P-12 Education

Evaluating the Ohio Improvement Process

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The OERC is a collaboration of researchers coordinated by the John Glenn College of Public Affairs and the Center for Human Resource Research (CHRR) at The Ohio State University. The mission is to develop and implement a statewide, preschool-through-workforce research agenda to address critical issues of education practice and policy. The OERC identifies and shares successful practices; responds to the needs of Ohio's educators and policymakers; and signals emerging trends. The OERC communicates its findings broadly, through multiple platforms and networks, producing materials, products and tools to improve educational practice, policy and outcomes.

Ohio Education Research Center | Evaluating the Ohio Improvement Process

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EXECUTIVE SUMMARY

Evaluating the Ohio Improvement Process

Introduction

The Ohio Department of Education (ODE) contracted the Ohio Education Research Center (OERC) to evaluate the impact of school turnaround interventions. The evaluation will inform ODE's approach to meeting the needs of the Every Student Succeeds Act of 2015, which requires Ohio to identify and improve its lowest performing schools.

Through this research, ODE seeks to understand the impact of recent school turnaround efforts specifically, the impacts of school improvement initiatives, the Ohio Improvement Process (OIP), School Improvement Grants (SIG) and "Priority School" identification, on student achievement and the actions taken by schools during those programs. This memo serves as a summary of the evaluation. Please refer to the individual OIP Snapshots in the following sections and Appendix C of this report for more detailed information on the data, research methods and results.

Approach

The OERC took a bifurcated approach to meeting ODE's research needs. First, researchers completed a quantitative analysis of school performance data to discover the impact of school turnaround initiatives, including the competitive SIG program and "Priority School" identification (Ohio schools ranking in the lowest 5 percent in student academic performance, all of which had to implement a turnaround initiative), on student achievement.

Following the quantitative analysis, OERC completed a qualitative review (utilizing interview data) of the evidence-based factors that contributed to the successes or challenges with the Ohio Improvement Process. ODE can use this information to review specific actions taken by schools that led to improvements or declines.

Executive Summary of Quantitative and Qualitative Findings

SIG awards initially resulted in large, positive impacts on annual student achievement in math and reading, as well as improvements in graduation rates. However, these positive impacts did not sustain after the first three years of the interventions. "Priority School" identification did not yield significant improvements in school quality, but did contribute to increased graduation rates. Among the schools that saw improvements in student achievement, interventions that required significant short-term disruptions (including turnover in school personnel) often led to immediate negative impacts on students currently attending those schools, yet greater improvements in student achievement growth and graduation rates for future students. Of the two programs (SIG and "Priority School"), "Priority School" interventions led to more significant principal and teacher turnover.

Factors that contributed to OIP successes for the schools interviewed included additional resources for personnel, professional development, and external supports like State Support Team coaches and district school improvement coaches. Schools that faced challenges related to OIP implementation cited the following factors: resistance to OIP as yet another approach to transformation (change fatigue), high principal turnover, student mobility and attendance (largely

due to students experiencing homelessness) and inability to translate data into actionable intervention strategies.

Quantitative Study: Impacts of School Turnaround Initiatives

OERC utilized data both publicly available and specifically provided by ODE to complete a comparable analysis between Ohio schools that were and were not eligible for turnaround interventions. The schools compared were statistically identical, with the only difference being whether or not they were eligible to receive additional support for improving student achievement.

Of particular note, the average SIG school received about \$2,000 more per pupil over a three-year period. More than 50 percent of this funding was allocated to salaries and benefits, and more than 25 percent was allocated to contracted services. Common demographics in persistently low-achieving schools in Ohio were found to be small enrollments, more economically disadvantaged and minority students and charter-school status.

The following items are a sample of OERC's results that may be of specific interest to ODE. Please refer to the full report in Appendix C for more detailed information on the data, research methods, and results (*Carlson and Lavertu, 2016*).

- *SIG awards had a positive impact on student achievement and graduation rates.* SIGawarded schools saw value-added student growth rates equivalent to 60 additional "days of learning" compared to SIG-eligible schools that did not receive a grant. However, after three years, reading and math gains declined to a point where the difference was no longer significant. SIG-awarded schools also improved graduation rates between 7-9 percentage points.
- *SIG awards generally led to less principal and teacher turnover in the long term.* Staff turnover was already so great in these schools that the SIG requirement for personnel replacements had little added effect, and over time, SIG grantees experienced less turnover than SIG-eligible schools that did not receive a grant
- *The SIG Turnaround model was more disruptive in the short term than the SIG Transformation model.* As expected, between the two models, more education professionals were replaced under the Turnaround model. This disruption led to a negative impact on the achievement of students currently in attendance when schools were granted SIG awards. Yet, the more disruptive SIG Turnaround model led to greater improvements for the future students.
- *"Priority School" identification yielded less impactful results, as there were no statistically significant improvements in student achievement.* However, "Priority School" identification in high schools led to improved graduation rates between 3.5-8 percentage points.
- *"Priority School" identification resulted in significant principal and teacher turnover.* This turnover did not appear to have a negative impact on the achievement of students who experienced the disruption.

Qualitative Study: Translating Data into Actions Taken

Given the results of our quantitative analysis, the OERC set out to discover the successes and challenges of OIP schools, barriers to student improvement and contributors to student success.

Using the results of the regression discontinuity analysis conducted in the quantitative study, ODE identified three districts (District 1, District 2 and District 3) which included five schools (School 1, School 2, School 3, School 4 and School 5) to participate in this qualitative study.

School	District	Characteristics
School 1	District 1	Priority, SIG, Performance Decreasing
School 2	District 2	Priority Status
School 3	District 3	Priority Status, SIG, Performance Increasing
School 4	District 3	Priority Status, SIG
School 5	District 3	Non-priority, identified as just above threshold

District-level personnel were present at the school interviews in District 1 and District 2, while a separate interview was conducted with the district-level improvement office in District 3. Interviews and site visits were conducted in each district or school to gather data around three key research questions:

- 1. What evidence-based practices are occurring in schools showing the greatest gains in student performance? What systemic practices are occurring at the district and building levels to sustain the best practices, even with frequent turnover?
- 2. What practices are occurring in schools with declining student performance? What are their barriers for increasing student performance?
- 3. In what ways have the added resources provided by the districts and the state affected improvement in Ohio's lowest achieving schools?

The following sections highlight the key takeaways, research themes, comparisons based upon variation in student performance, barriers to success, and connecting improvements to resources from turnaround initiatives.

Key Takeaways

The following summarize key takeaways that researchers learned from the OIP interviews:

- **Additional funding** for personnel, programs, technology and/or professional development led to the most impactful improvements through OIP.
- OIP suffered from **culture challenges**, including being seen as yet another tactic for school transformation and prioritizing compliance over improvements in student performance.
- **Principals** play a pivotal role in OIP successes or barriers. Schools that experienced high levels of principal turnover or low principal effectiveness saw more challenges implementing OIP.

Research Themes

Five themes were fixed by the research questions. Below are the collective findings across each thematic area:

• *Structural changes.* The most beneficial structural change through OIP was the addition of a state support team, though some districts experienced challenges with inconsistent OIP staffing across schools and a lack of tools needed to be successful (District 3). Other districts and schools experienced frustrations in structural changes after becoming accustomed to the Professional Learning Communities process and structure (School 3 and School 4). Alternatively, one school suffered from extreme structural changes in school grade composition and was delayed in implementing OIP (School 1).

- *School culture*. Schools experienced challenges adapting to a new culture of accountability among teachers (School 2). OIP was initially perceived as too compliance driven, which hindered implementation for schools (School 2, School 3, School 4 and School 5). Overall, school culture was enhanced through principal continuity and strong principal and parent relationships (School 2, School 3, School 4 and School 5). Alternatively, school culture was hindered by an inability to attract and retain effective leaders and teachers (School 1).
- *Leadership.* One school was solely focused on rebuilding leadership at all levels, so OIP implementation was not successful (School 1). Successes included strong, principal-supported BLTs and TBTs, including vertical integration of the two functions (School 2 and School 3). Some TBTs found success when they narrowed their focus on specific strategies that could be scaled throughout the school (District 3).
- **Resources.** State Support Team Specialists and district support coaches were mentioned as extremely beneficial resources (School 1 and School 2). Other schools mentioned resources external to OIP, but beneficial to school improvement, including Reading Recovery (School 2), Literacy Collaboration (School 3, School 4, and School 5) and Ohio Leadership for Inclusion, Implementation and Instructional Improvement (School 4).
- **Professional development.** Districts and schools expressed dissatisfaction with the training and development provided for OIP. Interviewees said the ODE training was initially too focused on compliance (School 2), lacked information on translating OIP-gathered data into actionable instructional strategies (School 3) and required external programs to supplement the gaps in the ODE-provided training (School 3).

Comparison Based Upon Variation in Student Performance

Two schools were selected specifically due to their performance. School 3 exhibited increasing performance prior to the study, and School 1 exhibited declining performance. The two schools exhibited near opposite characteristics within the five research themes.

- *Structural changes.* Schools exhibited structural stability and high levels of change which impacted the ability to implement the OIP. Leadership stability, due to having the same principal for 6 years (School 3) contributed to a successful implementation. Leadership and structural instability due to leadership, teaching staff and student grade reconfigurations from a K-8, a K-6, a 4-8 and a 7-8 middle school made it near impossible to implement the OIP (School 1). The transition from a Professional Learning Community (PLC) model to the Teacher Based Team model required by the OIP was met with some resistance (School 3) however it was supported by the district through the provision of extensive professional development to leadership and teachers.
- School culture. Investment in developing relationships with students' families is viewed as a fundamental component of the OIP process (School 3). Having staff available before- and after-school during drop-off and pick-up for impromptu meetings, frequent events in the evenings and on Saturdays that are designed to complement the curriculum and engage parents in students' learning, a high level of trust among staff, families and students contributed to this success (School 3). A negative school culture occurred when the school is viewed as "a dumping ground," for unsuccessful principals and teachers (School 1). Offering financial incentives to draw quality teachers were unsuccessful because teachers felt they would be isolated and unable to make a difference. A strong need for structural and leadership stability for a minimum of 4 years is needed to strengthen the culture and focus on transformative improvement (School 1).
- *Leadership.* Consistency in leadership is important to implementing the change process, six years of consistency (School 3) versus six years of constant churn (School 1). The district's school improvement office, particularly in the area of professional development and, at the

building level implementing the Building Level Team (BLT) and TBT processes required by the OIP is instrumental (School 3). One advantage of the TBT approach is "it gives opportunities for teacher leadership to all the teachers and staff that are involved" (School 3).

- **Resources.** Additional school improvement funds (SIG grants) positively supported OIP implementation (School 3 and School 1). District-level supports and resources, like OIP coaches and professional development providers (School 3) and the State Support Team Specialists (School 1) were key resources. Specialists supporting behavioral and mental health were available in the school (School 1) or through community partnerships, including the local children's hospital and community-based agencies (School 3).
- **Professional development.** Professional development is implemented through the TBT structure required by the OIP process (School 3 and School 1). Teachers are receiving professional learning related to collecting, interpreting and using data (School 3 and School 1). Professional development included classroom management and discipline for students who have experienced trauma; methods for managing student behavior (e.g. fidgeting in class); and content-specific PD in writing and mathematics (School 3) or PD was limited by the contract and that most of the support will be focused on training to support the TBT implementation process (School 1).

Barriers to Success

Across all schools and districts in the study, stakeholders identified common challenges during turnaround interventions that hindered increases in student achievement:

- *Change fatigue.* Schools mentioned OIP being implemented as yet another change initiative at a time when they were finally accustomed to the previous model (School 3, School 4 and School 5). This was compounded by resistance from building leaders (School 3) or a large amount of change taking place outside of OIP (School 1).
- *Lack of principal and teacher engagement.* Teachers mentioned inconvenient and inflexible schedules for engaging in deep, data-driven TBT discussions (School 4 and School 5). At one school, teachers and principals lacked the qualifications or skills to implement OIP, resulting in low engagement across the entire building (School 1).
- *Student mobility and attendance*. Two schools stressed the extremely challenging issue of student mobility, especially related to families experiencing homelessness (School 3 and School 4), which also impacted the accuracy of assessments. This challenge could be reduced through more effective communications to parents that their children do not need to transfer schools when or if the family utilizes a homeless shelter (School 3). Another school experienced challenges with student attendance due to parents enrolling students in home schooling or online schooling without removing the students from the brick and mortar school (School 5).
- *Technology disconnect*. Schools mentioned the challenge of everyday instruction being completed with pencils and paper, yet assessments taking place on technology (School 4 and School 5).
- *Culture of compliance*. Interviewees said stakeholders across schools met the OIP rollout with resistance due to the perceived emphasis of process compliance over instructional improvements (School 2).
- *Changing assessments.* All districts reported challenges making sense of student performance data due to the many changes in compliance testing.

Connecting Improvements to Resources from Turnaround Initiatives

Lastly, stakeholders discussed the specific tactics funded by turnaround interventions that led to improvements in student achievement:

- *Additional personnel.* Interviewees noted the benefit of state personnel, including personnel hired by the district or the state who work full-time in schools or split their time between various schools (School 1, School 2, School 3, School 4, and School 5).
- *Additional funding*. New funds were used for tutoring, new technology, transportation, additional personnel and/or professional development (School 1, School 2, School 3, School 4, and School 5).
- *External contributors.* Student improvement programs outside of OIP contributed to successes. Programs included Reading Recovery, Literacy Collaboration and Ohio Leadership for Inclusion, Implementation and Instructional Improvement (School 2, School 3, School 4 and School 5).
- **Parent communications and programs.** Building trust and educating parents through communications and programing, including effective principal-parent relationships and programs for parents to help them with at-home instructional activities (School 3, School 4, and School 5). One school found success in utilizing social media for parent education and communications (School 5).

Conclusion

OERC took a two-pronged approach to meeting ODE's research needs: a quantitative analysis of school performance data to discover the impact of turnaround initiatives and a qualitative review of the factors that contributed to successes or barriers. The quantitative study showed SIG awards initially resulted in large, positive impacts on annual student achievement in math and reading, as well as improvements in graduation rates. However, these positive impacts did not sustain after the first three years of the interventions. "Priority School" identification did not yield significant improvements in school quality, but did contribute to increased graduation rates.

Three key takeaways emerged from our qualitative study. Additional funding for improvement personnel was the largest contributor to successes. OIP was hindered by culture challenges, most notably being a perception of compliance being more important that student improvement and stakeholder fatigue from too much change. Lastly, schools that experienced high levels of principal turnover or low principal effectiveness saw more challenges implementing OIP. Even in a school with strong principal leadership and relatively high fidelity of OIP implementation, student academic performance has not improved on state tests.

INTRODUCTION: OIP QUALITATIVE CASE STUDIES

A Snapshot of Five Schools after Five Years

The following sections offer snapshots of current progress implementing the Ohio Improvement Process (OIP) in some of the most challenging buildings in three urban school districts in Ohio. These districts include District 1 (School 1), District 2 (School 2) and District 3 (School 3, School 4, and School 5). This collection is one part of a set of quantitative and qualitative studies completed by the Ohio Education Research Center related to OIP Implementation.

The Ohio Improvement Process (OIP) was introduced in 2012 as a structured way for school districts to look at how students are doing and what educators can do to improve academic achievement in their classrooms, buildings, and district. The OIP is a framework for engaging in a four-stage cyclical process to: 1) identify critical needs of districts and schools, 2) develop a focused plan, 3) implement and monitor a focused plan, and 4) evaluate the improvement process. The OIP framework includes guidance for establishing a collaborative school culture made up of district, building, and teacher teams to shepherd the improvement process. Also included is a Five Step Process for teacher-based teams to collectively discuss, strategize, and act on student data. The Five Step Process consists of: 1) collect and chart data; 2) analyze data; 3) establish shared expectations for implementing specific changes; 4) implement changes consistently; and 5) collect, chart, and analyze post data. The OIP Implementation Criteria and Rubric (Appendix B) lays out four levels of implementation for 26 criteria including examples of evidence to enable building and district teams to monitor their progress incorporating the OIP into daily practice. These documents serve as a framework for this report.

