, to a lesser extent, inspiring transformation

were their central goals. To accomplish these aims, all zones prioritized building teacher and principal capacity, but zones differed in the emphasis they placed on progress monitoring, school climate, and human resources. In terms of outcomes, two zones (Districts 1 and 2) experienced statistically significant improvement in test scores and/or graduation rates during the intervention period. Increases to the graduation rate in District 3's zone were also nearly significant during implementation years two and three. While descriptive results suggest that zone schools narrowed the test score gap with non-zone schools in Districts 1, trends in zone schools were only significantly different from those in non-zone schools during the first year of zone implementation in District 2.

Zone Implementation

In order to shed light on mixed quantitative findings and identify lessons learned for school and district leaders and SEA staff, the following section examines similarities and differences in the way each district implemented the turnaround model proposed in *The Turnaround Challenge*. These similarities and differences are summarized in Table 3. As the paragraphs below illustrate, Districts 1 and 3 implemented their zones in a manner that was generally faithful to *The Turnaround Challenge* model, while District 2 implemented its zones in ways that differed significantly from the model. At the same time, key differences between Districts 1 and 3 emerged and dimensions of each zone stood out from the rest.

* Described more fully in Appendix A, preliminary analyses found that standardized test scores varied systematically by the grade level at which tests were administered. Consequently, statistical models used to examine outcomes in the District 3 zone predicted test scores from tests administered at grades 3-8 and once in high school as federally mandated separately from tests administered solely at high school. Further, it is important to note that District 3 administered eight different standardized tests during the study period. The statistical model used to examine changes to test scores over time included a dichotomous variable to control for test score changes associated with the test administered in a given year. But this method may not have been robust enough to capture all the testing bias affecting results.

Table 3: Implementation Highlights by District

3 C's of Effective Turnaround	Theme	District 1	District 2	District 3
Changing Conditions	Decision-Making Authority	<ul style="list-style-type: none"> • Zone Director given new authority over time, people, money, and program 	<ul style="list-style-type: none"> • No attempt to change decision-making authority in zone schools 	<ul style="list-style-type: none"> • Zone schools given new authority over time, people, money, and program
	Context	<ul style="list-style-type: none"> • Prior labor-management collaboration facilitated the use of new decision-making authority 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Bureaucratic and, to a lesser extent, union resistance made it difficult to use new decision-making authority
	Climate	<ul style="list-style-type: none"> • Collaborative 	<ul style="list-style-type: none"> • Compliance-oriented 	<ul style="list-style-type: none"> • Distrustful
Clustering for Support	Lead Turnaround Partner	<ul style="list-style-type: none"> • Established Zone Office outside of the existing district management hierarchy 	<ul style="list-style-type: none"> • Embedded Zone Office within existing district management hierarchy 	<ul style="list-style-type: none"> • Established Zone Office outside of the existing district management hierarchy
	Streamlined Central Office Support/ Buffering	<ul style="list-style-type: none"> • Zone Office took work off school leaders' plates 	<ul style="list-style-type: none"> • Zone schools expected to operate like other low-performing schools 	<ul style="list-style-type: none"> • Zone Office advocated on behalf of zone schools • Autonomies enabled zone schools to opt-out of district mandates
	Network Model	<ul style="list-style-type: none"> • Hub-and-spoke 	<ul style="list-style-type: none"> • Hub-and-spoke 	<ul style="list-style-type: none"> • Hub-and-spoke • Spiderweb
Building Capacity	Resources	<ul style="list-style-type: none"> • Did not increase staffing in zone schools 	<ul style="list-style-type: none"> • Added many staff supporting zone schools 	<ul style="list-style-type: none"> • Added many staff supporting zone schools • Added new school-based positions in zone schools
	Focus and Alignment	<ul style="list-style-type: none"> • Zone Office prioritized improving school leaders' attention and ability to evaluate the alignment between actions and goals 	<ul style="list-style-type: none"> • Challenges identifying and prioritizing strategic objectives made it difficult for zone school leaders to focus • Zone Office struggled to help schools establish and use metrics to evaluate the alignment between actions and goals 	<ul style="list-style-type: none"> • Challenges identifying and prioritizing strategic objectives made it difficult for zone school leaders to focus
	Planned Teacher and Principal Turnover	<ul style="list-style-type: none"> • Implemented planned teacher and principal turnover • Used competency-based hiring processes to improve the effectiveness of the teacher and principal workforce 	<ul style="list-style-type: none"> • Did not implement planned teacher and principal turnover 	<ul style="list-style-type: none"> • Implemented planned teacher and principal turnover • Changed dismissal policies in order to more easily terminate ineffective teachers

The First C: Changing Conditions

Districts 1 and 3 attempted to change conditions in a manner consistent with *The Turnaround Challenge's* turnaround model. They both empowered zone leaders and/or zone schools with new decision-making authority to change the allocation of time, people, money, and programming in zone schools. However, in both districts, features of the local context affected the zone's ability to implement this component of the *Turnaround Challenge* model. District/zone climate also emerged as a potentially critical condition affecting zone implementation.

Decision-Making Authority

As suggested by *The Turnaround Challenge*, Districts 1 and 3 altered decision-making authority in their zones. In District 1, the Superintendent authorized the Zone Office (described more fully below) to make these decisions and codified this authority in the "Operating Conditions" section of the Zone Director's performance agreement — e.g., contract. Specifically, the district granted the Zone Office significant autonomy over people, including the authority to, "confirm all new school-level hires" and to, "work collaboratively with building administrators to make staffing decisions and assignments driven exclusively by student and programmatic needs." It also granted the Zone Office, "latitude to revise [teacher] evaluations," so long as revisions were in keeping with state regulations and local collective bargaining agreements. With respect to time, the district directed the Zone Office to develop and approve zone schools' annual calendars and daily schedules, which could include extended learning time. Regarding money, the Zone Office was directed to, "support the development of school-level budgets" and approve those budgets. In terms of program, the district granted the Zone Office, "the right to modify and eliminate existing academic extracurricular

programs and to develop new programs." Finally, while the Zone Office was required to comply with all other applicable district policies, it could change those policies with approval from the district.