The five urban schools included in this report were identified by the Ohio Department of Education using the results of the regression discontinuity analysis conducted in the quantitative study (*Carlson and Lavertu, 2016*). Interviews and site visits were conducted in each district to gather data around three key research questions:

- 1. What evidence-based practices are occurring in schools showing the greatest gains in student performance? What systemic practices are occurring at the district and building levels to sustain the best practices, even with frequent turnover?
- 2. What practices are occurring in schools with declining student performance? What are their barriers for increasing student performance?
- 3. In what ways have the added resources provided by the districts and the state affected improvement in Ohio's lowest achieving schools?

Researchers made a site visit to each district where interviews were conducted with district and building administrators using a semi-structured protocol (Appendix A). In District 1, the site visit took place at School 1 with two district officials. Structural changes at School 1 prohibited school leadership from participating. Both district leadership and school leadership were interviewed separately in their respective locations in District 2. Interviews were held at each of the District 3 locations with school principals. The district level interview was held in the district level improvement office.

Each interview began with an explanation of the purpose of the interview, to follow up on the progress of OIP implementation, and a request to audio record the conversation for transcription.

The administrator was then asked to "Tell me a bit about where things are and how have they progressed? This open initial question was followed, as needed, by a set of questions related to the research questions. All interviewees agreed to be audio recorded, and the recordings were transcribed for analysis. Transcriptions were then thematically coded. Five themes were present in all interviews: structural changes, school culture, leadership, resources and professional development. Additional themes also emerged during content analysis and vary by report. These include: data use; assessment and monitoring; identifying areas of need, goals and strategies; curriculum; instructional practices; barriers to improvement; contributors to improvement; and desired resources.

Evidence of these themes are presented for each elementary building and one district office along with an assessment of progress using the OIP Implementation Criteria and Rubric. These serve as a series of "snapshot" case studies. Patterns found across these case study schools are presented in the executive summary.

A list of acronyms used throughout the series of "snapshot" case studies is provided here:

AIR: American Institutes for Research **BLT: Building Leadership Team** DLT: District Leadership Team IEP: Individual Evaluation Plan LLI: Leveled Literacy Interventionist NWEA MAP: Northwest Evaluation Association Measures of Academic Progress **OAA: Ohio Achievement Assessment OIP: Ohio Improvement Process** OLAC: Ohio Leadership Advisory Council OLI⁴: Ohio Leadership for Inclusion, Implementation, & Instructional Improvement **OST: Ohio State Tests OTES:** Ohio Teacher Evaluation System PARCC: Partnership for Assessment of Readiness for College and Careers PD: Professional Development PLC: Professional Learning Community SST: State Support Team **TBT: Teacher Based Team 3GRG: Third Grade Reading Guarantee**

DISTRICT 1

OIP Snapshot: School 1, District 1

Introduction

School 1 in District 1 was selected by the Ohio Department of Education as a site for this study of progress on the implementation of the Ohio Improvement Process (OIP). Data on School 1's progress related to implementation of the OIP were collected in an hour interview with two district office administrators. One administrator has been employed in the district for several years, while the second was hired in September 2016. In the past decade, District 1 has experienced significant declines in enrollment and successive reductions of personnel. Due to multiple structural changes and turnover of personnel, there was no one from School 1 available to be interviewed about past OIP efforts at the school. Apart from the remaining long-time administrator interviewed, the entire district leadership team was newly hired for 2016-17. Administrators interviewed reported on School 1's history and shared information about a renewed district-wide rollout of OIP which began this fall. With participant permission, the interview was audio recorded. It was then transcribed and thematically coded. Five themes were fixed by the research questions: structural changes, school culture, leadership, resources and professional development. Additional themes also emerged during content analysis: instructional practices; barriers to improvement; and desired resources. Findings are reported by thematic area. Also provided are ratings for the eight sections and associated criteria of the OIP Implementation Criteria and Rubric. School 1 was at the "beginning" level on all criteria and the school report card grades were Fs.

Thematic Findings

Structural Changes

Multiple restructuring efforts were attempted by the previous administration to address the persistent challenges within the district. In fact, the prior administration changed School 1's grade-level configuration, principal, and teaching staff four times in the past five years. In 2011-12, School 1 was a k-8 building, in 2012-13 k-6, in 2013-14 4-8, in 2014- 16 5-8, and finally as a 7-8 Middle School this academic year. A new principal was assigned, teaching staff shuffled, and different mix of students attended with each reconfiguration.

School Culture

Administrators stated, "School 1 has been a challenge for a number of years... Leadership has not always been good; it has been a dumping ground. They didn't do well anywhere else so they got to go there.... take that along with the challenges around the location of the building, the lack of the best or appropriate leader, the morale of the staff- in and of itself is a hard hill to climb - and then you add in the issues of students, health issues, and all that has been going on in that community".

In the spring of 2016, financial incentives were offered to effective teachers in the district to move to School 1. Unfortunately, teachers did not respond positively to the offer. A survey conducted to ask teachers why they were unwilling to make the move revealed teachers did not feel they alone could make a difference. Some suggested if they could take a team of successful peers with them for a limited time period of 3-4 years, they would consider such a move to help transform the building. Administrators acknowledged, "while we have not been able to do it yet, the goal is to get a strong leader with a posse of teachers to go in and transform the building for 4-5 years and see what

happens." The hope is that the newly hired principal will be a strong leader who will be successful in changing the school culture so teachers feel more efficacy.

Leadership

District Leadership. The current four-member district leadership team is made up of three individuals new to the district this year. Consequently, the DLT have been focused on developing a plan to bring financial and personnel stability to the district. Interviews revealed that the DLT organized a renewed OIP rollout for 2016-17. "While the district started the OIP a couple years ago, it has become clear people don't really understand it and the quality of the work wasn't there. So the decision was made to go back a couple steps and make sure we are doing the PD needed to really understand the five step process."

Building Leadership. School 1 was reported as a building where principals faced numerous student and staff challenges with little time to support OIP implementation. In the past five years, School 1 had four different principals. District administrators candidly acknowledged that leadership in the building has been lacking in the past, "...the lack of having the best or appropriate leader to make a change in that building". School 1 also had no Teacher Leadership. "The morale of the staff, the poor attendance of the staff in that building... that's a hard hill to climb." School 1 has a new middle school principal and new middle school staff this year. The new principal is an individual they hope will be able to provide strong leadership. "I can't tell you that in all my years here, School 1 has had that."

Resources

State. Administrators reported the State Support Team Specialists have been valuable. "Now the principals don't always like having the SSTS in their buildings running meetings. But having those SSTS as coaches in the buildings, helping the TBTs is major. We just need more; more for the buildings that aren't priority to help those buildings focus and watch, because we don't have enough personnel to do that." The district does not believe they can hire district support personnel "because it is politically untenable." Title Funds are helpful. "We have sufficient Title 1 money, we have sufficient Title 2a money in my opinion."

Local. The district recently implemented the placement of Behavioral Specialists and Mental Health Professionals in specific buildings. "They have been particularly helpful to School 1."

Professional Development

In the past, the district provided professional development opportunities related to improving instructional strategies, but these sessions were offered at the beginning and end of schools years, and were not mandatory. Thus few teachers from across the district participated. Administrators stated that with the successive re-staffing of each grade reconfiguration at School 1, even teachers who may have participated in PD moved to other buildings or are no longer employed in the district.

PD is being provided this year around OIP. In August, State Support Team Specialists (SSTS) provided training about the OIP process and the roles of collaborative teams, especially the work of BLTs and Teacher Based Teams (TBTs) to all Building Leadership Teams (BLTs). A second training in September 2016 focused on data, "what kind of data do we collect and what to do with data when you collect it." A third session, just with the priority schools, was also provided "because they have to fill out the forms for ODE." That session included "time in their BLTs having conversations and

filling that information out collectively with the SST." Additional PD related to data was provided to all BLTs depending on "the different kinds of data they are using."

In October, professional development training related to data was provided for all district teachers, with different training options based on different levels and background in data so as to accommodate teachers at various learning levels. The current teacher contract provided one half-day for PD in the fall and does not include any other professional development time until the end of the school year.

In January 2017, the district's six curriculum support specialists will each have five buildings they will begin to support with TBT training and coaching on the Five-Step TBT process. Administrators have also discussed offering a teachers' institute next year to retool teachers in best practice strategies.

Instructional Practices

Current instructional practices were acknowledged as needing significant improvement. Many teachers observed during building walk-throughs are using out of date methods. "Some of the things I have seen, being out in the buildings, is some of the practices being used were popular in the 70s that have been proven by tons of research to be ineffective." Administrators acknowledged there is much to be done in promoting best practice and differentiated learning strategies throughout the district. "In terms of 'do they have the strategies'? I would say no. Have they been offered the opportunity to learn the strategies, I would say yes, but have those opportunities been consistent? I would say no." Teacher turnover compounds the problem. "Another thing is that even if they were trained there has been such a high turnover rate that of the teachers that were trained many are gone." There are plans to promote effective instructional practices. "There are basic and foundational pieces that we need to address and get out of the way before we can do an institute" to promote differentiated instruction.

Barriers to Improvement

Several barriers were revealed. These include:

- Too much change from constant restructuring.
- Lack of teacher engagement in improvement.
- Lack of effective principal leadership.
- Lack of teacher leadership.
- Poor teacher morale as evidenced by poor attendance.
- Teachers' lack of effective and best practice teaching strategies.
- Limited time and personnel to provide embedded professional development.

Desired Resources

Administrators asked for additional State Support Team Specialists. "We just need more; more for the buildings that aren't priority to help those buildings focus and watch, because we don't have enough personnel to do that."

They also asked for a way to help teachers philosophically understand and participate in the process of improvement. "Can you find a magic pill- to help people understand it is a process, be willing to engage in the process rather than just wanting the product – to help teachers be willing to engage in the journey? If you can, find a way to help teachers with that!"

Measuring Progress

The OIP Implementation Criteria and Rubric specify eight areas of progress and associated criteria. Progress at School 1 falls in the Beginning level in all eight areas. Progress on Section A Effective Teams and Section G Team membership are just beginning with identifying team membership, development in the forming stage, and team meetings not yet regularly held or purposeful.

Section B progress is in the beginning stage receiving training on developing a plan with strategies and goals.

Section C Teacher-based Teams progress in in the beginning level as formative assessments need to be developed and teams are just learning about using student data, there is no job embedded PD and instructional practices are not adequate.

Progress in Sections D Formative Assessment, E Instruction and F Standards are in the beginning stages as the district has plans to align curriculum, develop formative assessments for all grade and subjects, and improve instruction.

Section H is also at the beginning stage with training being provided on the Five-Step process.

Summary

School 1 has been through multiple structural and leadership changes, and is now a Middle School with a new principal and staff. They are essentially beginning OIP implementation from scratch. Past barriers to success, like the absence of stable, capable principal leadership, are being addressed by the district along with plans to improve instruction through professional development and coaching by State Support Teams. These plans offer hope of improving the district as a whole, and specifically school culture in persistently low performing schools like School 1.

DISTRICT 2

OIP Snapshot: School 2, District 2

Introduction

School 2 in District 2 was selected by the Ohio Department of Education as a site for this study of progress on the implementation of the Ohio Improvement Process (OIP). Since 2012, District 2 has been transitioning to a Portfolio Strategy. School 2 is a bi-lingual (Spanish-English) school located in a thriving bi-lingual community. A site visit to the district and school enabled data collection during one- hour interviews with a district administrator, the building principal, and a district transition support coach. Administrators interviewed reported on general district OIP progress and School 2's progress implementing OIP. With participant permission, the interview was audio recorded. It was then transcribed and thematically coded. Five themes were fixed by the research questions: structural changes, school culture, leadership, resources and professional development. Additional themes also emerged during content analysis: curriculum, instructional practices, data use, barriers to improvement, contributors to improvement, and desired resources. Findings are reported by thematic area. Also provided are ratings for the eight sections and associated criteria of the OIP Implementation Criteria and Rubric. School 2 was at the 'developing' level on fourteen criteria and "accomplished" level on thirteen criteria, but their school report card grades were Fs.

District 2 has 37 "priority" and 17 "focus" schools that must implement OIP. The whole district began the implementation of OIP three years ago. All three interviewees reported there was a great deal of push back initially. "I think the biggest push back on the OIP was the documentation involved. Keeping track of walk-throughs, keeping track of BLT/TBT agendas, and who was going to fill out the forms. So we had a lot of that to get through." "This year has probably been the best year so far. Our union is starting to understand the process. People are becoming, I guess more experts at it, where in the beginning it was just very difficult to get it up and running." "Some of the initial push back was largely from some of those teachers who wanted to continue to hide, and in a team process it is difficult to hide." District-wide OIP implementation varies by school. "Schools are all at different levels. Some still at a beginning level, still unpacking standards two years later. Some have really progressed thru the process where they are analyzing data, lesson designs, and looking at intervention strategies to help our lowest performance schools. So we are at different levels, in the priority schools in particular." The district has not seen significant gains associated with OIP implementation. "Have we seen a big bang for the buck and seen big increases out of OIP? Probably not." School 2 is viewed as "doing a good job implementing OIP" but has remained "lowperforming" even with OIP implementation.

Thematic Findings

Structural Changes

In 2012, District 2 joined the Portfolio School District Network sponsored by the Center for Reinventing Public Education. The large urban district has eight Academic Superintendents/Network Support Leaders who manage the cluster of theme-related buildings in their network. The Portfolio Strategy has seven principles, with school choice and building autonomy key. "Principals have full autonomy to do what they want to do. Some networks have investment partners providing assistance in coaching, school culture, instructional strategies, interventions, building capacity." Even though the district adopted the Portfolio Strategy where schools have autonomy, for this academic year the network School 2 is in adopted a network-wide direct instruction program for reading.

School Culture

School 2 is a bi-lingual school. Signage, art, and interactions in the building were cheerful and bilingual. "School 2 was not always a low performing. It just dropped into priority the last couple years. It is in a nicer part of town. Their biggest issue is probably related to language deficits. They do a lot in the building and it is one of our largest k-8 populations building. They do a good job of implementing OIP. They do well there; the kids seem to like it. Kids select it." The staff are friendly and teacher teams are collegial. "You will see them together eating in the same room and talking about students. They wouldn't say they are working, but the conversations are about kids and work. So the culture is shifting." "We are a friendly building but also haven't really ever held each other accountable to one another to do everything we are expected to be doing. So that is a hard transition for teachers. Some new teachers are doing it more than veteran teachers asking, 'did you do it?'"

School 2 has not seen the academic growth anticipated in a thriving building. "Remember the tests have changed three times and the expectations continue to change so that it has been hard to actually see growth." Teaching staff feel the students are tested too much detracting from time focused on learning. "There is lots of push back from staff on testing because kids are tested a lot here. Teachers would say we don't think we need to test. We know where kids are and we just need to come up with strategies to intervene that work." During the first two years of OIP implementation, teachers felt the focus was on compliance. But now, "they are really buying into this being about their instruction and being able to help each other about instruction, so their kids are successful k-12." "There is an expectation, this is how we do things, and there's a specific structure to it. OIP promotes that professional learning community structure." Results of a recent climate survey were positive. "Climate surveys came back very positive. 92% climate is supportive 90% climate supports social emotional learning." "Students here have intrinsic motivation. Kids feel good about coming here, but we want them to have more interest in the importance of education." The building is moving in the direction of having students engaged in data analysis and performance tracking in classrooms. "Some teachers have students track their progress and less have data boards up in their room, but we are pushing for those and wall tracking."

Leadership

District Leadership. District 2 has a popular, stable CEO. "We have a phenomenal CEO who works very well with teachers and central office. So he is a visionary, a wonderful asset." However, the district does have some principal turn over issues they feel impede academic progress. "Typically, we lose 25% of our principals each year and we get a whole new crop in. So it is difficult to gain like that. If you are in suburbia, principals stay 10-15 years, even 20-30 years, and they have a connection to the community. We are lacking that here a bit. But we have a really strong aspiring principals training program where you are taken under wing for a full year before being placed in a building. We have a pool of internal candidates to replace principals who leave and they have had experience in the district for a full year. So they are ready to step in." Teacher turnover was reported as less of an issue. "Teachers here are very willing to work here and very willing to accept help. I don't see huge issues there."

Building Leadership. The principal at School 2 has been in the building for seven years, four as Assistant Principal and the last three as Principal. All three interviewees reported OIP implementation is "Largely dependent on the principal "and School 2 has a principal who values

OIP. "It [OIP] is important to me. Teachers hear me going down the hall saying, its TBT Tuesday! They know I am monitoring in Google docs, seeing instant feedback. He is reading, looking." "During walk-throughs it can be hard to catch them doing, but they know I am looking for it. Using it to drive our building goal."

Teams. The principal has made teams a priority and maintains a schedule with full-participation expectations. "So we know every Tuesday we will have TBTs and every month BLT. The TBTs teachers like it. They feel sometimes it is more about the forms that the thinking so it becomes 60% compliance and 40% instructional focus. We have tried to help by creating all TBT forms in Google docs so everyone has access and can enter data at the same time. This has been helpful."

The principal did not feel the BLT is as effective as the TBTs. "BLT is all about compliance. There's no time to do more than fill out the forms. They [ODE] need to combine them or something to make it less the forms. It is way too cumbersome." One of his concerns about the BLT process was that the data analysis process doesn't align well with the TBTs work. "I find little value in the BLT. It is hard to analyze the data. And is done alongside of the TBTs, so data isn't available right away. So we are just scrambling to fill out the forms." Another concern was the number of people included on the BLT. "As an admin process it is too hard to include so many people. It's just too hard to do."

All interviewees reported School 2 works pretty well in Teacher-Based Teams. "School 2 staff has grown pretty well over the last two years. TBTs have been required for maybe 4-5 years, but the district's really only been doing it the last 3 years." Three years ago the district hired Transition Support Coaches to help teacher teams implement OIP and the Five-Step Process for planning instruction. "We were hired, this is our third year, and the district had not forced the issue and required teachers to function in TBTs until we were hired. We have a pretty good process, we are in our third year and have full functioning TBTs and have a mostly functioning BLT. The TBTs are working much better than our BLT."

The transition support coach offered some indicators that the TBTs are working. "They're not like back in the day when you pretty much shut your door and did your thing, taught your classes and then hung out and socialized with your colleagues. They're invested in each other, and I think teams embrace that more than not. They can help each other and benefit from each other. And that happened seldom, or much less frequently, than it does now with the OIP process being in place."

He also described ways the coaches help the TBTs function better. "We encourage the teams that if you have somebody on your team, you need to embrace them, help them. So it's not about shunning those people who don't get it, you've got to help bring them along." "And having team data is promoting a collaborative process, so it's not just three teachers doing their own things and recording it on the same form; that's cooperation not collaboration." "Sometimes they just need to get over excuses for lower expectations for students because 60% are ESL and 300 special needs. We need to push through that."

The TBT work has helped teachers focus on and communicate about good lesson planning. "OIP has systemized ways to strategize for good lesson planning. It's moved the needle in a good direction for driving the focal point around creating synergy around a single idea with common language. Without the mandated process to help us organize our efforts, I don't think we would have made the same level of progress. TBTS are good for talking about student progress and teaching."

Resources

State. Interviewees reported the State Support Team Specialists (SSTS) have provided valuable support to TBTs. "We [coaches] worked in collaboration with the state support team and they provided a lot of initial training and a lot of initial resources to the TBTs. We still encourage teams to go to their [ESC] trainings. As well as we provide refresher trainings to them on an individual school basis."

Local. District support coaches have also been very helpful in keeping implementation on track but they report they are spread pretty thin given the number of buildings and meetings they try to attend. "We [coaches] provide in-house training, and we meet with TBTs. I liken it to any kind of coaching experience - you are taking people where they are at and helping them. My problem is, and we all have the same problem because there are only three of us and there are 37 schools, so I have 14 schools and six schools have TBTs at the same time."

Building-level resources are used by the principal to support good teaching. "When teachers come asking for magazines or programs, we buy those. Anything they feel they will use, I am willing to purchase. If they have a sound action plan and a commitment to implement, I support and fund it."

Professional Development

The district provides monthly professional development (PD) but most of the PD is determined at the building level. "Principals create what is called a strategic school design. It's a budget narrative aligned with a building plan and they have their own funding sources, so they determine the needs of the building and PD for the building; and the district provides the supports and helps them find the PD."

"The district also has 24 investment schools with generous funding to provide support for PD - so through their academic sups they have partners for the whole network, and the partners help provide PD for the whole network and most of the PD is provided by those partners." The Direct Instruction Reading program being implemented in School 2 and the network is an example of this type of PD. "So like every network has a part where they are doing direct instruction and it's just a small part of their day where they are doing it. And there is a learning curve going on with that because there is at least one team of teachers who felt they were being stifled by generalizing their whole teaching experience around it rather than it being just a small part of their day. It is a very rigid program and it is scripted. They ask how can we not have flexibility?"

ODE-provided OIP training was reported as 'too focused on compliance." The hope for this year is that the SSTs will begin to focus less on reporting requirements and more on instructional interventions and best practice strategies. "We were working with the state hoping we would focus less on the forms and more this year on interventions and implementation support, and what we need to do to help our kids turn their achievement around."

PD on *6+1Writing* was provided at School 2 to support the building's writing process goal. They found "middle grades teachers having a hard time figuring out how to teach the writing process for content areas." So the principal arranged for additional coaching. "By constantly looking for strategies and trying to improve what we do, it's catching on. Two years ago when we would look at a student writing sample, it was a scary proposition. So this has made a huge difference."

The district reported that although they monitor PD, usage and student performance results, even in the investment schools "we are not seeing improvement. We have good partners and good usage but we are still getting flat results."

Curriculum

School 2 is focused school-wide on improving the writing process. "We are using this process [OIP] and AYP goals to focus on writing. We all are working on it across all grade levels and everyone is doing that standard and you can see it in every classroom; it's what is expected and looked for." TBTs are using a model for lesson planning, rewriting the Writing standards as measurable daily learning objectives, and using OST rubrics. "We are rewriting standards because they weren't daily learning objectives, they weren't manageable and measurable. We are using a model for lesson planning that includes all the language for the writing component." "Last year used a lot of rubrics based on standards they were working on, but this year we are using OST writing rubrics from ODE resources so we know our assessment is aligned with what is expected of students."

Instructional Practices

The district union contract includes language that teachers are not required to create a lesson design. "Before this [OIP] there wasn't anything formal about planning instruction. We do have a Union contract that does not require teachers to create a lesson design; so we have those issues." Instructional strategies vary from network to network in District 2. "Some networks have specific partners and they use certain strategies. Many use Mariano for basic appropriate strategies, but if they have a network partner they stick to those strategies and they have a whole set of strategies they are using."

The TBT process has been framed as unit lesson development. "We focused on really helping teachers create a strong lesson plan design; focusing on each piece at different levels because each piece is important." School 2 was reported as doing well at strong lesson planning, but issues recently arose with SMART goals and data language. "They all knew SMART goals had to represent all the kids so why they aren't doing that now, I'm not sure. For example, percentage of kids achieving mastery is sixty percent. Ten percent advanced. But what about the rest? You have thirty percent- you can't plan to have them fail; you have to plan for how they will succeed. Also when analyzing data in strengths and challenges, in step 2, they got away from quantifying those. They used most or many rather than actual percentages."

Data Use

School 2 is focused on TBTs using data in the Five-Step Process for planning instruction and it seems there have been conflicting messages about what level of data needs to be reported. "We are having teams disaggregate data in step 1 and 5, some at the team level and some by teacher. But then there came a concern- and where the concern came from I can say for certain - but it was using that documentation as part of evaluations. So when we sat down and the new form was developed, we had a discussion about how teachers will have their own data but whether they report it on the form is not the thing but they need to know it for pre- assessment data. However, the most recent feedback posted from the SSTs made comments to teams to disaggregate their data, which is contrary to what we had talked about. So the teams are like ok what's it gonna be?" This is an example of how the compliance aspects of the process get in the way of using the process.

A variety of sources are used for data analysis. "Some have vendors data that are standard specific for pre and post assessments. Many create their own assessments. That was a problem early on.

Teachers giving kids pre-assessments that didn't completely align with the targets they had outlined. For example, don't test in adding single digits when the target is double digits."

The major concern is that the data indicate no significant improvements in student performance. "The data show, not that we are flat so not really dropping. But no significant growth. We are working extremely hard trying a number of different things. We have our investment partners, phenomenal curriculum and instruction department; we have a scope and sequence, teachers receive a pacing guide; we offer extensive PD, we buy new resources - students are really resource rich. But not really able to answer the question of why no growth, except that that we just haven't hit the mark in how to help students who are not reading on grade level."

Barriers to Improvement

Interviews revealed few clear barriers to improved student achievement. There was a consistent assessment that rollout and implementation of OIP was met with initial resistance because compliance was emphasized over improving instruction. "When State Support Transformation Specialists (SSTS) came in with such a focus on compliance it was a turn off, but if it had been more focused on working with best practices and working with teacher teams it might have been better for us." "OIP was introduced as too much of a compliance piece rather than a support piece, and it took three years just to get teachers to buy into the process." It was also pointed out that for OIP to work the entire system has to be part of the process. "ODE was too focused on working with Principals on implementation, when they should have worked with central office staff too. It needs us all together to get it to work, because it's a 'system'."

Another issue mentioned that impacted OIP implementation was poor vertical communication. "So this is a one we have struggled with and that's the communication between the TBT and the BLT, and the feedback and support filtered back down. With five networks and five different leaders we haven't been able to develop anything with any kind of consistency."

Also the nature of ODE feedback sometimes impeded progress. "Everything is a comment in the feedback process, and even if it wasn't really meant to be a negative or a ding, teachers are very protective and immediately defensive. Especially because often they already did some of these very minor things, like adding times to the master schedule, and though many feedback things are minor they feel it is criticism. Now they are feeling a little judged, rather than seeing it as coaching. Some teams are much more defensive."

Delays in communications about requirements and expectations from the state were also mentioned as slowing down buy in and progress. "Last year with the change of leadership in Columbus at ODE, they didn't come out with requirements until October and school started in August. So we thought- ok let's keep the TBTs and BLTs moving because we know they will continue to be part of the process. We know what to do there - and that worked out pretty well. Then this year we had the same thing and didn't get the requirements and monitoring period until early October. And this year we didn't have as much luck keeping those teams together. The state doesn't seem to realize that if they don't send us the rules of the game, people get discouraged and turned off easily when there is not consistency. So they just shut down and some schools wouldn't do anything until they saw the state requirements."

Another barrier was frustration that applied to OIP implementation and new initiatives in general. "Because we are a large district and try new things on a yearly basis I do think teachers are used to it. But there is some frustration sometimes because one year we are saying do this and the next year we say do that or that didn't work so let's try this."

The final barrier discussed in interviews was the difficulty fully remediating pervasive and significant reading gaps because interventions take time and during that time new gaps emerge due to the exponential nature of vocabulary and level of reading skills required to learn all other subjects. "Students come with huge deficits in reading and the system hasn't, and I don't think anyone, has come up with an answer on how to help such large numbers of students who are so far behind in reading." "We have READ180, they are a partner, and of course we have spent thousands of dollars with the program reading and monitoring; and the program guarantees improvement in one reading grade level for the year. But these kids were reading at a 3-4 reading level and after a year are only reading at a 4-5. So the dilemma is how do you ever catch up? How do you close that reading gap? And you have to be able to read to learn. I have been in all kinds of districts, rural, suburb and urban, and I just see this as the big difference. And no one has come up with a good answer for how to improve reading for such large numbers [of students]."

Contributors to Improvement

State Support Transformation Specialists were acknowledged as making significant contributions to the implementation of OIP. "Those teams provide a lot of support." "Kudos to the SSTS and District Transformation Coaches for helping us understand the forms." "We work well with the transformational support specialists. The first year they had a document that laid out the expectations for each milestone period. And even though that is all monitoring and compliance based, if you know what to expect it made it easier for the schools to accept, 'this is what we need to do' and move on together to get it done."

A contributor to improved student performance, Reading Recovery, was mentioned as very important but not directly related to OIP. "This is the last year of it and we just did 8 schools, and worked with OSU's reading collaborative and implemented Reading Recovery – which is very labor intensive and expensive - but through those grants we have implemented Reading Recovery. That has probably been the number one thing, out of anything we have implemented, that has been really successful for us."

Desired Resources

Administrators asked for additional State Support Team Specialists and ODE created an all on-line documentation process. School 2 created their own Google Doc version of the required ODE forms to enable wider sharing of information and facilitate the work of completing the forms. "I like all forms being available to view but only edit your own. It is hard to share when it is all on paper. It helps to extend learning up and down to differentiate. It would be nice to have it all done for you in the portal system that could be submitted right from within rather than adding that layer of paperwork."

Revised BLT forms were also desired. "BLT forms and process needs to be reworked. It's unclear what they [ODE] want. I would prefer to have a list of components they want and be able to submit them, as I want to, in what makes sense... the forms aren't workable. They are not five separate things when they are interrelated. So you need a doc that synthesizes them."

Measuring Progress

The OIP Implementation Criteria and Rubric specify eight areas of progress and associated criteria. Progress at School 2 falls in the *Developing* level on fourteen criteria and in the *Accomplished* level on thirteen criteria.

Progress on Section A: Effective Teams four criteria and Section G: Team Membership criteria were at the *Accomplished* level. Teams are in the norming stage, rules and responsibilities are defined and applied, participation is 100%, and meetings are held on schedule with agendas using team data to complete required forms.

Progress on Section B: District/Building Leadership Teams were at the *Developing* level. The School 2 BLT has a focused plan based on needs with SMART goals, strategies, and action steps but data were not yet organized and progress was poor.

Progress on Section C: Teacher-based Teams and Section D: Formative Assessment were at the *Accomplished* level. Teachers were organized, used common formative and summative assessments and rubrics to discuss student work, and strategized about appropriate interventions.

Progress in Sections E: Instruction was at the *Developing* level. Teachers are having students monitor their own progress and encourage independence.

Progress on Section F: Standards was at the *Accomplished* level with teachers re-writing daily objectives using the state Standards and having opportunities to participate in professional development.

Progress on Section H was at the *Developing* level. The Five-Step Process was being used to examine student data and identify appropriate instructional strategies. Teachers were working to improve differentiation to meet sub-group needs but requires further differentiation.

Summary

OIP implementation at School 2 is progressing with positive effects on school culture, teacher collegiality, and data- based instructional design, but has not yet resulted in improved student performance as measured by standardized tests. Teachers at School 2 have benefited from stable building leadership and support services from State Support Transformation Specialists and district coaches. Teacher-Based Teams are using the OIP Five-Step Process to design data-driven teaching and learning. The adoption of OIP was impeded by perceptions it was too compliance focused, but over time buy-in has been gained by focusing on how OIP guides lesson designing and improves instruction.