In contrast to District 1, which altered decision-making authority by embedding new autonomy in the Zone Director's performance agreement, state approval of District 3's Turnaround Zone proposal enabled zone schools to exercise new decision-making authority over the specific aspects of time, people, and program outlined as waivers in the district's Turnaround Zone proposal. With respect to people, zone schools received new authority over teacher recruitment and dismissal. Zone schools could make contingent employment offers, hire unlicensed staff for certain positions, and reject intra-district teacher transfers. Additionally, zone schools were not subject to collective bargaining agreements regarding involuntary transfers, and performance, not seniority, determined which teachers to retain during lay-offs. Zone schools were also empowered to change district evaluation and observation practices for teachers, and three schools shortened the time required to dismiss non-probationary teachers after consecutive evaluation ratings of, "less than effective." Finally, the zone's high school adopted annual contracts for its teachers and established the right to dismiss ineffective staff.

Other changes to decision-making authority gave zone schools the power to set the school year and school day as well as make decisions about the time during which teachers were expected to be on duty and the allocation of teacher planning time. In terms of program, zone schools could choose their own textbooks and curriculum as well as adjust grading and assessments. The high school also established the right to adjust class rank and

GPA calculations; student retention, promotion, and acceleration practices; and graduation requirements. Because district policies already allowed individual schools to significantly alter budgeting processes and procedures, the district did not seek budgetary autonomy for zone schools through its Turnaround Zone application. Instead, the application declared, “significant freedom in budgeting processes will be granted” to zone schools.

In contrast to Districts 1 and 3, District 2 did not empower the Zone Office or zone schools with new decision-making authority. As one former Mi Engagement Director recalled, “It did not feel like there were a lot of autonomies being exercised.”

Context

In Districts 1 and 3, context appeared to affect the establishment and implementation of new decision-making authority. For example, dramatic changes to the teacher workforce in District 1’s zone schools and some of District 3’s zone schools were made possible by collaborative labor relations district-wide (District 1) or within schools (District 3). A 2015 SIG application for one of District 1’s zone schools noted that District 1, “has continuously demonstrated a very collaborative relationship with the teacher’s [sic] union....The teacher’s union has always remained supportive of school improvement efforts.” In fact, the decision-making authority conferred upon the Zone Office in the Zone Director’s performance agreement closely paralleled autonomies granted to schools participating in the Excellent Schools Initiative, which according to one periodical were established by modifying the district’s collective bargaining agreement with its teachers.

In District 3, more than 90% of the teachers in each zone school voted for school innovation plans with the autonomies outlined above. However, in contrast

to District 1, bureaucratic and, to a lesser extent, union resistance made it difficult for District 3’s zone schools to use their newfound authority. Authority that could not be established solely through line edits to district’s collective bargaining agreement with its teachers was particularly difficult for zone schools to exercise. One former Mi Senior Program Manager explained:

Instead of just getting your FTEs and then a budget for non-personnel stuff, [we were] trying to push the district to...give a school an overall budget. But...that kind of stuff is not in the bargaining agreement....I think it was still too grey of an area where the district...could say, ‘No, we gotta [sic] make those decisions.’

Central office departments also pushed back when zone schools wanted to operate differently from the rest of the district. As a 2017 Mi report to the district explained, “Waiver policies that were implemented successfully this year required lengthy advocacy efforts from the [Zone Office] to secure district buy-in for [zone school] authority.” Zone schools also sometimes received a similar response from the teachers’ union. One former Mi Engagement Director explained:

Observation-feedback became one of the things that they really focused on in District 3, and I think it was really helpful, although controversial with the union there....If it wasn’t written down..., ‘On Tuesdays at X...you will do this,’ then they were like, ‘Oh, that’s outside the bounds of the day.’

Together, union and bureaucratic resistance help explain why a 2018 Mi report to District 3 stakeholders noted that some schools continued to, “experience barriers related to operationalizing

hiring, performance evaluation, and dismissal waivers” through the second year of zone implementation.

District/Zone Climate

Although not included in *The Turnaround Challenge’s* definition of conditions, qualitative findings suggest that climate varied across districts and zones and was an important condition affecting zone implementation. Adapting Cohen’s definition of school climate, district/zone climate may be thought of as the “quality and character”^{7(p180)} of district/zone life as expressed through interpersonal interactions.⁸⁻¹⁰ Whereas the climate of District 1 and its zone appeared collaborative, the climate of District 2 and its zone could be characterized as compliance-oriented. The overall climate of District 3 did not emerge in qualitative analysis. But the climate of its zone appeared distrustful, at least during the first two years of zone implementation.

In District 1, a 2012 State of Schools report authored by the district cited an article about the Excellent Schools Initiative that described, “the collaborative nature” of the district. A similar sense of collaborative climate was also apparent within District 1’s zone. The Zone Director and Zone Office staff had been employed by the district for many years and were either master teachers and/or former principals. According to former Mi staff, this helped zone leaders build strong, trusting relationships with school-based staff that were critical to the zone’s success. As one former Mi Program Manager explained, “the trust that they built, which I think was critical to any ability that the zone would have to make a difference..., that trust came from seeing, having the zone staffed by people who have the trust of school leaders and have the experience to draw upon....” This sentiment was echoed by a second former Mi Program Manager, who highlighted the extent of collaborative decision-

making within the zone:

[W]hen we’d go out, let’s say we were going to do a root cause analysis..., there’d be a meeting with the principal..., and I just remember those conversations as genuinely kind of back and forth, like, [the Zone Director] coming in with thoughts but really wanting principals’ perspectives..., coming in to sort of say, “Here’s what I think is happening. Here are my ideas..., but I want your perspective,” and I do remember those...feeling like fairly collaborative decision-making kinds of meetings and conversations.

A collaborative district/zone climate was less apparent in qualitative data collected from Districts 2 and 3. In District 2, Mi staff perceived a culture of compliance rooted in the Chief Academic Officer’s clear preference for centralized decision-making. In this district, the zone and zone schools had little authority to behave differently than non-zone schools. A former Mi Senior Program Manager recalled feeling as if, “this district is moving forward in lock step.”