DISTRICT 3

OIP Snapshot: District Office, District 3

Introduction

As part of the study of progress on the implementation of the Ohio Improvement Process (OIP) personnel in the district level improvement office for District 3 were interviewed. District 3 has 17 "priority" and 34 "focus" schools that must implement OIP. The district began the implementation of OIP three years ago.

Data was collected during a one-hour on-site interview (office is located at a District 3 High School) with personnel in the district level improvement office for District 3. The director reported on general district OIP progress. Previously she was the principal at a District 3 High School which was designated a focus school so she also spoke some from this experience. With participant permission, the interview was audio recorded. It was then transcribed and thematically coded using NVivo, a qualitative data analysis software. Five themes were fixed by the research questions: structural changes, culture, leadership, resources and professional development. The resources theme did not return any results. Additional themes also emerged during content analysis: assessment and data; identifying areas of need, goals and strategies; barriers to improvement; and contributors to improvement. Findings are reported by thematic area. The 2015-2016 district report card for District 3 were all Fs except for the D received in the Prepared for Success category.

Thematic Findings

Structural Changes

The person that oversees the Ohio Improvement Process serves as the official OIP internal facilitator for District 3. She is also responsible for the ESL and Gifted and Talented programs for the district. "Last year was an observation year for me which is why this year there are things in place in terms of 'Ok, what is the job description, who, how are people being held accountable, what are they doing, how are we measuring this?' Those kind of things weren't in place, so last year, because school improvement isn't the only thing that I'm doing it's been a year of learning what's being done." While this office has existed previously under other titles and different capacities she has served in this role for the last 2 years. Prior to this role she served as the principal of a High School on the south side of District 3. In fact she was still the principal at the start of the OIP process so she has been on both the building and district side of the process. "I'm communicating with those who are working with our central office, our executive directors, curriculum, you name it. I'm working with them. I'm providing professional development, working with the principals when they have principal development. I'm also working with them overseeing the district leadership team, leading that process as well."

Under the "school improvement umbrella" for the district there is staff devoted to work with the priority schools. There is "a supervisor of priority schools and school improvement supervisor -

their main focus is working with priority schools." There are also teachers on special assignment that provide additional support to the priority schools. To understand the school improvement staffing in the district the executive director explained further that "They do work with me and provide support overall for school improvement. Because of the 17 schools there are 92 other schools that, in terms of staffing it's just me. Thirty-six of the schools [are] focus schools and they do have a state support team that helped to coach and monitor good progress of the 36 focus schools. So we do have that as a support system that the district has in terms of working with our schools. So I have 17 schools that have a little bit more support and then I have 36 schools that have outside support and then the rest of the schools, we have 45 watch schools and maybe about 12/15, I believe are independent rating schools that just fall under me in my role. The staffing is a little skewed."

Because she previously was a principal of a focus school at the start of OIP she could speak to the structure of OIP from both perspectives. She recalled having a set of half day meetings regarding the process with other principals. "We were told this is the process and these are the forms that you use as evidence to document the process and then were told to do the process. We did have division meetings, principal division meetings monthly where every once in a while there was some emphasis on the Ohio Improvement Process. As I recall it wasn't consistent because we had meetings once a month." In her view OIP was rolled out like any other initiative by ODE – "you have to do this, these are the things that are in place to do them, now go off and do them."

In this process as a school principal the state support seemed inconsistent. "Because my school was a focus school then we had a state support team coach. So that helped a little bit, that helped, it gave us some support in doing the process and I'm saying that to say that there were schools that if they didn't have the status that I had and they weren't a focus school and they weren't a priority school they had to do the process but there was no support in the district. No structured organized support for those schools that weren't a focus in private school status. So if the principals happened to try to reach out, in that way, there may have been support but anything that really ...organized, or how are you doing, let's kind of monitor your progress, that type of thing didn't exist so they were more or less just doing the process" on their own.

As far as learning the OIP process that was mostly self-taught. There were activities provided by the state around OIP "but in terms of walking away and feeling empowered, feeling like I had some additional tools, additional information to lead the work of the Ohio Improvement Process, my experience as a principal was that didn't exist during those times where it was on the agenda for the meeting. I didn't gain that." However, in her role as the internal OIP facilitator she learned the process on her own and then taught her staff. There was a lot of independent learning which was then brought back to the group to be shared.

Culture

The district distributed a family survey to assess culture and climate at the schools; while buildings tried hard to gather that data they did not collect enough for it to be successful or useful. "We weren't successful. It wasn't, across the board, especially at the high school you typically didn't get a

lot. So it was an assessment, it was a data source but it wasn't reliable, we just didn't have the numbers." Additionally the little data that was obtained went straight back to the district and was not returned to the schools for use in their own assessment.

Leadership

As the District 3 leader for OIP, the "goal is to push the integration and collaboration that needs to take place because what I've discovered is we function in silos and so that's been difficult for my position." The goal here is to "rebrand" and "reteach" the Ohio Improvement Process. Part of the issue is the frustration that there is always something new – a new process, new standards etc. Teachers and administrators feel that they can never keep up and instead of focusing on the kids they are being forced to change strategies after just having learned the last one. "OIP, OTES…people will run down the acronyms of what they have to do. So last year I heard a lot of so this is one more thing that we have to do." This is where the rebranding comes in. "The Ohio Improvement Process is teaching and learning. That's the bottom line. It is the processes in place to impact, to influence, to monitor and support teaching and learning. So unless, I've jokingly said, unless teaching and learning is something extra we do in the district then OIP is not something extra."

A huge focus of the Office of Innovation and Improvement is adult education or teacher education by playing into the needs of adults as unique learners with differentiated learning needs. "Adult learners are still learners and they are all over the place, all over the spectrum in terms of their learning curve, what they need. We talk about differentiating for students, but there's typically not differentiation for adults, so I have adults then, that you go to this training and the expectation is that every adult is leaving on the same level having been trained and not really assessing where they are. So one of the things I can say to the Ohio Improvement Process is this is just not a student focus, this is not just the student performance it's also the adult performance and processes. It's twofold." We don't assume that all children learn the same so why is this philosophy also not applied to how we teach our teachers? "But if you're wanting to have leaders that can lead the teaching and learning process, can lead, can have the conversations that can inspire, engage, do the inquiry, then you have to have leaders that are trained and continue to learn, you can't leave them out just to say you have a principal licensure, you have the degrees so when you have the position so you should be able to just do that. So that's where I see now doing this Ohio Improvement Process for the second year. There's an imbalance there. We haven't figured out how to monitor support for the adult performance." More needs to be done to foster and nurture adult learning. When this occurs the impact will be evident not only through teacher performance but also through student performance.

Professional Development

Prior to the Ohio Improvement Process the district was using Professional Learning Communities (PLC) and solution trees. This provided funds for training to be an instructional leader to manage and support practice and monitoring of the teaching and learning process. This provided for an easier transition to OIP. There was a greater struggle in teaching staff to understand evidence based research practices. "In terms of what's evidence based research practices... It just didn't exist and even still we are trying a little bit of that now but it's still not to me in terms of leading this OIP

purposefully deliberate enough...I have principals that are all over the place in terms of building leadership teams that are all over the place in terms of what they're doing, still reviewing school improvement plans where the emphasis is these aren't evidence research based strategies and my push back is 'well but you're not training the principals to...' and I'm one of those that came out of those ranks, that, if you're not training them they don't have the knowledge base to do that so they are doing what they know to do or what they're trying to figure out on their own."

The district has a Teaching and Learning Department that oversees professional development. There is a Leadership Academy which includes monthly meetings of principals which creates short training opportunities which focus mostly on the instructional strategy piece.

Teacher training is mostly done through the train-the trainer model. "We have teachers who are on special assignment in the curriculum office and depending on the level they have different ways in which they work with teachers. A lot of it is train-the-trainer, that type of model and so at the high school level there are department chairs. Department chairs have an opportunity to work with the curriculum office and then go back and bring them to their departments. Middle schools as well, elementary I know we have a lot of literacy coaching, instructional coaching monthly, that type of thing. So those things are available and support the process but it's not as strategic and so I say everybody is not at the table when we are planning this. We are still in silos." Another goal of the OIP Internal Facilitator is to always get a seat at the table, whether it is Teaching and Learning or the Special Education Department planning professional development opportunities. "If I'm talking to them, people are still learning the Ohio Improvement Process, then my role is sitting down with curriculum and saying so when you are planning for the year these are the weaknesses we are seeing in terms of implementing teacher based teams and building leadership based teams. And these are my recommendations for when you're planning professional development - these are things that you can do to help them when teachers are meeting in teacher based teams to provide more guidance in terms of how to create formative assessments, how to develop rubrics, how to select instructional strategies...because those align within the skillset the foundational pieces that teacher based teams need in order to be able to function with fidelity. So those things from their department are crucial in terms of developing strong teacher based teams." The goal is that the OIP Internal Facilitator can work to align needs so that OIP can be implemented with fidelity.

Assessment and Data

The inception of OIP also brought the use of NWAE MAP as the districts formative assessment. "So we decided on using that as a formative assessment to guide our work throughout the district, throughout the school year to better prepare our students to take the summative assessment, for them to be successful in the summative assessment." As with any new program that gets introduced there is a bit of a learning curve as well as different modes of implementation. "It was just started last year and we didn't have all the schools. I believe high schools were the last to have to use NWAE MAP for our 9th graders. So it's been a transition for us and just like anything when you start out people are doing it and its compliance and little bit of both but people are still getting familiar with using NWAE MAP. Using that how do we read the data, how do we gather the information, utilize the information that's gathered from NWAE MAP to make decisions regarding school

improvement plans, to make decisions in terms of instructional strategies? Those types of things that [require] learning how to use the tool that was adopted and to make it work so ultimately in the classroom we are seeing that change."

In District 3 they are focused on the math and reading tests. These assessments are being given at the beginning, middle and end of the year. Reports are produced at the "principal level, building level and teacher level that are explicit enough that they can be used then to make decisions on what performance goals they need to focus on. Is it in the classroom? Vocabulary acquisition? Geometry that they've been able to drill down globally and then individually work on how to meet the needs of the students?" From this they are able to learn "how to funnel the strategies and the work of the staff, the teachers and the principals." This district formative assessment gives teachers the tools to create their own formative assessments to create an ongoing understanding of where their students are developmentally. However, since use of this tool just started it is all just a work in progress.

There have been an abundance of changes in the district that make it hard to monitor progress. "Coming into this department and this area, there have been so many changes, personnel changes, changing of plans that to me is hard to really measure what if any, how it's been affected. Also too, in terms of as I come in to this and ask "what have we been doing to measure progress?" It's disturbing to me that there is nothing that they can pull out that they have been strategically measuring the progress or the changes." For example, we might know that "School A has been this priority school for this number of years, even if there has been no progress, just charting what's happened, the data that you can show and demonstrate as to why. What I find to is assessing, reflecting, and assessing progress is to me not a common practice." Instead the sole goal is to finish the year. There has been little data collected which allows for an understanding of the progression or lack of progression schools are making. "Its foreign to really assess and reflect and assess and look at what's our progress, or have we made any progress? Or are we charting, what's the evolution been to even be able to answer you to say 'Ok, then, there's been no progress, this is the reason why, or there's been progress and this is the reason why'? I just haven't in this position received anything or anything being collected to even answer that." A major goal in this position is to next year have "some system of measurement."

Identifying Areas of Need, Goals and Strategies

District 3 goals include reading, math, attendance and discipline. SMART Goals have been established in all four areas. Last year movement was limited to a couple offices creating action steps in support of the district improvement plan however not much beyond that took place. "They created action steps that were kind of based upon what they are doing. [But] there was no deliberate ...'We decide this is going to be the reading across the board for these grade levels, we need to brainstorm what each of our offices are going to do to support this goal and how we're going to monitor what we are doing to support this goal.' So that wasn't in place." Instead of starting fresh folks were just adding to what they were already doing. There are a lot of offices involved including teaching and learning, exceptionalities, and social workers/counselors, career technical, principal leadership development and professional licensure. Part of the struggle is to get everyone on board and on the same page. Therefore a major goal for this year is to "be more strategic with that piece in terms the alignment of what it is that they are doing and trying to be more deliberate in terms of monitoring that." There is a lot to do before an adequate process is in place according to the Executive Director. "It's still to me not where we need to be. It's still not in terms of the collaborative effort, in terms of getting the people from the academic service team to look at this as this is our work. This is our work. We've created this plan. We see ourselves in this plan - reading, math, discipline and attendance. This is ours. We have ownership for this. [I] facilitate this but we have ownership. How are we doing? We are not there. We are not there at all."

This year, working with the 4 goals – math, reading, attendance and discipline – using the decision framework (for the first time) they used this information to create a plan. It was first shared with a group of executive directors and then with everyone. Each department followed up by documenting how they would support people in the implementation of this plan. However things came to a halt after their first quarter of monitoring.

"But we haven't gathered back together to look at to me the whole plan with everybody's action steps, everybody sitting around the table and talking about each department articulating this is our role this year in helping them support the district improvement plan." This is because they are still "trying to meddle through the isolation piece and the team piece so even though we have people sitting around the table there are still some things that we are doing in silos because it works for the organization but in my opinion it doesn't really work to help, to move the team to really functioning as a team and functioning as a truly collaborative effort for me." There is a lack of team work as most are used to functioning in silos. To change this will likely result in a major culture change however it is a goal of this office to change that. It would be helpful if people were sharing their work and allowing for questions so that everyone has an understanding of the work being done.

Barriers to Improvement

The biggest barrier to improvement is professional learning time for teachers, principals and even district officials. "They are not figuring out how to make the time or take the time to come by the support that is needed. That time factor, figuring that out, as a district and then even at the building level there are just so many constraints that that is a hurdle." There is also the lack of recognition that just like children adults learn differently as well. Not only providing the time and space for learning to occur but providing different teaching methods to accommodate various learning styles is also very important. "If you are going to impact student performance then having the time and the commitment to develop the adults, the staff it's just so very important in their learning and in their continuous learning as well."

Contributors to Improvement

There are basically two tiers of improvements being made thus far. First there are those schools that are in the "collaborative stage" and are "very deliberate about the instructional strategies that they are using and they are very deliberate about having a system in place." These systems include principal and teacher leaders who are monitoring the strategy using classroom visits, and TBTs "that are very strategic in terms of gathering and collecting information, and [returning] to the building leadership team for a deep dive into the process of influencing the teaching and the learning that is going on in the classroom." At the elementary level there are schools that have chosen specific literacy programs to promote the "specific strategies that they are using to guide and improve literacy in their buildings." There are also buildings that have been trained to measure and monitor practices which are intended to improve school culture through increased attendance and decreased disciplinary actions.

The second tier of schools are those that are merely able to comply. "I think we probably have, I don't want to give a percentage, but if I had to, go out on a limb and say about 50% are really strategic in terms of strategies they selected and that they as a building are collaboratively focused on and gathering that data. And that might be going out on a limb but I'm going to be hopeful and say 50%. Then the other portion is just in the compliance mode going through the motions."

Summary

The Executive Director of the Office of Improvement & Innovations for District 3 serves as the official OIP facilitator for the district. After spending the first year in this role observing, the next step is to begin strategizing about more productive means of implementation and monitoring of OIP. Building a collaborative culture in which working in silos is minimized, and creating a culture in which learning differentiation for adults becomes the norm as it has for children is the priority. Ultimately, promoting increased teacher development is seen as the number one tool to improving student performance for the district.

OIP Snapshot: School 3, District 3

Introduction

School 3 in District 3 was selected by the Ohio Department of Education as a site for this study of progress on the implementation of the Ohio Improvement Process (OIP). District 3 has 17 "priority" and 34 "focus" schools that must implement OIP. The district began the implementation of OIP three years ago.

Data was collected during a one-hour on-site interview with the principal of School 3. The school principal reported on the current progress made at School 3 in implementing OIP. With participant permission, the interview was audio recorded. It was then transcribed and thematically coded using NVivo, a qualitative data analysis software. Five themes were fixed by the research questions: structural changes, school culture, leadership, resources and professional development. Additional themes also emerged during content analysis: barriers to improvement; contributors to improvement; and identifying areas of need, goals and strategies. Findings are reported by thematic area. Also provided are ratings for the eight sections and associated criteria of the OIP Implementation Criteria and Rubric. School 3 was at the 'developing' level on three criteria and "accomplished" level on fourteen criteria while six were unknown. The school report card for School 3 was all Fs except for the B they received for Progress in 2015-2016.

Thematic Findings

Structural Changes

The school principal reported that she is currently in her 6th year as principal at School 3. Prior to that there were 5 principals in 6 years. Her stability at the school as created a more structured and trusting environment than staff, students and parents were used to in the past. At the time she started they were still using the Professional Learning Communities (PLC) process. The Ohio Improvement Process (OIP) began in her second year. Her 3rd year the school was awarded a School Improvement Grant (SIG).

There were definitely some adjustments that had to be made in switching from the PLC to the OIP. It was frustrating for the teachers at first who had just learned the PLC process to now have to learn a new process. The principal explained that "a big challenge was just that language and getting teachers to understand, 'Well it's called TBT but it's kind of like the same premise of what you were doing' but they were like 'Oh it's one more thing, we just learned how to do PLC's and now we have to learn how to do TBT's.' So a lot of that was just getting the information to the teachers, to let them know it's not one more thing, you are going to use the skills that you did in the PLC but it's just called something different." To overcome this, the district offered significant professional development (PD) to both principals and teachers on how to implement the OIP process.

School Culture

School 3 is located on the southeast side of District 3. The student mobility rate has been somewhat high in the past due to high rates of homelessness and lack of knowledge regarding required school transitions and enrollment. However, through increased parent contact and communication this is changing.

Arrival and dismissal times are maximized for parent contact since most parents are there to dropoff and pick-up their kids. The principal and all other staff are available outside the building to greet parents and touch base with them when needed. "I also have an open door policy with parents, every time I have parents here. We have a voicemail. We tell them we will get back with them within 24 hrs. I have a text line through google voice that I use so it's not really my number, you know, but I communicate a lot with parents through email and text. I am really pleased with the contacts we have been able to do." The principal feels that the parents want to be involved but sometimes are stigmatized as being unreachable because they ignore calls from the school or their phone is turned off. However, it is more likely that they are working at a job where answering their phone is not allowed. Therefore, the principal and other staff have to be available outside of regular school hours to reach parents. Email and google voice have been very effective methods of communication which also provide documentation of contact.

"Well I will say it was very difficult to build rapport with parents when you are the 5th principal in 6 years because they are like 'Well you're just going to be gone like everyone else, so why should I even deal with you.' So we do and have done a lot to build rapport with our parents." While teacher retention is a huge problem so is principal retention. However, beyond just keeping a principal the district/school needs to make sure they are a good fit with the community the school serves. Getting the parents to come to school and to trust the administration has been no easy task but the hard work does seem to have paid off. The principal has been able to develop strong relationships with parents and they trust her. She said, "I feel like now if there is a problem parents are going to bring it to me and they are going to bring it in the appropriate way they aren't going to yell at me." She provided a recent example of how one parent videoed students in school and posted it to Facebook without permission. Other parents felt comfortable in coming to her to report the issue and it was addressed immediately minimizing any harm to students. The same is present with students. For example, "Lots of times if kids bring stuff from home they shouldn't bring like toy guns, lighters, stuff like that usually the kids are telling the teachers or the kids are coming down here to tell me. So I think that relationship piece is huge and in tune with how much progress you make with the OIP." These things could not happen in a culture where trust was not present.

To build these relationships with parents they do a lot of after school events and things on Saturdays. Examples include math and science curriculum nights, literacy events, and parent teacher conferences with a parent meeting and dinner. Sometimes they do giveaways with donated gift cards or other items, breakfast and lunch combined with informational sessions that draw parents. They also have student performance which draws about 75 to 100 parents. There are 340 kids in the school. They also have a partnership with a local children's hospital who provide sessions for parents to learn how to deal with the behavioral and growth transitions of their kids.

The district also tries to reach out to families but sometimes it just doesn't work as they would like. Each school culture is different and that must be taken into consideration when planning events and hoping for a good turn-out. The principal gave an example of a literacy event the district held at COSI this winter. Families who come get in free and get free COTA passes to get there. However, as the principal of School 3 points out, "We don't normally have a lot of kids from our school go. We go as principals to volunteer. I would say I've never had more than like 5 kids from my school go and COSI is not that far from here. But what I try to explain to the some of the people who maybe aren't in the buildings who don't understand is that 'Well it sounds good, get in free to COSI, we are going to have a literacy event, you can bring your family, we will give you COTA bus passes.' But I'm like, this weather, a COTA bus pass and I've got multiple kids. 'I'm like I'm not coming out on a Saturday morning for a literacy event.' You see what I'm saying? To a place where I'm not comfortable, I don't have a relationship with those people. Even though it's my child's district... I know a lot of kids in this area, even parents, it's more about relationships, so I will basically do the same thing that they are doing down there at COSI but I will do it here." Instead they will host a similar kind of event at School 3 where parents and students feel more comfortable. This also allows them to monitor

better who is in attendance and to ensure they are taking the right materials home. "So it's just things like that that are barriers that we can't expect parents to adapt to us. Sometimes we have to adapt to them."

The principal discussed some activities that might take place during a Saturday event. "We would do a parent meeting with everybody together and then the teachers would go to different stations. And then we had activities where they could model how to do these things with their kids at home. We would have playing cards and show them how they could do math facts with playing cards, we do board games, we do arts and crafts but involve the parents like how they could measure stuff. It was all duplicable stuff that they could do at home that they didn't have to spend a lot of money. One activity was like when you take your kids to the grocery store how they could be involved. They could do a grocery store scavenger hunt. They could help add up or count money. You know just little stuff. A lot of our parents think they can't help their kids because they weren't really successful in school so we are trying to let them know it's not rocket science, you don't have to be a teacher to help your kid at home. So a lot of the parents are really appreciative of it and it kind of helps them with a way to bond with their kids because a lot of our parents have a lot of stress and anxiety. We just really work hard to build that rapport with them."

Leadership

District Leadership. Support comes from a school improvement office at the district level which serves as the middle person between ODE and school principals. This office has always been around in some capacity however the title frequently changes. Often teachers at School 3 request additional professional development in areas they do not feel confident in. The idea being that one or two teachers from the school could attend the PD and then return to the school to train the other staff on what they had learned. However, the principal noted that she often gets, "a lot of pushback from the district sometimes and this is a challenge that we have because when I talk about all those people having to approve. So sometimes if I say 'I want to take this team to a professional development or I want this team to go.' Now I have the money because I have the state grant but I still can be denied to take my team. And that has happened which is very frustrating. The response I get is well we already have our representation from the district going to that. 'Ok who is going and are they going to be delivering that PD in my school? And even if they came and delivered it would they be going to the sessions that are relevant for us?' That's the piece that I don't understand about the whole...if principals are really supposed to have autonomy about building decisions, it's not like I'm overspending my budget we have that money set aside for professional development but someone in central office can say 'hmmmm no you guys aren't going.' So that's just a challenge, a struggle we have to overcome somewhat but it's really not true autonomy that the principals have."

Building Leadership. There is a member of every TBT that also attends the BLT meetings. This provides communication across grade levels since the TBTs are currently set up by grade level. Teachers do the research and choose the resources they need to create an effective learning environment in their classroom. Currently, these include programs like IStation, IREADY and ALEKS. These are then presented to the BLT for final decisions. "We have people coming from the different companies and sharing the products. The teachers give feedback. They are the ones who actually choose, you know they vote on what they want to use; the BLT does. And I think that's important to involve them in that process you know because they are going to be the ones implementing it. So instead of me saying 'Ok I'm the principal, I'm the one that's going to make the decision, this is what you're going to do…." I let them look at the prices, I let them know how this is effecting the budget, well if you guys are going to go with this then we are going to have to cut back on after school tutoring, you know which one do you guys think is more effective? So I really involve

them a lot. I like the OIP process because it's fluid. Facilitators can change, it's not always, it doesn't always have to be the principal, and it doesn't always have to be the coach. It gives opportunities for teacher leadership to all the teachers and staff that are involved."

Teams. At School 3 they have tried both vertical and horizontal TBTs, with cross-grade level and same-grade level. Ultimately they decided that horizontal, same-grade level TBTs were best because teachers "found that the standards that they wanted to do for their short cycle assessments were too spread out when they were doing the vertical and so even though they might have all agreed on the same thing, like they might have all done vocabulary, they might have all done context clues...it was just the strategies ended up being different so they wanted to focus on just being with their grade level team for this year." The system is constantly being tweaked. They might find that next year vertical teams work better and they will switch back.

There are 6 TBTs – one for each grade level kindergarten through 5th grade. The principal and the two coaches provided by the SIG grant each attend two of the TBT teams weekly to break up the work load. They then meet weekly to discuss the TBTs and address any issues as an administration.

Each team is different and some need more assistance or tweaking than others. For example, the principal mentioned that the "2nd grade team is kind of struggling and they don't really have a good model so I've kind of attached to their team for the first 9 weeks. I attached to their team to try to just help them with framework and then the 2nd quarter we actually paired them with the 3rd grade team who is a very successful team so they could actually see the peer modeling among teachers." This team has "One new teacher and one seasoned teacher. So you have one person coming in that wants to kind of do everything and in my assessment as an administrator I think they are just too broad and they can't narrow down their focus. It's not necessarily about them doing the assessments because they can do that and they can say which kids are above which kids are below. It's more about trying to narrow down what standards are important how you do that and then how you share strategies with your teachers." Besides a difference in experience the other issue is that the team is more focused on the kids than on how the adults are implementing certain practices. "So I'm trying to get them to understand that really when we talk about the TBT and practices we really should be focused on what the adults are doing. They need to see it in action amongst their peers to see that it can be done and to see how it can be done. Then it's not like me as a supervisor or as their principal but it's like their colleagues" showing them the way.

There is a 5-step process that the TBTs are supposed to complete during their meetings and return to ODE. It includes things like "what your pre-assessment data is, what strategies you are going to do and then your post assessment and that's where we are talking about the adult implementation factor." At School 3 they found that the teachers became too focused on completing the forms and therefore missed the content and benefit of the meetings. "The district wanted minutes, the state wanted minutes. What I found at my building was that they were just so focused on making sure that they had every piece and part that they were missing out on the whole point which was to have these collaborative conversations and to be able to change your practice." They had to adjust how they approached the 5-step process and completing the forms so they could best maximize their time and dissemination of information. Instead they just took notes and then after the meeting was over they went back and filled in the pieces and parts of the conversation that matched the form fields. "I think it took some of the stress off of the teachers as well because it just made more sense because well we have to have some kind of data to show that we are meeting and that we're talking and that we're looking at data, we're using the data to inform instruction. So I think every school has to tweak it so that it makes sense for their staff." The culture of the school staff is what makes
this possible. Staff at School 3 are very flexible and willing to adapt but this is not the case at all schools.

Resources

At School 3 they use a variety of resources from programs such as IStation, IREADY and ALEKS. They use fidgets in the classroom and exercise equipment in the hallways to help the students refocus their energy. They have created partnerships with outside agencies and non-profits to help their students and families such as the partnering with the local children's hospital regarding behavioral health. There are also partnerships with local agencies to provide counseling to students and referral systems to get them the support they need at school.

Professional Development

At the start of the OIP process the School 3 Staff participated in a lot of professional development provided by ODE. They watched videos together on the Ohio Leadership Advisory Council (OLAC) website where they "have videos that go along with the OIP process as far as like the different stages and they actually have videos of TBTs so we did a lot of that." At School 3 through TBTs and BLTs they were able to identify several areas in which additional professional development was needed. They mentioned professional development around understanding data, discipline, childhood development and trauma.

The teachers realized through looking at collected data in the OIP process that additional professional development around how to correctly understand and interpret data was necessary. "So for example, I just left the 5th grade TBT when I came down to talk with you. They just did their middle of the year assessment and we are looking at their scores...they were like 'We need some more help with how to break down these reports. Why did our tier 3 kids go down? Why did these kids go up?' So this is what the teachers are telling me. We need some more PD on just how to analyze this data now that we have it. 'I don't understand this report, I don't understand this report.' I'm pretty well versed on data and how to look at it and explain it but like every principal is not. We all have our strengths. We all have our weaknesses. So that was something we put down. We need to have [ODE] come back and give us some PD."

The principal felt that the necessity for increased professional development around understanding data was even more important given that it is the middle of the year. They would like to understand where their kids are now so they can help them improve before the end of the school year. "Especially now that we are in the middle of the year so teachers are going to have that data from the beginning of the year to the middle of the year. What does this mean and what should our trajectory be until the end of the year so that you can get those kids that growth pull. And sometimes, it's overwhelming because you have so much data. So that's why we usually pull and look at a lot of it and say hey, 'Pull what's going to be best for you and your team so that you understand it.' Because everybody is different. Some could like colors, some could like bars, and some could like lines. It's all the same information you just have to figure out what's going to work best for you."

To work on reducing the discipline related events of their students the staff have participated in trauma informed professional development. "That was definitely going to take some hard conversations, that was going to have to have some theoretical information to help you understand children in poverty, what happens to the brain when children are exposed to trauma, what does that look like in a school, when they come into a school and they are yelling or their anxiety is up you can't take that personally as a teacher. You gotta understand what they're bringing in could

have nothing to do with you. But if you don't have the understanding of what they are dealing with out there you can't effectively manage your classroom and have empathy." This PD has helped teachers with classroom management and learning to provide effective tools for reducing the need for disciplinary action.

They also went through extensive professional development in which they learned about alternative activities and tools that could help redirect student focus on the classroom lesson when feeling fidgety. One such tool was the fidget box. Teachers were able to try out the various tools in their classrooms to determine if it would work for them. "You know it might drive me nuts in my classroom for kids to be in wiggle seats. That might not be something I want in my room. Or maybe I only want one or two of them and another teacher might want like 10. Some fidgets make noise that annoys some teachers so we let them choose what they're gonna have in their classroom, what they think the kids will be best at using. If what you are doing in the plan is not transferring back to the classroom you are not going to see any change."

The principal expressed that she would rather provide additional professional development for her teachers than spend a lot of money on additional supplies and programs. She finds that investing in her staff is a much better use of funds. "So what I will do is I will send them to conferences and then they will come back and offer PD to my teachers. I don't do compliance and procedural stuff in staff meetings, every staff meeting is professional development. I do compliance and paperwork through email, announcements. I let teachers do that when they get ready to do it."

They always check to make sure the professional development is working. Each PD is evaluated by the teachers at the end "And then between myself and the coaches we do our walkthroughs and we look for evidence of whatever the PD was and we set a certain timeframe that we are looking for so the teachers know. Ok we did this PD on writing, for the next month we are going to be looking for elements of what we did in this professional development. Or we did professional development on guided math groups so we are going to be looking for evidence of differentiation and that's what we are going to be giving you guy's feedback on. So we may say, we saw evidence of differentiation in 82% of the classrooms that we visited on this day, we saw 60%, we try to do it at different times so that we can get a clear picture about what's going on. But we do it through classroom walkthroughs and evaluations."

Identifying Areas of Need, Goals and Strategies

Math, reading, attendance and discipline are the four major areas they are focusing on at School 3 School. Within each there are sub-areas like number sense in math, writing and comprehension in reading, mobility in attendance or time out of the classroom for discipline.