In qualitative data from District 3, there was no explicit reference to district climate. However, as noted above, the quality and character of zone life in District 3 was affected by bureaucratic and, to a lesser extent, union resistance to zone activities and the zone concept for at least the first two years of zone implementation. During the same time period, there was also tension between zone principals and the Zone Director. A 2017 report by Mi to district stakeholders explained:

It is evident from feedback conversations that many school stakeholders do not feel comfortable being open and vulnerable with

the [Zone Director] about strengths and growth areas. Stakeholders explained that feedback conversations often focus on [the Zone Director's] successes in other contexts and do not effectively leverage and develop school-leader capacity to carry out their work.

It is not clear if the climate in District 3's zone improved during the final year of zone implementation when a new Zone Director was hired.

Summary

In sum, qualitative analyses suggest that Districts 1 and 3 attempted to change conditions in a manner consistent with *The Turnaround Challenge's* turnaround model. Whereas these districts empowered the zone and/or zone schools with new decision-making authority over time, people, money, and program, District 2 did not. At the same time, contextual features of Districts 1 and 3 influenced these zones' ability to use the new decision-making authority they received and district/zone climate emerged as an important factor affecting zone implementation more generally.

The Second C: Clustering for Support

In all three study districts an internal "lead turnaround partner," or Zone Office working within the district, managed the zone, and all three zones clustered schools by a common characteristic such as grade level, feeder pattern,* or geography. Contrary to *The Turnaround Challenge's* hypotheses, there is no evidence in the qualitative data that the common characteristic used to cluster zone schools or the extent to which decision-making was tight or loose improved networking or resource allocation in any zone. Instead, the Zone Office's ability to

offer streamlined central office support and buffer zone schools in Districts 1 and 3, coupled with its ability to implement a spiderweb network model¹¹ in District 3, appeared more closely related to improved networking and resource allocation in zone schools.

Streamlined Central Office Support/Buffering

All three study districts established a Zone Office to support zone schools. Consistent with the concept of an "internal lead turnaround partner," Districts 1 and 3 established a Zone Office led by a Zone Director who reported directly to the district Superintendent. In contrast, District 2 did not establish a Zone Office outside of the district's central hierarchy to lead its zones, and there was no direct line of communication from the zones to the Superintendent. Instead, the Zone Directors were managed by an Assistant Superintendent also overseeing a host of non-zone schools clustered on one side of the city. The Assistant Superintendent, in turn, reported to the Chief Academic Officer, who also supervised Assistant Superintendents managing other groups of schools, and reported directly to the Superintendent.

Variation in the Zone Office's relationship to the district's central hierarchy appeared to be associated with corresponding variation in a zone's ability to offer streamlined central office support/buffer zone schools. In District 1, the Zone Office accomplished this by taking work off school leaders' plates. For example, zone staff completed required paperwork for zone schools and tracked down district-level information. According to one former Mi Program Manager, this streamlined central office support enabled school leaders to stay focused on "what's actually making the difference in schools...."

In District 3, the Zone Office provided streamlined

* The term feeder pattern refers to a high school and the elementary and/or middle schools whose students ultimately enroll there.

central office support and helped buffer zone schools by advocating on their behalf with the district. As noted above, the Zone Office secured the district buy-in to implement the waivers zone schools were granted by the state. Similarly, being part of the zone helped zone school leaders prioritize their time differently than school leaders outside of the zone because zone school leaders could opt-out of district mandates. A former Mi Consultant explained, “I think, in a large part because of the autonomies that zone schools were given, it gave them the ability to pass on a lot of the normal chaos that comes up that say, ‘Oh, you’ve got to do this right now.’ And they could say, ‘No, we actually don’t. We have this little waiver that says we don’t.’”

Together, the streamlined central office support/buffering provided by the Zone Office in Districts 1 and 3 improved resource allocation by giving zone school leaders the time and space to focus on their priorities. In contrast, District 2’s Zone Office did not appear to provide streamlined central office support/buffer zone schools. Instead, evidence suggests that zone schools were expected to operate much like other low-performing schools in the district. As noted above, zone schools in District 2 had little authority to behave differently than non-zone schools, and Mi staff perceived a culture of compliance district-wide.

Hub-and-Spoke vs. Spiderweb Networking

While the existence of management structures operating outside of the district’s central hierarchy appeared to be associated with resource allocation through the provision of streamlined central office support/buffering, a zone’s network model appeared related to its ability to improve networking within the zone.

All three zones relied heavily on a hub-and-spoke

model to provide intensive network support to zone schools. A hub-and-spoke model is typically characterized by strong relationships between the hub (e.g., the Zone Office) and network members (e.g., zone schools) and very little meaningful interaction between network members themselves.³⁴ In District 1, this was exemplified in the way zone staff supported zone schools. A former Mi Program Manager explained, “the Zone Office was often empty. All three of the full-time staff members were very frequently in schools, whether it was meeting with school leadership.... going into classrooms and doing walkthroughs, and just sending that informal feedback back.” District 2’s zone took a similar approach. A former Mi Senior Project Manager explained, “district leaders [were] pushing into schools quite frequently....”

Although both zones provided regular opportunities for school leaders to come together, these opportunities appeared to be predominately related to professional development or facilitated school improvement planning, not cross-school collaboration. A former Mi Program Manager from District 1 explained, “I think there were informal relationships between the different zone schools, but there wasn’t a ton of bringing them together for solidarity or for thought partnership.”

In contrast, District 3’s zone was the only zone where study participants used language consistent with a spiderweb network model in addition to a hub-and-spoke model. In a spiderweb model, network members have far more interaction with each other than they do in a hub-and-spoke model,³⁴ and members as well as the hub support other members.¹¹ A former Mi Engagement Director explained:

Instead of having a formal connection through a principal supervisor who's like, "You talk to this person and this person," like, we wanted to create these across building networks and affinity groups by role...

Zone staff realized this vision by creating intentional opportunities for school leaders in zone schools to learn from each other. A former Mi Analyst explained that school improvement planning retreats and quarterly monitoring meetings included time to, "show some best practices," which helped "facilitate sharing of information across schools and build capacity that way."

The relationships built through the spiderweb model may also have improved resource allocation by making collective action easier. For example, District 3 was the only zone where schools pooled resources to fund shared positions such as human resource staff, instructional coaches, and a family engagement specialist.