There is a common assessment that everyone in the district uses to measure reading and math. However, at School 3 they use an additional measure using online programs "because we know that we have been trying to prepare the kids to get ready for those online assessment switches even before we were all online." "We look at the performance of our students compared to the district. We also look at their growth. And then we've always had a couple of measures so we look to see if they align. Based on that data everything we have will also break it down into sub categories so it's not just math. It's broken down into measurement and data and number sense, problem solving." Doing it this way shows them what their lowest areas are allowing them to refocus their energy in improving those areas. "I think the first year I was here our lowest area was measurement and data and informational text. So we as a staff committed to, ok, these are the things we are going to work on. And so what happened that's where we had the most gains but then other things suffered. So this year based on the data we are doing number sense. The kids are struggling with just basic calculation, memorization of facts, problem solving strategies when it comes to numbers. So number sense is what we are working on." However with every gain it seems that they fall behind someplace else. It is a constant risk they take – to improve in one area generally means losing ground in another.

It's not just math that this happens in. Literature is another area which presents problems. "Really for reading their literature has fallen back, informational text is not the lowest anymore so it's vocabulary and literature. So the strategy we are using for that is trying to do like a lot of writing because they also figure writing covers lots of subjects we can hit social studies, we can do a lot with writing." Another problem identified by the 2nd and 3rd grade TBTs are vocabulary deficiencies. One intervention is to provide spiral bound index cards that the kids can write their vocabulary words on and take with them wherever they go for a quick and easy practice.

Attendance and discipline is also a major problem at School 3. While they have made great progress there is still much to be done. "So with attendance we basically are just looking at your overall attendance rate for the school and strategies that we are implementing are like incentives, like we are doing incentives for classrooms, we are doing incentives for individual students. We are actually even doing incentives for teachers for their homeroom, you know if they get their kids there on time, just gift cards. That's stuff that like me, my social worker, coach, we just each take a month and we say 'I'll get the gift cards for our teachers this month.' I mean we are doing that out of our pocket. Because we really can't reward them you know." The administrators want to see their staff and students succeed so they provide what they can to incentivize positive behavior.

In terms of discipline they are really trying to keep students in the classroom and provide teachers with alternative methods to dealing with students who act out. "We are looking at time-outs, they can either be less than an hour or more than an hour, so we are looking at reducing the amount of time that the kids are out of the classroom by giving teachers strategies where the kids can do self-regulation in the classroom." One strategy is to provide tools to the teacher which will allow her to discipline the student while keeping them in the classroom so they can continue to listen to the lesson. "They might have like little break stations; we have like wobble seats, like little pillows the kids can get and kind of wiggle in their seat. They have fidgets they can get to play with in their hands, stress balls, things that they have access to in the classroom where they don't necessarily have to go out of the classroom and miss instruction. It's been successful for us to give the teachers some of the things they need in the classroom."

The principal finds that thinking outside of the box and finding uncommon solutions are possibly the best resource for success. There is exercise equipment in the hallways such as a stationary bike and elliptical if students need to take a quick break to regroup. "Where you will see a lot of progress is where you do have consistency and outside of the box thinking and outside of the box strategies. Some of our strategies here, well we let the kids leave the room by themselves to go do like a regulation station. We have rocking chairs in the hallways; we have exercise bikes, little elliptical machines. This is their brain break. So if that doesn't work in the classroom they can go outside. [Others] are like 'Oh you can't trust the kids; they are going to get in a fight.' I get a lot of that but if you teach them what the expectation is and they know that what you are providing is to help them be successful they are going to protect that. I even have pushback like 'Well can you have equipment, are you allowed to have exercise bikes in the schools?' I'm like 'We would do it for gym!' It's like some of the stuff that hasn't been done; obviously some of the stuff that has been done isn't working so why would we keep doing it?" Another strategy to successfully accomplishing the school's OIP goals is to involve the staff at every level and provide them with the resources to make informed decisions. For example, "Let's say I'm with the BLT and we are discussing all of these things and they are understanding why and all of the research behind it. Then when it goes to a staff meeting where you might have your whole staff there and questions come up they can answer or they can provide the reasoning, you know, I think it gives more weight when you are looking at creating change if it comes from the teachers then it necessarily coming from me. I think a lot of times if they understand the process, like I know one thing was when we would do like purchasing, they wanted to get some supplies and they'd be like 'It's taking a really long time, is [the principal] not doing it? Is the secretary not putting it in?' But I'm like you know 'Well once we submit something it has to go to this person for approval and this person for approval and then it kicks us back a purchase order.' So I think, then they are like 'Ok we really need to get this in early, if we want it by this timeline we are going to have to make sure it goes in by this date.' I think those are the ends that the teachers don't necessarily see and understand and I don't really want them focused on that but I do share with them the process so they have an understanding."

Sometimes it feels like they are moving forward in one area only to lose momentum in other areas. It's hard to just say that one area needs more attention than another when students are struggling all the way around. "But then it's like you spend your focus on these areas and you do see gains there but then you don't see gains in the others and so the problem with working with a school like School 3 where your low in a lot of areas you just basically do the best you can because you can't just say we are only low in this area we just have to pick which one we think is going to give us more bang for the buck."

Barriers to Improvement

Part of the OIP process is identifying barriers to improvement and how the school intends to address them. Sometimes it is not possible to completely eliminate a barrier but it is possible to reduce it. Several barriers to improvement were mentioned in conversation with the school principal.

- 1) **Student mobility.** The student mobility rate is decreasing in large part to parent education programs provided by the school on homelessness and school choice rights. "When I first got here we were at 30% mobility rate and we are down to like a 16% now. And a lot of that has been reduced. We talk about how we can reduce that. What we were finding is when parents were moving because like I said we have a lot of students in shelters or in and out of shelters. They were moving and they thought they had to go to wherever, they had to go change their address and they thought they had to go to that new school but in actuality, if they are homeless we can get them a bus from wherever and they don't have to change schools. So we started, in those parents meetings giving them what the rights are and the laws are regarding homeless people and even if you are living with your sister you're considered homeless and we have a Project Connect office and this is the number that you call or you can call us and we will get you in contact with Project Connect. You don't have to change your kid's school and actually it would be better if you don't change your kid's school because they are already having to change homes so why not keep this constant? But before parents just didn't know they just figured 'If I move I have to go to a new school'. So by parent education we have been able to help reduce that mobility grade."
- 2) *Attendance.* Attendance is also impacted by mobility and an issue that they are trying hard to address at School 3. Last year attendance was 91% but the district wants 93%.

They are close but transportation is a major barrier for students especially when there are a significant number of students dealing with homelessness. "We have a lot of transportation issues. Those are things out of our control. We have a lot of um, their home living...they might end up at a shelter just like that and then it takes us like a week or so to even touch base with the family and then we have to get transportation set up. Those are things we take major hits on." Student mobility is also "tied to the learning gap thing because I'm just thinking when they move they miss out on instruction."

- 3) *Teacher qualifications or skill.* Teachers are often not prepared to accommodate the level of academics students are able to achieve or the socioemotional issues they bring to school with them.
- 4) *Teacher retention.* There is a lot of teacher turn over which is costly to the school because "you have invested all this time in PD and planning and then you have to start from scratch."
- 5) *Lack of adequate support staff.* There are not enough counselors, social workers and nurses to serve the students at School 3 and none of these positions are filled full-time. This means that on any given day professionals that can provide socioemotional or health services to students are not available.

Other barriers to improvement come from the state or district level. Teachers and administrative staff are not always responsive to continual changes in improvement processes. Administrators must be receptive to change from the state and district to better enable a more positive attitude from their staff. When these changes are not communicated effectively from the top down implementation may be a challenge. "Challenges are the implementation and communication at the beginning of the process. This is critical because if you are going to use this process and you just kind of blow it off and you say oh the state is making us do it then that is what you are going to get out of your teachers?"

While communication from the state is critical success is also determined on the ground level. "I think it's on your part as a district and the school as to how you communicate. I think the state has pretty much identified what it is." However, better consistency in the professionals who the state hires to conduct the professional development would definitely help to improve the process. "I do think the state maybe needs to have people who are, the people who are providing the professional development to the districts and to the schools need to be very well versed in the process. I found that it's hit or miss with the person that you get as a support person from the state. And I've had a different person every year because their turnover is crazy. Some of them are more versed in the process than others. You've got all different kinds of backgrounds, some people were principals, some people were teachers, and some were social workers. Some people were never in education they are just coming in basically to assess. I think if you want it to be successful you have to have someone in there who understands the process or at least can communicate it so they can teach it to the people."

Another issue is time and a lack of understanding on the state's part regarding what actually happens during the course of a day in some schools. There are critical events that occur throughout the course of a typical school day that just cannot be identified through the OIP process. "Time is definitely a barrier. Especially when you work at a high traffic school like here. There are other schools where I know there's rarely any instances of crisis, they can sit in a meeting probably for an hour and be uninterrupted. But then there are other schools that like I said, it's like triage all day. Teachers are spent at the end of the day or they can't really take the time to focus on this OIP because you know 'Johnny's mom got shot yesterday, they witnessed the murder, we've got the kid that came to school today who is tearing up'...I mean those things take precedent and those are

things that I don't think you can capture in the OIP process. Just understanding that every school has different needs, every school has a different level of commitment as far as time and every school has different priorities. All of those factors need to be taken into account."

Contributors to Improvement

After the start of the OIP process School 3 was awarded the School Improvement Grant (SIG). The additional resources provided through SIG have really enabled a more positive application of strategies to get things done in terms of the OIP process. "Definitely think that the SIG grant has made a huge impact on what we have been able to accomplish here. Funding - I do have Title funds, I have school improvement grant funds, we have our general funds that we pull from for mostly everything that we do."

Having additional resources from the district such as OIP coaches and other professionals that are not based in the school are helpful in providing an outside perspective and bringing useful tools that other schools are using. "As far as implementation I would say that it is helpful to have a resource in the district that can help us when we need help or to have just an outside person meaning outside from your school come in and observe your BLT, your TBT to give you feedback on how you can tweak it. Because they do have the bigger picture because we are not sitting in other schools meetings and we are not looking at other schools minutes. So I think having that person that has that more global view that can say "ok this is where you guys can improve, this is where you guys are doing really well" So I think that feedback also helps with the tweaking."

Consistency in improvement processes is the key to improvement. Teachers and administrators are more responsive to changes in policy and programs when there are fewer of them and they have the ability to stick with one framework longer. "The longer you can have a system or framework in place the more efficient it gets. The problem that we run into is, even with the state, with ODE and even with the district, it's like they don't really stay with something long enough. You know so we were with PLC's for 3 to 5 years now we get to the OIP, now we've almost been with OIP for 3 to 5 years and people are starting to get the nuts and bolts and I'm like 'Ok well something else is probably about to come.' So even though, I mean, educators, they just flip when stuff is called something different because they think they have to learn something different." When the state and/or district sticks with the same processes this allows for the collection of data which can be compared overtime. However, when the processes keep changing data cannot be compared even to what might have happened 5 years ago. "When you have the same framework you can become comfortable with it, you can understand the process, you can now have comparable data. I can now go back 3 years and I know we've always been using the OIP so we've been looking at reading, we've been looking at math, we've been looking at attendance, and we've been looking at discipline. So it's more focused. I can look at what was our goal 3 years ago for discipline compared to now? So you have this common measure. So if we were to try to compare what we were doing with OIP to PLC it would be totally different because we didn't necessarily have the framework, the same way that we do measurable goals, it was different. It's like comparing apples to oranges."

With student mobility being such a big issue the school is trying hard to communicate with parents every chance they get. "We do it in newsletters, like I said every time [parents] are here we make an announcement about 'Hey if you have moved please give us your updated address, understand you don't have to go to a new school if you have moved, come to our office and we will try to get you a bus" We are just constantly and sometimes, I mean now the word is just out, you know like they don't have to change schools, they call, they get the lease, we get them on the phone with Project Connect. And other parents tell other parents. It's just kind of like the culture that we have set up.

We put posters up in the schools. I told you we have a lot of parents that come so we put posters up so they would see it. And just every newsletter, every time they were here, even if they were here for like award assemblies or a Christmas concert or an arts show. In my communication with them as principal, I welcome them and give them updates about the school. I would pick like the top three things they need to know at each event." They have found that this increased communication is really helping to make some changes for the better at School 3.

Measuring Progress

The OIP Implementation Criteria and Rubric specify eight areas of progress and associated criteria. Progress at School 3 falls in the *Developing* level on 3 criteria, in the *Accomplished* level on 14 criteria and unknown for 6 criteria.

Progress on Section A: Effective Teams four criteria and Section G: Team Membership criteria were at the *Accomplished* level. Teams have both identified strategies for improvement and are still developing strategies for improvement. They have created a reporting system which allows for effective and collaborative conversation while also meeting the demands of the district and state.

Progress on Section B: District/Building Leadership Teams were at the *Accomplished* level. The School 3 BLT appears to have a focused plan which uses available data however more professional development is needed to ensure proper understanding and use of this data to successfully identify goals, strategies, and action steps.

Progress in Section C: Teacher-based Teams was at the *Accomplished* level. There was variation amongst the organization of the different teacher's teams. Some teams were more accomplished while others were still developing through the identification of needs and strategies. They focused on the need for increased professional development and worked to identify the appropriate interventions to accommodate student needs.

Progress in Section D: Formative Assessment was at the *Developing* level. Teachers identified their own process to complete formative and summative assessments. There was evidence of vertical and horizontal articulation.

Progress in Section E: Instruction was at the *Developing* level. Teachers are employing differentiated instruction through the use of tools that allow students with disciplinary problems to stay in the classroom.

Progress on Section F: Could not be rated. It is unknown if special education/early childhood education staff are included on the teacher based teams.

Progress on Section G: Could not be rated. Although teachers have many opportunities to participate in professional development those that were discussed were not related to standards.

Progress in Section H was at the *Accomplished* level. The TBTs and BLTs were using the Five-Step Process but not necessarily as prescribed. So that the process could best benefit the staff at School 3 adjustments were made which facilitated their own learning needs. In doing this they are able to examine data and identify instructional strategies while also meeting the district/state requirements.

Summary

OIP implementation has had positive effects on school culture, increased parental participation, access to resources and increased professional development for teachers and staff. After 5 principals in 6 years the current principal has altered the expectation that the principal won't stay by remaining for the last 6 years. "I would guess that if they are looking to see like who has more progress and who has been more successful you're going to see that teacher retention is in place, the mobility grade is stable and reducing, you're going to see that they are spending a lot of time on professional development to try to overcome those barriers. Instead of leaving the barriers as an excuse as to why kids are not making gains." School 3 has a long way to go to get out of Academic Priority Status however every day they are making great gains. With every year there are new challenges and new goals. With the support of the district and the state the principal feels it is possible to overcome these barriers.

OIP Snapshot: School 4, District 3

Introduction

School 4 in District 3 was selected by the Ohio Department of Education as a site for this study of progress on the implementation of the Ohio Improvement Process (OIP). District 3 has 17 "priority" and 36 "focus" schools that must implement OIP. The district began the implementation of OIP three years ago.

Data was collected during a one-hour on-site interview with the principal of School 4. The school principal reported on the current progress made at School 4 in implementing OIP. With participant permission, the interview was audio recorded. It was then transcribed and thematically coded using NVivo, a qualitative data analysis software. Five themes were fixed by the research questions: structural changes, school culture, leadership, resources and professional development. Additional themes also emerged during content analysis: parental involvement; data use; assessment and monitoring; identifying areas of need, goals and strategies; barriers to improvement; and contributors to improvement and added funds. Findings are reported by thematic area. Also provided are ratings for the eight sections and associated criteria of the OIP Implementation Criteria and Rubric. School 4 was at the 'developing' level on one criteria, 'accomplished' level on eleven criteria,' exemplary' on 7 and six were unknown. The school report card for School 4 were all Fs except for the C they received for Progress in 2015-2016.