Summary

In sum, while all three study districts clustered schools by a common characteristic, there is no evidence that these characteristics alone or the extent to which decision-making in the zone was tight or loose improved networking or resource allocation. Instead, District 1 and 3's decision to establish a Zone Office outside of the district's central hierarchy appeared to improve resource allocation by positioning the Zone Office to provide streamlined central office support/buffer zone schools. Similarly, the Zone Office's ability to implement a spiderweb network model in District 3 appeared related to improved networking and, to a lesser extent, resource allocation in zone schools.

The Third C: Building Capacity

The districts studied here approached the task of building capacity in zone schools differently. Differences were most apparent in terms of the zone's reliance on additional resources, which were central to zone implementation in District 2 and, to a lesser extent, District 3 but not District 1. Differences also emerged with respect to a zone's ability to establish a clear focus and align capacity building efforts to that focus, an implementation feature that seemed particularly strong in District 1. Finally, the zones attempting to implement planned teacher and principal turnover, in which teachers and principals were invited/encouraged to transfer out of zone schools if they did not want to participate in zone implementation, used different strategies to improve the effectiveness of the teachers and principals remaining at or moving into zone schools. Whereas District 1 used a competency-based hiring process to improve the overall effectiveness of the teacher and principal workforce in zone schools before implementation began, District 3 relied on a mix of one-year contracts and performance-based, rather than tenure-driven, dismissal policies to more quickly terminate ineffective teachers. However, as noted above, schools experienced challenges in implementing these approaches.

Resources

Qualitative analyses suggest that flooding zone schools with resources was the primary mechanism District 2 used to improve conditions in the zone. As one of District 2's Zone Directors explained in a newspaper article published shortly after zone implementation began, "It's not that we try to do everything different in the Turnaround Zones," she said. "We just have the resources to provide more frequent support within the zone to the elementary and to the high schools." In addition to two Zone

Directors, zone schools initially had access to four turnaround coaches with expertise in instruction as well as district-level graduation coaches, who worked with schools to identify graduation barriers and implement interventions. During SY2017-2018, the district also charged one Mi staff member with providing instructional coaching nearly full-time in zone schools and used contractors to provide additional coaching support.

Like District 2, District 3 added numerous staff to the Zone Office and zone schools during each year of the intervention. In addition to the Zone Director, the Zone Office initially included two additional staff, focused on coaching principals and developing data collection and reporting systems for zone schools. In later years, the zone added an additional staff member to lead school-based family and parent engagement, an additional coach for assistant principals, and zone-level instructional coaches aimed at improving school-based coaching and instructional leadership teams.

In addition to these resources, zone schools in District 3 used their autonomy to add a number of school-based positions. These positions were designed to meet needs articulated in the school innovation plans included in the district's Turnaround Zone application and focused broadly on students' social and emotional well-being, early warning indicators, and family engagement.

In contrast to Districts 2 and 3, District 1 did not increase staffing in zone schools, and its Zone Office was staffed solely by a Zone Director and two principal coaches. Notably, all three zones included roughly the same number of schools — five in Districts 1 and 3 and seven in District 2, which suggests that variations in staffing were not a

function of zone size.

Focus and Alignment

In addition to staff resources, focus and alignment differentiated the capacity building efforts of the districts studied here and emerged as a real strength of District 1's zone implementation. In this district, the Zone Office worked hard to improve zone school leaders' attention and ability to evaluate the alignment between actions and goals.

This is best exemplified by the zone's approach to partnerships and progress monitoring, which were distinguished by their emphasis on coherence, specifically the alignment of actions and goals. Aligning partnerships with priorities was explicitly mentioned in the Zone Director's performance contract. One of their "Performance Metrics" was to, "Manage contracts with external supporting partners to ensure alignment to [Zone Office], district, and [zone] school priorities." According to one former Mi Engagement Manager, the zone accomplished this, in part, by facilitating meetings between school principals and current/potential partners to discuss the partner's contribution to school improvement plans and priorities. He recalled, "I remember principals, who were part of the zone, mentioning how helpful it had been to bring partners in to ground all the work in the school's improvement plans and priorities...."

District 1's focused approach to capacity building is also exemplified by the way zone leaders used progress monitoring to help zone principals learn to evaluate the alignment between actions and goals. As a former Mi Program Manager explained:

The performance management piece was big, like, actually setting targets of various kinds

hadn't really been much of a thing before...just kind of building spreadsheets and trackers that were genuinely going to be used and kind of live documents that would drive...check-ins and conversations with principals because, I think having the ability to focus on a clear, understood, you know, common set of metrics was really useful...But I think they were also helpful in giving principals a more structured, like, rigorous way to think about what does it mean for the building to be, you know, sort of moving in the right direction...

By establishing metrics and checking in on them regularly, District 1 zone leaders built the capacity of school leaders to determine if their activities were helping achieve their goals.

Partnerships and progress monitoring were also central to the work of zone leaders in Districts 2 and 3, but their efforts were less focused and aligned than the efforts of zone leaders in District 1. In Districts 2 and 3, challenges identifying and prioritizing strategic objectives made it difficult for zone leaders to focus. Reflecting on principal coaching in District 2's zones, a former Mi Senior Program Manager wondered if it, "would have been helped by like, 'Okay, what is the one or two things, what are the two or three things that we are going to try?'" Similarly, a 2017 report from Mi to District 3 stakeholders noted:

While [zone] schools' innovation applications provide an overview of how school models shift over three years to better serve the needs of students and staff, they alone do not provide schools with focused, year-long improvement priorities...Schools can better focus their efforts and maximize positive change by defining

a select number of year-long improvement priorities in a school improvement plan...

In this way, challenges identifying and prioritizing strategic objectives made it difficult for zone school leaders in Districts 2 and 3 to maintain a clear focus.

Zone leaders in District 2 also struggled to help schools establish and use metrics to evaluate the alignment between actions and goals. An instructional audit of District 2's high school zone written by Mi in 2016, recommended the zone put in place, "progress monitoring systems with leading indicators." This recommendation, the authors declared, would enable zone schools to "course-correct" if they were off-track as well as, "clarify the path to nebulous destinations like 'rigor' and 'engagement'..." Without these systems in place, the report argued, zone leaders struggled to help schools determine if they were meeting their goals and if the strategies they put in place were working.

Together, challenges identifying and prioritizing strategic objectives in Districts 2 and 3 and establishing a performance management system in District 2 help explain why focus and alignment so strongly differentiated the capacity building approach of District 1.