Thematic Findings

Structural Changes

The school principal reported that she is currently in her 4th year as principal at School 4. Prior to coming to School 4 she served as principal of another District 3 elementary, also a priority school, for 7 years. The principal refers to her move as the "[District 3] principal shuffle."

When arriving at School 4 OIP had just begun and most were still unclear as to what it was. While at the other District 3 elementary they were still using the Professional Learning Communities (PLC) process. She mentioned that this included "huge notebooks for compliance" and "big diagnostic reviews" for the state. With the PLC process she felt frustrated because neither teachers nor principals were given adequate professional development to understand the process. The staff at the other District 3 elementary was also much different than the "very good, very reflective" staff she has now that "wants to learn" and grow to obtain the correct information.

School Culture

School 4 is located on the East Side of District 3. The student population hovers between 370 and 385 but literally changes daily due to the high mobility rate of the students that attend. The school serves as a YWCA shelter school and therefore serves a high number of homeless youth. In any given week there might be both 5 to 10 students that leave the school and another 5 to 10 students that start at the school. It is not uncommon for students to only attend for a few weeks before transferring to another school.

Each year the school does a parent and student survey to obtain information about how both groups feel things are going at School 4. Questions include things like: if they feel welcome in the school, if the teacher is easy to get a hold of, and if students receive help when they need it. They also asked students: if they felt their teachers liked them, if they liked coming to school, if they behaved in the classroom and outside of the classroom. They asked questions about communication

and involvement with parents and student progress. Survey findings showed that answers to these questions were very positive overall. However, "the biggest, and it was glaring, was that there was a bullying issue. However, because we had the actual discipline data in front of us, the parent perception and the student data didn't match." Therefore, parents thought there was a bullying issue at School 4 but the student discipline data did not back this up, creating a disconnect between what parents thought was happening and what was actually happening. To resolve this problem, teachers started making personal phone calls each time there was an incident to the parents of the victim. "So if a child comes to a teacher and says 'so and so hit me' the parent of the victim gets a phone call to the let the parent know 'We are aware and we took care of it.'" This allows parents to know that the other student is being disciplined for their actions and that their student is now safe. It also opens the line of communication between the school and the parent so that if the child tells the parent something more than what they told the teacher the parent can report back to the school. Taking this action has really decreased the perception that there is a bullying issue at School 4 and parents are feeling much more comfortable about their children's safety.

The student population at School 4 is 20% Hispanic (There is a trailer park behind the school where many of the schools Hispanic population lives.) "Those parents come to everything. They come to every parent night." They are also the parents that "do all the cutting, all the organizing, all the sorting, and all the bagging" for the half cost fruit and veggie program held twice a week.

Chaperoning field trips is very popular among parents as well. Frequently, parents are racing to get their request in first. "We let them ride the bus because a lot of them don't have cars so this might be the only time they get to experience a field trip to COSI, or the zoo, or a field trip with their child. They fight to be the first to get in so that their admission is paid on those field trips. I know parents want to do things they just don't always have the resources to get there so we try to give that stuff to them as much as possible."

It is also impressive that parental involvement among moms, dads and step-parents is high. "More often than not, even if they are not in the same household, I have mom and dad come, or mom and her husband and dad and his wife or his girlfriend. So I have 4 and 5 people coming to those meetings so totally supported. The kids always get a lecture during those meetings 'do you know how lucky you are to have not just one parent but two parents and their spouses. You have two phenomenal families supporting you and it is absolutely amazing.' They can't always come to all of the parent events we have due to jobs and finances and those kinds of things. But I feel like a lot of our parents really are supportive to our kids." While another perception due to the high poverty rate at the school might be that parents are not working it's really not true. "We have a lot of double parent families that are just working their tails off to make ends meet. I don't have a lot of parents who aren't working."

There are of course always parents who are not involved and may not be working. These are the parents who aren't answering the phone when the school calls. However, the principal reminds us that we have no idea what these folks might be dealing with. There are some parents "that are just so overwhelmed with life they can't deal with the prevention of a crisis because they are in the middle of so many crises at this moment especially coming from a shelter. The last thing they want to come to is an event to help them teach their child to be a better reader when they are at the shelter, they don't have a house, they don't have food, and they can't do Christmas for their kids." There is an understanding at the school that some battles can't be won and that they just must do their best to offer the support that they can to their students and families.

Parental Involvement. The Literacy Coach hosts special events for parents to encourage parental involvement in academics. She hosts a monthly "Coffee and Conversation" once a month in the library from 8:30 to 9:00 am for parents who want to drop in after dropping off their kids to school. There is usually a very brief agenda to generate conversation around the things currently happening in the reading and math programs. Usually about 5 to 8 families attend; about 3 or 4 of them are generally the same each time. "The parents like it because it's a small group and they really get questions answered if they have questions about academics." She also hosts one in the spring that is specifically about the Third Grade Reading Guarantee to inform parents of that process and the requirements of what students must be able to do. "Coffee and Conversation" is optional but eventually once the program (see program description in "Identifying Areas of Need, Goals and Strategies" section) is rolled out parents will get attendance points which will count towards tokens to use in the school store.

Other parental involvement activities include a Literacy Leadership Committee and 4 after-school parent involvement nights throughout the year. "This quarter we had a Polar Express reading night. The kids came in, and we modeled what to do during our read aloud with asking questions and comprehension skills and of course we had the fun things like hot chocolate and cookies and activity stations that they could do afterwards to promote comprehension. And we had 4 new families come to the Polar Express night and it was freezing. It was one of those days that we all thought school should have been cancelled because it was so cold due to the wind chill. We had 40 families come and some of them with kids in strollers. It was phenomenal."

There is also "Donuts for Dads," "Muffins for Moms," and a grandparents breakfast. Each of these are once a year and are used to build relationships between the schools and the families. It is used as a time for the kids to share with their families a current activity or something they recently learned how to do in school. "The Reading Coach will have some kind of activity that the kids can do with their parents so the kids can teach the parents. So she is sneaking in that learning activity by having the kids talk about what they are learning in school which is what we hope they would do every night that they often don't get to do. We sneak that kind of stuff in."

Leadership

State Leadership. It seems that the roll out of OIP was confusing for a lot of principals and "not in the best interest of staff and student buy-in." It was perceived as compliance instead of professional development. At School 4, the principal indicated that principals were not provided with the high quality professional development needed to lead and inform their staff. "We didn't know that the true purpose of the BLT was to support the TBTs. We didn't know the true purpose of the DLT was to support the BLT. That understanding didn't take place until District 3 selected a few principals to take part in the OLI⁴ (Ohio Leadership for Inclusion, Implementation, & Instructional Improvement) grant program through the University of Dayton."

Successful implementation has been stalled because folks viewed OIP as an issue of compliance, "you have to do this or you are in corrective action." If it had been rolled out as professional development which was supported by research stating that "this will make your instruction better which in turn will improve student performance. That would have changed the entire climate of ...priority status. We already felt...we knew our scores were low. We wanted to get better but the compliance piece is what made it feel worse." Part of the problem was how OIP was communicated to the already stigmatized priority schools. "If the principal was reaching out to the staff in the same way that he or she was spoken to about the efforts of OIP or the requirements for the 5-step process it [would have been] seen by the teachers as a negative as well." They frequently feel as though they are being punished for the student population that they serve. "This is one more thing that priority schools have to do because we have the clientele that we have. I know for a fact you could take this staff because of the PD they have had and put in them in any school in the district and they will be successful. I can't say the same for every school in this district or the suburbs. I think if you put some of them in this building they would flounder because they don't know how to deal with the socio-economic and mental health issues that we are dealing with every day. It's just a part of every child we educate it's just who they are. It's not that we are getting a better kid they are giving the best that they have. I don't know if people understand that not all teachers could do that or maybe they are just not communicating it, if that makes sense. I think more understanding of the systemic punishment [that occurs is needed]; 'We know you are good teachers, this is just something you could do better because we know you want to do better and this will help'. I think pitch is a huge piece to buy in and it wasn't pitched well."

District Leadership. The principal of School 4 serves on the district leadership team. She indicated that they are "pushing that committee to be bringing copies of BLT meeting minutes to the DLT so the work of the DLT is supporting the work of the BLTs" across the district. They want the DLT to do more than simply receive data from the BLT's.

Building Leadership. "The BLTs are actually spent looking at TBT minutes using the rubrics, assessing where the TBTs are, where we need professional growth to happen, in which area of the rubric the growth needs to happen and figuring out how to make sure staff get the PD that they need." BLT members visit other grade level TBTs to monitor the real work happening in the classroom. They go into "classrooms during instruction to monitor whether or not the strategies are being implemented with fidelity. The same amount of fidelity in each of those 2nd, 3rd grade classrooms whatever their grade level is." There of course is the recognition that teaching styles vary for teacher to teacher so that is always taken into account. However, this process ensures that implementation is still happening with fidelity. "Just because teacher styles are different just to make sure one teacher isn't getting better results because they are implementing it with more fidelity. And not for the lack of trying. They think they are implementing with full fidelity but a piece is missing. So we are using another set of eyes besides me because sometimes coming from the evaluator is not effective. So by using a colleague and saying 'Here is how I'm doing it why don't you come watch? If this is where it is falling apart why don't you come watch me teach?" This has produced a strong system of checks and balances at School 4 and allows staff to hold each other accountable for the implementation of their teaching.

Teams. There are TBTs for each grade level Kindergarten through 2nd grade. The High Incidence Special Education Teacher services on the 2nd grade TBT because 10 of the 14 special needs students are in the 2nd grade. She changes teams each year depending on where her students are. Then there is a TBT for 3rd through 5th grade. The ESL teacher is part of this group. The Reading Coach also participates in all TBTs. She has been trained as an OIP facilitator so she monitors the meetings ensuring that jobs on the TBTs are assigned correctly. "She is like a process checker in the TBT meetings in making sure that things are implemented with fidelity. So she is a really good set of eyes because she gets all aspects of the OIP and those literacy collaboration components which are totally aligned to the OTES rubric, the OIP requirements, the OIP rubric, and the self-assessment the TBTs do." Because she participates so heavily in the TBTs it makes it that much easier for her to align needs with the PD she provides.

In the first year TBT and BLTs were used it was unorganized, teachers did not understand the process and they thought it was just more compliance. TBT's were held before or after school but

the schedule was confusing. BLTs met after school. These were hard demands to meet because "in a priority school there was also after school tutoring, other responsibilities, parents, IEPs. You know all those things that happen that interfere with TBT time." In the 3rd year they created a new plan for TBTs and BLTs. Every two weeks they got substitute teachers for 1 hour and a half. Both groups met bi-weekly for 90 minutes of uninterrupted time instead of 45 minutes of questionable time each week. "It was during the school day, they had substitutes, they could have really good in depth conversations. Its' really hard to do that in 45 minutes. Really really hard. So they could have really good in depth conversations, finish the conversations and make future plans in one meeting and not have that problem of getting started and ending every week if they met every week."

Using substitutes during this TBT time proved to be very effective for School 4. Because of this consistent schedule they were able to attract the same substitutes over and over. Most were in school to get their teacher licensure so they could use this time to study because the TBT time overlapped with unified arts time as a way to minimize the amount of time students weren't taught by a certified teacher. This allowed time for productive TBTs and job embedded PD through the TBTs.

However ODE did not approve of this bi-weekly schedule and have since required TBTs to meet weekly for 45 minutes "which stinks because they were meeting for 3 hours a month." The TBTs are back to meeting before or after school for 45 minutes each week. They don't' get subs for unified arts time so it is hard to meet these needs during this time. Additionally, the subs no longer know what the schedule will be so it isn't as enticing to come. "Now, and it depends on the staff, some teachers haven't used any PD subs or they are able to work it out through the unified arts. Other teachers just based on their schedule aren't able to get the PD in during the unified arts. For example, if it's a 2nd grade teacher they all teach reading at the same time so we don't want a sub teaching their reading class so they can go watch somebody else. But for the 4th and 5th grade because they all teach at different times the 4th and 5th grade TBTs are 3 through 5 math and 3 through 5 reading so they don't work with grade level teams. They do departmentalized teams so it's easier for them to go and watch each other during a unified arts because they are not teaching the same things at the exact same time. So primary teachers probably use more subs than do intermediate teachers for that reason."

Resources

School 4 is privy to a number of resources that other schools might not have. First they participate in the OLI⁴ grant (Ohio Leadership for Inclusion, Implementation, & Instructional Improvement) which provides professional development to school principals around leadership. Second, they are in their 4th year as a Literacy Collaboration School which provides access to faculty at Ohio State and funds for a literacy coach to support the whole school. The literacy coach is required to do preconferences, post-conferences and classroom visits to give School 4 the Literacy Collaboration School designation. The choice to be a Literacy Collaboration School is outside of the OIP process but definitely impacts the process. The staff had a choice between three reading programs but was already invested in the Literacy Collaboration model so it was an easy choice.

Because School 4 is a Literacy Collaboration school it is designated as a research school. Normally, the Reading Coach, who is fully trained in Reading Recovery, would also be running that program. While an effective program, for it to work students must participate for 18 weeks. Because of the high mobility rate in which students leave School 4 after only 3 or 4 weeks this is not possible and they have been granted an exception from OSU. The more important goal here is to empower the

teachers "so they can do their best for the kids for the 14, 15, 16 days they have them in their classroom."

Third, the district recently agreed to pay for one of School 4's LLI (Leveled Literacy Interventionist) teachers so in lieu of a new teacher the BLT met and decided to reallocate those resources to the purchase of 4 new chrome book carts. They found this to be a large need because without the technology students are only learning to do things using paper and pencil. However, this becomes problematic when all assessments are now being given on a computer. They have found that "our students are taking assessments now that they are all online they don't know how to take information from their brain directly to a computer screen." If student performance is to increase they must become familiar with the tools used for testing.

Fourth, meeting reading assessments has been a challenge. "They do the pre-tests where someone is a zero and someone else is a 50%" – these two students will not have the same goals and therefore there needs to be more differentiating of the assessments. One of the TBTs found a reading program (name unknown) that asks the same question at 3 reading levels. The program provides a passage at 3 reading levels for the same grade so they can ask the same types of questions. This allows "every child [to] have a different reading level if they need it and they are still getting the comprehension skills they need as part of the grade level standard. This is their way of scaffolding the instruction."

Professional Development

The principal at School 4 attributes much of her success to her participation in the OLI⁴ professional development program. She says, "The Ohio Leadership Institute process has been phenomenal. We would not be where we are now if I had not been selected for that program." The OLI⁴ professional development was the "critical piece" because ODE did not provide training at the district level to inform priority schools as to what OIP would/should look like. "I had never heard that the role of the BLT was to support the TBTs. From the compliance document that we received from ODE we thought that the role of the BLT was to look at school level data, make changes, write the OIP and make sure we were at compliance with that. We looked at this from attendance; you know those kinds of things, in order to put interventions or tier 3, or tier 1, 2 and 3 interventions in place for that. But we were never going to support TBTs before this year."

The program is currently in its 3rd cohort (she was in cohort 2) and hopes that the grant will continue. She believes that every single principal should attend this training. She describes it as "3 intense centralized trainings" which are each 2 full days (7 am to 8 pm). There are also monthly meetings in which "We get together with other principals from other districts within our radius with a facilitator that works with us on specific background and reflection questions about our BLT, about effective teaching, how do we use most effective teachers to help bring up those that are less effective."

Part of this process includes TBT members visiting each other's classrooms and BLT members going to TBT classrooms. There is a "kindergarten teacher going to a second grade classroom to support their work. She is going to their TBT meetings to make sure what is happening in the meetings is happening in the classrooms. And with fidelity. The same in all three in those kindergarten classrooms has all come about because of the OLI⁴ process." They have the same trainer for all centralized trainings. He conducts webinars, modules on the OLAC website and hosts discussions with other principals in District 3 and other districts.