Planned Teacher and Principal Turnover

In contrast to District 2, Districts 1 and 3 used planned teacher and principal turnover to build capacity in zone schools. In both districts, teachers and principals were invited/encouraged to transfer out of zone schools if they did not want to participate in zone implementation. But Districts 1 and 3 complemented this policy-change with different strategies for improving the effectiveness of the teachers and principals remaining at or moving into

zone schools. Whereas District 3 changed dismissal policies in order to more easily terminate ineffective teachers, District 1 used a competency-based hiring process to improve the overall effectiveness of the teacher and principal workforce in zone schools before implementation began.

In District 1, four of the five schools included in the zone were designated as “transformation” schools by the state. As such, they were required to replace their principals.⁴ Although not required by state accountability designations, District 3 also recruited new principals to zone schools before establishing the zone. An Mi Analyst explained, “I do know that the district was pretty intentional right before the zone design work launched to bring principals from higher performing schools into the zone.” Similarly, both Districts 1 and 3 implemented planned teacher turnover, allowing teachers in all District 1 zone schools and the high school in District 3’s zone to transfer to another school before zone implementation began.

Despite these similarities, there is some evidence that planned teacher turnover in District 3’s zone resulted in a less effective workforce than policy-makers intended. As a former Mi Consultant explained, “when the zone started, they basically scrapped all staff, brought in all new staff, and a lot of them, I think, were new to education, certainly new to [District 3].”

At the same time, contextual barriers made it difficult for zone schools in District 3 to use the authority they received from the state to terminate ineffective teachers. A 2018 Mi report to district stakeholders noted that zone schools continued to, “experience barriers related to operationalizing...dismissal waivers” through the second year of zone implementation.

In contrast, District 1 used a competency-based hiring process to improve the overall effectiveness of the teacher and principal workforce in zone schools before implementation began. At the principal level, district leaders identified critical competencies for zone principals, including categories such as critical thinking and team leadership, and used role-plays and performance tasks to evaluate principal candidates against these competencies. For example, they asked candidates to connect sample school data to issues, concerns, and plans for school improvement. They also asked candidates to watch a recorded classroom observation and identify a teacher’s strengths, areas for growth, as well as the immediate next steps they would recommend. Similarly, teachers who wanted to remain at or move to a zone school were required to attend a professional development academy based on Doug Lemov’s Teach Like a Champion.³⁴ The Zone Director and a panel including teachers’ union and school leaders used a competency-based evaluation framework to identify teachers who successfully completed the academy and were eligible for placement in zone schools.

Summary

As described above, the districts studied here approached the task of building capacity in zone schools differently. Whereas Districts 2 and 3 relied heavily on additional resources, District 1 stood out for establishing a clear focus on a small set of priorities and aligning capacity building efforts to that focus. At the same time, Districts 1 and 3 aimed to build capacity by implementing planned teacher and principal turnover. But they complemented this policy-change with different strategies for improving the effectiveness of the workforce in zone schools — strategies that appeared more effective in District 1, in part, because contextual factors made it difficult for District 3’s zone to implement its preferred

approach.

In sum, qualitative findings suggest that Districts 1 and 3 attempted to change conditions, cluster schools for support, and build capacity in a manner that was generally faithful to *The Turnaround Challenge* model. These districts gave zone schools new decision-making authority to change conditions and established internal lead turnaround partners reporting directly to the Superintendent to build capacity and provide intensive network support to a cluster of schools. Although not explicitly discussed in *The Turnaround Challenge*, District 1 and 3's decision to locate the Zone Office outside of the district's central hierarchy appeared to improve its ability to provide streamlined central office support/buffer zone schools, which in turn was associated with improved resource allocation in zone schools.

In contrast, zone implementation in District 2 differed significantly from *The Turnaround Challenge* model. The district did not alter decision-making authority in its zones and embedded the lead turnaround partner within the district's central hierarchy. There was no mention of streamlined central office support/buffering in the qualitative data, and the district's primary mechanism for building capacity in zone schools was to flood them with resources in the form of additional staff support.

While Districts 1 and 3 implemented their zones in ways that were more consistent with *The Turnaround Challenge* model, key differences between the two emerged in qualitative analyses. District 1's prior experience collaborating with its teachers union to change conditions in a smaller subset of schools helped District 1's zone use its decision-making authority more easily than the zone in District 3, which was hampered by bureaucratic and, to a lesser

extent, union resistance. Additionally, District 1's zone appeared to benefit from a more collaborative district/zone climate than the zone in District 3. Finally, the two zones differed in the strategies they used to improve principal and teacher effectiveness in schools where planned turnover occurred. Whereas District 3 tried to change dismissal policies in order to more easily terminate ineffective teachers, District 1 used a competency-based hiring process to improve the overall effectiveness of the teacher and principal workforce in zone schools before implementation began. As noted above, District 1's strategy appeared more effective in the qualitative data.

In addition to these differences, several other themes in the qualitative data distinguished District 1 and 3 from each other and District 2. Whereas focus and alignment strongly differentiated the capacity building approach of District 1, District 3 stood out for implementing a spiderweb network model that appeared to be associated with improved resource allocation and networking in zone schools.

Lessons Learned

This section triangulates qualitative and quantitative findings in order to identify key lessons learned for school and district leaders and SEA staff working to accelerate pandemic recovery in low-performing schools and begin the difficult task of reinventing public education to better serve systemically marginalized students.

The First C: Changing Conditions

Qualitative analyses revealed that Districts 1 and 3 altered decision-making authority in their zones in ways that were consistent with the turnaround model proposed in *The Turnaround Challenge*. But District 3's zone, which had a harder time using its

newfound authority than District 1's zone, did not experience a statistically significant improvement in test scores and/or graduation rates during zone implementation. Additionally, District 2, which did not alter decision-making authority in zone schools, experienced a statistically significant increase in test scores and graduation rates during the first year of zone implementation and was the only district where improvement in zone schools was significantly greater than the corresponding improvement in non-zone schools at any point in time.

This suggests that new authority over people, time, money, or program may be insufficient to improve student outcomes in some contexts. What matters most seems to be the extent to which a district can establish the conditions for school improvement, not the strategies by which conditions change occurs.

Qualitative findings also suggest that it might not be possible to replicate *The Turnaround Challenge's* approach to changing conditions in districts with less collaborative labor-management relationships or a central office that is less bought into the zone concept than the central office in District 1. School and district leaders and SEA staff working to transform low-performing schools and address the current educational crisis would do well to focus on strategies for improving conditions in low-performing schools that have the greatest likelihood of success in a given context. In addition to time, people, money, and program, they should add district/zone climate to the list of critical conditions to be leveraged or improved.

The Second C: Clustering for Support

Although *The Turnaround Challenge* hypothesized that clustering schools by a common characteristic would improve networking and resource allocation,

the characteristics by which districts chose to cluster zone schools were not clearly correlated to quantitative findings. Further, there was no evidence that clustering characteristics alone were associated with improved networking or resource allocation. Instead, qualitative findings suggest that networking and resource allocation were more closely correlated to a district's decision to establish a Zone Office outside of the district's central hierarchy, as this decision seemed to enable the zone to more effectively offer streamlined central office support/buffer zone schools. Improved networking and resource allocation also appeared correlated to a Zone Office's ability to implement a spiderweb network model.

School and district leaders and SEA staff aiming to improve networking and resource allocation through clustering should consider managing these clusters through an office reporting directly to the district Superintendent and explicitly charged with providing streamlined central office support/buffering schools. They may also wish to consider using a spiderweb network model to foster relationship-building and enhance social capital across schools.

The Third C: Building Capacity

Qualitative analyses revealed that study districts approached the task of building capacity in zone schools differently. Districts 2 and 3 built capacity by bringing additional resources to zone schools, while District 1 did not. District 2's infusion of resources at the start of zone implementation may help explain why test scores and graduation rates in zone schools rose dramatically during the first year of zone implementation. But zone schools received more resources during subsequent years, and test scores and graduation rates did not change significantly. Similarly, while the addition of numerous staff

focused on students' social and emotional well-being, early warning indicators, and family engagement may help explain why the graduation rate in District 3's zone improved during each year of the intervention, this improvement was only marginally significant during implementation years two and three. Further, standardized test scores either declined or did not change significantly during any year of the intervention in District 3.

This suggests that additional resources may be a necessary but insufficient component of improvement in low-performing schools. While a large infusion of resources may significantly improve student outcomes in the short-term, school and district leaders and SEA staff must combine additional resources with other strategies if they are to build capacity in ways that affect student outcomes in low-performing schools.

One strategy that emerges from examining qualitative and quantitative findings in concert is attention to focus and alignment. Focus and alignment were central components of District 1's capacity building efforts – a finding that emerged most clearly in qualitative data related to partnerships and performance management. This differentiated District 1 from Districts 2 and 3 and may help explain why standardized test scores in District 1's zone improved during every year of the intervention, even if this improvement was not always statistically significant. This conclusion is consistent with literature finding that the process of creating coherence is critical to managing external policy demands effectively³⁵ and may be closely linked to students' academic outcomes.^{36,37} School and district leaders and SEA staff working to transform low-performing schools and address the current educational crisis would do well to center focus and alignment in their

capacity building efforts. In particular, they may wish to establish partnership and progress monitoring protocols that help school leaders attend to and effectively evaluate the alignment between school actions and goals.

Examining qualitative and quantitative findings in concert also suggests that school and district leaders and SEA staff working to transform low-performing schools and address the current educational crisis would do well to use competency-based hiring processes, particularly when aiming to build capacity through planned teacher or principal turnover. As noted above, Districts 1 and 3 used different strategies to improve the effectiveness of their workforce. District 1's competency-based approach appeared more closely correlated to better student outcomes, as zone schools experienced statistically significant improvement in student test scores during implementation years two and three. In contrast, District 3's test scores did not change significantly during zone implementation at the secondary level where planned teacher turnover occurred. This finding is consistent with prior research indicating that planned teacher turnover can improve student outcomes but only when turnover quickly stabilizes and improves teacher effectiveness.^{19,22,23,26,27,28,30}

Conclusion

This report revisited the concept of school turnaround in order to identify critical lessons learned for school and district leaders and SEA staff working to accelerate pandemic recovery in low-performing schools and begin the difficult task of reinventing public education to better serve systemically marginalized students. Whereas quantitative findings add to a growing body of evidence suggesting that school turnaround interventions can improve standardized test scores¹⁸⁻²² and positively impact

graduation rates,¹⁹ they also support prior research finding mixed or null effects of turnaround interventions.^{19,21,23-30} Qualitative findings suggest that mixed quantitative results may be associated with corresponding differences in the way the three zones changed conditions, clustered schools for support, and built capacity.

Study findings offer the following lessons for school and district leaders and SEA staff working to transform low-performing schools and address the current educational crisis:

- The extent to which a district has established the conditions (time, people, money, and program) for school transformation seems to matter more than the strategies by which conditions change occurs. While *The Turnaround Challenge* argued that school leaders need new decision-making authority to change conditions, the results of this study suggest that new decision-making authority is not always necessary or sufficient to alter conditions in low-performing schools.
- Context matters. School and district leaders and SEA staff working to transform low-performing schools and address the current educational crisis would do well to focus on strategies for improving conditions in low-performing schools that have the greatest likelihood of success in their local context.
- In addition to time, people, money, and program, school and district leaders and SEA staff should add district/zone climate to the list of critical conditions to be leveraged or improved.
- The benefits of clustering — networking and resource allocation — appear related to the use of a spiderweb network model and the establishment of a Zone Office with the structure and authority to offer streamlined central office support/buffer zone schools.

- While a large infusion of resources may significantly improve student outcomes in the short-term, school and district leaders and SEA staff working to transform low-performing schools and address the current educational crisis must combine additional resources with other capacity-building strategies if they are to affect long-term student outcomes in low-performing schools.
- School and district leaders and SEA staff would do well to use competency-based hiring processes, particularly when aiming to build capacity through planned teacher or principal turnover. They should also establish a clear focus and align their capacity building efforts to that focus.

While critics have rightly pointed out the faulty assumptions and limited success of the early 2000s school turnaround movement, the COVID-19 pandemic has exacerbated the need to dramatically reinvent public education in the United States. By applying the lessons learned from this study of school turnaround to the current educational crisis, school and district leaders and SEA staff can accelerate pandemic recovery in low-performing schools and begin the difficult task for reinventing public education to better serve systemically marginalized students.

Appendix A

Research Methodology

This report is a mixed-methods, multiple case study of three turnaround zones established and implemented by urban public school districts in partnership with Mi between 2012-2019.

Quantitative data were drawn from publicly available school-level reports of demographics, standardized test scores, and graduation rates. Qualitative data were collected during interviews with eight current and former Mi staff and a document review of Mi's files related to each zone. The research methodology is summarized below.

Participants

Cases were selected from the universe of urban public school districts partnering with Mi to establish and implement zones between 2012 and 2019 (N = 7). All districts implementing a zone for at least three years were included in the study (n = 3), as three years is the minimum number of post-intervention time periods recommended for "short" interrupted time series analyses.³⁸ District names and other identifying information have been masked to protect anonymity.

Eight out of ten current or former Mi staff members identified as having worked on one of the zones studied here consented to participate in the qualitative portion of the study. All staff members worked extensively with at least one of the zones studied here. Five participants worked with or had significant familiarity with at least one other zone. Collectively, they conducted an initial assessment of school conditions in each district, supported the establishment of a Zone Office to oversee the initiative, and helped facilitate school improvement planning and progress monitoring. As part of this

work, Mi staff helped zone leaders monitor and improve leading indicators such as changes to adult behavior, student culture, and attendance. In District 1, Mi staff also helped develop a competency-based hiring process for teachers and principals and wrote SIG grants for zone schools. In District 3 they developed a competency-based hiring process for Zone Office staff, and in Districts 2 and 3, Mi staff also supported zone efforts to improve on-going teacher development.

Measures

Quantitative measures come from publicly available school-level reports and include:

- Standardized test scores — either the average proficiency rate or mean score on state standardized tests in mathematics and English/language arts, standardized around the state mean for a given test in a given subject during a given year at a given grade level (three to eight or secondary).
- Graduation rates — the four year cohort graduation rate of a given school in a given year.
- Year — school year transformed into pre- and post-intervention years one through three. Note that in all three districts, the final pre-implementation year was also a planning year for the zone.
- Non-zone — a dichotomous variable indicating whether a school is a zone (zero) or non-zone (one) school.
- Reading — a dichotomous variable used in test score analyses to indicate whether the subject being assessed was mathematics (zero) or English/Language Arts (one).
- Standardized test — a categorical variable indicating the standardized test from which scores are derived and used to control for testing bias. Tests are not referred to by name in

tables or results in order to protect participating districts' anonymity.

Qualitative measures come from interview questions asking participants how the zone addressed conditions, capacity, and clustering as well as specific strategies the zone used to improve students' access to highly effective instruction and provide wraparound services, features of effective turnaround highlighted in the literature but not *The Turnaround Challenge's* model.¹⁹

Analyses

Given the small sample size and limited number of observations per school, quantitative analyses utilized the multi-level piecewise growth model described in Heck et al.³³ and illustrated in Equation 1:

$$\begin{aligned} Outcome_{ts} = & \pi_{0s} + \pi_1 Year\ Pre\text{-}Intervention_{ts} + \\ & \pi_2 Intervention_{ts} + \pi_3 Year\ Post\text{-}Intervention_{ts} + \\ & \pi_4 Non\text{-}Zone_{ts} + \pi_5 Year\ Pre\text{-}Intervention_{ts} * Non\text{-} \\ & Zone_{ts} + \pi_6 Intervention_{ts} * Non\text{-}Zone_{ts} + \pi_7 Year\ Post\text{-} \\ & Intervention * Non\text{-}Zone_{ts} + \pi_8 Reading_{ts} + \pi_9 Test_{ts} + \\ & \pi_{10} Test_{ts} + \mu_{0s} + \varepsilon_{ts} \end{aligned}$$

Where:

- $Outcome_{ts}$ is the outcome at time t for school s .
- π_{0s} is the outcome for zone school s three years prior to zone implementation.
- π_1 is the annual rate of change in zone schools during the two years prior to zone implementation.
- π_2 is the change in outcome associated with the first year of zone implementation in zone schools.
- π_3 is the change in slope associated with the second and third years of zone implementation in zone schools.

- π_4 is the marginal difference in outcome among non-zone schools three years prior to zone implementation.
- π_5 is the marginal difference in pre-intervention trends during the two years prior to zone implementation in non-zone schools.
- π_6 is the marginal difference in level associated with the first year of zone implementation in non-zone schools.
- π_7 is the marginal difference in slope associated with the second and third year of zone implementation in non-zone schools.
- π_8 is the marginal change in outcome associated with English/language arts versus mathematics.
- $\pi_9 - \pi_{10}$ is the change in outcome associated with a given standardized test compared to the base test.
- μ_{0s} is a random effect, capturing the effect of omitted school-level variables and enabling the intercept, π_{0s} , to vary by school.
- ε_{ts} is the residual error.

The results of Equation 1 were examined separately for each outcome by zone. Preliminary analyses in District 3 (not shown) found that standardized test scores varied systematically by the grade level at which tests were administered. Consequently, statistical models used to examine outcomes in District 3's zone predicted test scores from tests administered at grades 3-8 and once in high school separately from tests administered solely at high school. Additionally, District 1 was omitted from models predicting graduation rates because there were no high schools in the zone, and the District 2 graduation rate model includes only two pre-intervention years, as the state did not make school-level graduation rates publicly available for the first pre-intervention year.

Qualitative analyses examined the way each zone attempted to change conditions, build capacity, and cluster schools. The first round of coding focused on *a priori* codes generated from *The Turnaround Challenge*. For example, clustering was a top-level code that included two dimensions of decision-making: tight and loose. The second round of coding focused on *in vivo* codes that emerged from the data. For example, a third dimension of decision-making: collaborative was included as an additional code in the clustering family. Following Yin’s recommendations,³⁹ themes within and across codes were identified by zone and compared to the turnaround model proposed in *The Turnaround Challenge*. Finally, a cross-case analysis examined patterns across zones and triangulated qualitative and quantitative findings to identify lessons learned for state and education leaders and SEA staff working to transform low-performing schools.

Limitations

While study findings reported below and in the main body of this report have broad applicability to school and district leaders and SEA staff working

to transform low-performing schools and address the current educational crisis, this research is not without limitations. First, statistical analyses were underpowered, and the sample size was very small. This resulted in large standard errors and affected the statistical significance and generalizability of results. Second, treatment and comparison groups were not comparable. Consequently, we cannot be certain that quantitative findings comparing trends in zone and non-zone schools captured null effects of the intervention rather than systematic differences between treatment and comparison group schools. Similarly, we cannot rule out the possibility that testing bias may have affected statistical analyses, particularly in District 3, which administered eight different standardized tests during the study period. While the statistical model used to examine changes to test scores over time included a dichotomous test variable to control for test score changes associated with the test selection in a given year, this method may not have been robust enough to capture it all. Finally, the fact that qualitative analyses relied heavily on retrospectively interviews means that recall bias may have affected qualitative findings.

Table A1: Piecewise Growth Model Predicting Standardized Test Scores

	District 1	District 2	District 3 – All Schools	District 3 – High Schools
	(1)	(2)	(3a)	(3b)
Fixed Effects				
Intercept	-0.60 ⁺	-1.55 ^{***}	-1.24 ^{***}	-1.06 ^{***}
	(0.35)	(0.38)	(0.25)	(0.30)
Time Pre-Intervention	0.18 ⁺	-0.03	0.30 ^{**}	0.03
	(0.10)	(0.10)	(0.09)	(0.06)
Intervention	0.30	0.49 ^{**}	-0.06	-0.02
	(0.19)	(0.19)	(0.17)	(0.08)
Time Post-Intervention	0.28 [*]	-0.16	-0.19 [*]	0.02
	(0.11)	(0.10)	(0.08)	(0.04)
Non-Zone	0.74 [*]	1.00 [*]	0.57 [*]	0.55

	(0.33)	(0.40)	(0.27)	(0.33)
Non-Zone X Time Pre-Intervention	-0.12	0.01	-0.21**	-0.05
	(0.11)	(0.10)	0.08	(0.05)
Non-Zone X Intervention	-0.13	-0.41*	0.11	0.02
	(0.21)	(0.20)	(0.15)	(0.09)
Non-Zone X Time Post-Intervention	-0.06	0.07	0.12	0.01
	(0.12)	(0.11)	(0.09)	(0.04)
Reading	0.06	-0.22***	-0.09***	-0.18***
	(0.05)	(0.04)	(0.03)	(0.02)
Test 2 - District 1	-1.33***			
	(0.08)			
Test 2 - District 2		-0.60***		
		(0.09)		
Test 2 - District 3			0.07	
			(0.08)	
Test 5 - District 3				0.03
				(0.10)
Test 6 - District 3				-0.00
				(0.10)
Test 7 - District 3				-0.11
				(0.08)
Test 8 - District 3				0.03
				(0.08)
Random Effects				
Intercept	1.17	0.89	0.27***	0.17
	(0.29)	(0.15)	(0.05)	(0.08)
Residual	0.26***	0.31***	0.12***	0.04
	(0.02)	(0.02)	(0.01)	(0.00)
n observations	471	810	634	166
n schools	36	74	59	10

Note: Test 1 serves as the base case in Models 1-3a. Whereas Tests 1 and 2 represent the same standardized tests in Districts 1 and 2, they represent different tests in District 3. In Model 3a, Test 3 was omitted because its indicator was colinear with time. In Model 3b, Test 4 serves as the base case. Standard errors are in parentheses.

+ p < .10, * p < .05, ** p < .01, *** p < .001

Table A2: Piecewise Growth Model Predicting Graduation Rates

	District 2 (1)	District 3 (2)
Fixed Effects		
Intercept	55.51***	50.67**
	(6.54)	(17.06)
Time Pre-Intervention	-3.01	4.78
	(4.89)	(6.00)
Intervention	20.29***	7.52
	(4.68)	(10.44)
Time Post-Intervention	1.12	10.43 ⁺
	(2.45)	(5.72)
Non-Zone	28.35***	-0.10
	(8.11)	(18.69)
Non-Zone X Time Pre-Intervention	3.00	-4.15
	(6.19)	(6.43)
Non-Zone X Intervention	-19.49**	6.29
	(6.03)	(11.68)
Non-Zone X Time Post-Intervention	-0.14	-7.95
	(3.18)	(6.44)
Random Effects		
Intercept	92.58***	469.48***
	(48.07)	(227.13)
Residual	35.88***	130.68***
	(9.27)	(27.61)
n observations	39	59
n schools	9	12

Note: District 1 is omitted from this analysis because there were no high schools in its zone. Standard errors are in parentheses. Graduation rates were not publicly available for the first pre-intervention year in District 2.

+ p < .10, * p < .05, ** p < .01, *** p < .001

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In this capacity, Anna leads a portfolio of systems-level engagements including comprehensive diagnostic reviews, equity audits, strategic planning, and district framework development. Since 2015, Anna has supported two national district partners to design, implement, and manage performance of Transformation Zones as a strategy for school and district improvement and innovation.

Susan Lusi works at Mass Insight Education &

Research as President & CEO. Susan has worked in both urban and suburban settings, and in practice, policy, and research, during her over 30-year career. In her seven years of leadership at Mi, Sue has led efforts to strategically grow Mi's school improvement services and diversify its board and staff. Under Sue's leadership, Mass Insight has strengthened its focus on diversity, equity, and inclusion and serving systemically marginalized students and families. She holds a B.A. in Economics and a M.A. in Teaching Social Studies from Brown University, and a M.P.P. and Ph.D. in Public Policy from Harvard University.

John Schneider works at Mass Insight Education & Research as Managing Director of Policy & Advocacy.

John is an accomplished leader in expanding educational and economic opportunity with more than 30 years of experience working with government, nonprofit, and public policy organizations. He is responsible for Mi's federal and state advocacy and government relations programs.

Rob Jentsch works at Mass Insight Education & Research as Chief Program & Strategy Officer.

In this capacity, Rob oversees the work of Mi's full national portfolio of partner engagements. From 2016 through 2021, Rob played an evolving leadership role on our school improvement team where he supported the design and delivery of services to partner schools, districts, and state education agencies across the country.



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