The Reading Coach offers job embedded professional development weekly at three different times – in the morning of one day, the afternoon of another and then on one weekend day in that same week. This allows teachers the opportunity to schedule PD around their personal commitments. They also get paid extended hours to participate (because they have priority school funds). Entering the year the Reading Coach had a preset schedule of workshops to be offered throughout the year however this has changed based on teacher needs. The Reading Coach also attends the TBT meetings where she gathers insight into what is working and what is not working and then adjusts her professional development workshops the Reading Coach visits each teacher monthly. This includes a pre-conference, a classroom visit and a post-conference. She also spends 6-weeks coteaching with each of the K-3 teachers, "where she is modeling the expectations of literacy collaboration with true fidelity." There seems to be unlimited job embedded professional development when it comes to reading. "If a teacher cannot teach reading with the support that is here there is no hope. Because there is a ton."

There isn't as much support for math as there is reading at School 4. Two years ago they did have a dedicated math coach but funding for that position was eliminated. Currently, there is a district math coach who models effective math strategies for teachers. She attends the TBTs when the topic is math and she will do classroom visits to check on student growth, provide support and advice to the teachers. Math PD is offered through the district because there is not much they can do in house.

They also use the Ohio Teacher Evaluation System (OTES) process as professional development at School 4. "Let's say I'm meeting with a 5th grade teacher who is struggling with writing across the curriculum or a writer's workshop and the 3rd grade teacher is phenomenal. I will schedule time, whether I go to the classroom or the coach goes to the classroom, to make time for them to go observe somebody else teaching that particular standard, that particular content, that particular strategy so they can see their teammates doing it with our population of kids, with our specific kids." They have found that visiting other schools isn't as effective because styles and students vary. Most professional development is done in-house where folks are accessible if teachers need help implementing a strategy.

It is rare to have teachers attend out-of-town conferences. However, in March the Reading Coach and one of the Kindergarten teachers, who is chair of her TBT and on the BLT, will attend a reading train-the-trainer conference. This will provide a great opportunity for the Kindergarten teacher to work with primary teachers and the Reading Coach to work with intermediate teachers on their reading teaching skills.

Data Use

A variety of data sources were considered when developing their plan. Student data included discipline, attendance and the parent/student climate surveys. To address staff needs, the TBT minutes were considered as well as student scores and the parent/student climate surveys to identify areas of needed PD. "One of the things we looked at for our discipline goals didn't come from student behavior data it actually came from the parent/student surveys because there is a perception that there is a ton of bullying happening at School 4. There is a little bit but not a ton." This allowed them to consider the gaps in protocol and identify strategies such as contacting parents of victims immediately to diffuse any rumors of bullying.

The BLT looks at attendance, discipline and climate culture data, 3 times a year, beginning, middle and end of the year to determine any next steps that need to be taken or approaches that need examined. They collected baseline data at the beginning of the year however the accuracy of this data is in question. "For attendance we struggle because we still had kids on rosters that hadn't shown up yet but we had to complete that 15 day checklist before we could get them withdrawn so there were still kids showing up as absent who we knew were attending somewhere else. So our attendance looked worse in the beginning of the year than we know it was because we had those kids who hadn't shown up yet."

Assessment and Monitoring

To determine if the PD is successful the BLT frequently looks at the TBT minutes. This also helps the coaches plan future PD. "It's very, very cyclical. It's the 5-step process. It's ongoing, its' not a beginning and an end. The end of step 5 is really the beginning of step 1. It's really that pre-work. So that's how the coaches are coming up with some of the PD is going to the TBT meetings, doing the PD....then at the next TBT meeting we are talking about the professional development to make sure they got what they needed or if there is another gap - so it is totally cyclical."

Monitoring implementation generally occurs through principal walk-throughs. She makes it to classrooms daily if not twice a day. However, there is generally one day during the week that "craziness ensues" and it is impossible to get to all of the classrooms. The Reading Coach also conducts classroom visits with pre and post conferences to discuss what is happening. "It's the walk-throughs, the TBT minutes, the conversations we have in BLT about what is working and what's not working. It's the coaching visits. It's the staff meetings that we have and the conversations that happen during the professional development. It's a little bit of everything. And that's what I'm trying to figure out what the alignment is between each of the pieces. That's why TBT and BLT members are now going into classrooms to look at fidelity because that's where we think the breakdown is. Not that they are trying to but each 2nd grade teacher is implementing whatever their strategy is with a different level of fidelity which is why their data isn't coming across as consistent as we would think it is coming across with a particular strategy. So that's where I'm trying to figure out where things are missing."

Identifying Areas of Need, Goals and Strategies

Math, reading, discipline and attendance are the four major areas they are focusing on at School 4. They have set a minimum goal of one years' worth of growth in both math and reading for each student. While they know that these kids need more than that it is frequently a challenge because of the mobility issue. The MAP assessment is given to students at the beginning, middle and end of the year. Results align with the districts goal of making more than one year's worth of growth.

Another problem with growth is that the tests used to measure growth and achievement keep changing. This makes it difficult to measure successes or failures over time. "If we had a consistent test this whole time I think we'd be out. But it keeps changing. It was OAA, then it was PARCC, then it was AIR. So if we can get something that is consistent we could actually be out of priority status. The money is nice but we are ready for the stigma to go away." However, even with the changing state assessments and the high mobility rate kids are still making one years' worth of growth and received a C for value added which actually means some kids are making more than a year of growth. "Even with the change in the state assessment and even with the mobility we have in this building, our kids still made 1 years' worth of growth in this building which is to be celebrated [given] the barriers that we have."

Discipline is being addressed by first reducing discipline referrals and increasing classroom behavior plans. Data is reviewed at the end of the 2nd semester to make changes for the end of the year. Data shows that suspensions have been reduced. There are about 20 students who are "Red Kids" that are in PBIS (Positive Behavioral Interventions and Supports). The school works with them to provide counseling, accommodations or a new school placement. Next, they are working to eliminate the rumor mill that School 4 has a bullying problem. Using the responses received from the parent/student climate survey and the discipline incident data staff have been working to contact parents "one incident at a time to put that faith back in School 4 that we are taking care of those issues." To follow up on disciplinary action, the school counselor examines the Learning Circle data to identify students with more than one risk factor. Students who are "Red" indicates they have 3 risk factors and require a RIMP (reading improvement and monitoring plan – part of the 3rd grade guarantee), a behavior plan, classroom accommodations or an outside plan.

They also look at discipline referrals plus parent involvement once those referrals have been made. They email parents to have preventative conversations about student behavior as well as use other communication tools such as "In-Class Dojo" which allows parents to track student points each day. Opposite of before, "parents aren't angry with us, they want to support, they want to know what is going on. They are bringing up past instances because teachers are getting better at calling home to let parents know what is happening. Parents have already taken things away. Parents are calling us asking for outside counseling agencies and asking for referrals. I'm not having to chase them down."

The school's attendance goal is to be above the district expectation. Attendance continues to rise about 1% every year. This currently puts them at 94% just above the district goal of 93%. "Our kids are so far behind they are the ones who cannot afford to miss anymore school because they are already behind. We are trying to incentivize parents, we are trying to inform them. At the end of every quarter we send a letter out with every student's attendance summary. The letter explains that every child should be here 93%, every child's individual attendance rate needs to be 93% or above. Which means they can't miss more than 9 days of school period." They send these letters first to break things down for parents and to give them a visual of what their child has missed up to that day. Second, it also gives the parents the opportunity to correct any marked absences that might be incorrect due to the school secretary being out that day or something that caused a recording error. "If they have already missed 6 days of school at the end of the 2nd quarter they are already behind, unless they don't miss any more days of school they are not going to make it." However, more common than missing full days of school is simply just coming to school on time. "That's probably the bigger issue, it isn't that they are missing, they are coming to school but they are coming late. And I don't mean 9:05. I mean 10:30 when I say late. It's either they missed their bus or mom is working 2nd shift or mom is sleeping in." However, even with these issues, "attendance is going up 1% every single year and I think that is just constant communication with parents, valuing academics, incentivizing kids, they know that it is a safe place, it is a consistent place, it is a good place to come, they know the expectations, its predictable. And I think all of those things make them want to come to school as opposed to not wanting to come to school."

The kids are too young to penalize for not being to school on time as at this age it is the parent's responsibility. To encourage on time and daily attendance the school is working on creating a program to incentivize the parents to meet these requirements. This program would include parents receiving points for their child's attendance, being "Pink Free" (being on time, not being signed out early, parents monitoring performance, coming to conferences) grades and other milestones as well as their own participation in parent activities at school (such as the "Coffee and Conversation"). These points will turn into tokens that can be used at a pop-up store housed at the school once per month. The store will provide taxable items that cannot be purchased on food

stamps such as shampoo/conditioner, razors, soap, and laundry detergent. The idea is to get parents more involved, encourage good student behavior and also "help the student morale. It will help them socio-emotionally. It would help the parents with finances."

They are working with a partner, Hexium, to provide goods and services. At this point it is about logistics and finalizing details so that things run as smoothly as possible when they get started next school year. The BLT has met and assigned token values to the parent involvement activities, now they have to work with the partner to obtain a list of items to "price." Parents need to work for these items by attending events and getting their kids to school on-time but they don't want them to be priced to where they are out-of-reach and it's not even worth it for them to participate.

Barriers to Improvement

Probably the biggest barrier to improvement at School 4 is student mobility and the high number of homeless students they serve. "Our challenge has been because we are the homeless school for the YWCA homeless shelter our kids don't stay with us for a whole year. Many of our kids don't even stay with us for a whole semester because they are coming to us from the shelter and then they get permanent housing and while ProjectConnect will provide transportation for them parents want their kids to go to a school that is closer so we end up losing them."

The shelter is a 21-day transition shelter so School 4 will typically see 5 or 6 new kids each week and lose just as many. In addition to the homeless students there are students that are transient for other reasons. The principal provided an example of one student who had already missed 39 days and the second quarter wasn't even over yet. For this student it is a systemic family issue in which it is not a priority for the kids to get to school. "There is a new baby at home and a 3rd grader is a lot of help." The kid actually does well when in school. "The kid is a great kid. We love the kid. He seems to like school when he is here. But he has a hard time because he is not here enough. He misses 2 to 3 days a week." They are pulling out all the resources to reach this student and his family as well as other students in similar circumstances. The school nurse, social worker and principal are all heavily involved.

"Our mobility, by the time our kids get to 5th grade, out of 50 kids in 5th grade we probably have 5 who have been here since kindergarten, maybe a couple more since first grade. Which is why it is really hard for us to measure growth and we get really frustrated at the way the state measures progress - they are not here!" Because of high student turnover it makes it very difficult to make sufficient growth with students and also measure it. Thus how the state measures growth is also a barrier to improvement for schools like School 4. "We can't make 3 years' worth of growth for a child in one year. We could do more than a year, and if we had them through several years they could get there but we can't do it in just one or two years. They are just too far behind for us to make that kind of growth in that short amount of time." It is really important to consider that the kids in the 4th and 5th grade that are being assessed are most likely not the same kids that entered School 4 in Kindergarten or 1st grade. "When we look at students that we are taking to MTSS as 4th and 5th graders they are not kids who have been in this building since kindergarten, 1st or 2nd grade. They are new kids. So it is hard to look at long term data and trends even from 3rd to 5th grade, they are not the same kids. Even if you look at cohorts they are not the same kids because they change yearly, weekly."

Another major barrier to improvement is lack of technology, or the alignment between teaching strategies that include technology and the fact that students are now expected to complete assessments using computers. In class students are taught to use pencil and paper but when it

comes time to take assessments like MAP or AIR these must be completed on a computer. "They can't type it from here to a computer. In class they are used to writing it on paper and publishing it "on the computer". What they are not able to do is those short answer and extended responses questions right from their brain onto the keyboard." To resolve this issue they are integrating use of the computer when they can. "We are trying to give the students more practice with answering even in-class assignments on the computer. In 2nd through 4th grade they are making that one of their learning centers. Instead of different types of computer programs they are just going into Word and answering questions based on their reading level, their text familiarity, and answering those 2 and 4 point questions on the computer without paper. Where they have to just go on the computer and type the answer without ... a pre-write, do the editing on the Word document just like they will have to on the MAP on the AIR test. We think that is causing some issues with our kids not being able to pre-write it first which is why we are allocating those funds to the Chromebooks."

Contributors to Improvement and Added Funds

Having a Reading Coach at School 4 has been an incredible benefit to both the staff and students. They also hired an additional part-time hourly LLI. To fulfill this job the person can either be an instructional assistant trained by the Literacy Collaboration at Ohio State or a licensed teacher. This includes 6 days of training, 3 at the beginning of the year and 3 in the middle of the year. Currently, there is one full time instructional assistant that works with the 2nd grade, and one for the 4th grade, one LI teacher in the 1st grade and one in the 3rd grade. They are still trying to hire someone for the 5th grade but it has been very hard to get people to apply for this position which does not require teacher licensure. "Every grade level K, 1, 2 and 3 has that small group no more than 3 students per group intensive intervention for those who are struggling." The goal is to "make sure that every grade level has an instructional assistant to do small group, tutoring, pull outs, interventions for small groups of students while the teacher is doing whole group or even to facilitate independent learning center work while the teacher does the small group, whatever they think is needed for that particular content area." As part of the improvement plan they want there to be an instructional assistant for at least half a day in each grade level

There are various funding structures that provide resources the school might not otherwise have that certainly contribute to the school's overall improvement. In addition to adding the Chromebooks to facilitate better transfer of knowledge, they also hope to add more math literature to the bookroom and classroom libraries to better integrate math, reading and writing. This will help teachers who don't have enough time for all the content areas. "It is using real authentic literature so we are looking at using non-fiction text in social studies, science and math to teach reading strategies for non-fiction text that way they are teaching the content and their reading skills at the same time."

SIG funds are frequently used to provide professional development for teachers. However, it is not uncommon for teachers to apply for and obtain grants which pay their registration feeds. Funds are also used to hire substitute teachers so that staff can leave for professional development opportunities. The Reading Coach gets paid triple – because she is holding the trainings 3 times in one week. "I have a really frugal staff which makes it harder to spend the money but I know that every penny is going towards something positive and not something that's more frivolous."

Measuring Progress

The OIP Implementation Criteria and Rubric specify eight areas of progress and associated criteria. Progress at School 4 falls in the *Developing* level on 1 criteria, in the *Accomplished* level on 11 criteria, *Exemplary* on 7 criteria and unknown for 4 criteria.

Progress on Section A: Effective Teams 3 of the 4 criteria met exemplary status while one criteria met the accomplished status. Teams have established processes that work for them and create the most productivity with results.

Progress on Section B: District/Building Leadership Teams were at the *Accomplished* level on 7 of 8 criteria and exemplary on one. The School 4 BLT appears to have a focused plan which uses available data. Job-embedded professional development is most commonly used and classroom observation and monitoring occurs daily.

Progress in Section C: Teacher-based Teams was at the *Accomplished* level on 2 of 5 criteria, exemplary on one and unknown on the remaining two. Teacher based teams all seemed to function well. The Reading Coach plays a huge part in this process by holding pre-conferences, classroom visits and post-conferences to discuss the implementation of strategies with fidelity and make any needed adjustments. Job-embedded training is key to their successes.

Progress in Section D: Formative Assessment was at the *Developing* level. Data is collected at least 3 times per year to assess things like attendance, discipline and student/parent perceptions. There is vertical and horizontal articulation. There was no mention of a district-wide data warehouse.

Progress in Section E: Instruction was at the *Accomplished* level. Teachers are employing differentiated instruction through the use of tools that allow students with disciplinary problems to stay in the classroom. Teachers have also identified and are using reading comprehension programs that allow students to be assessed at their level of ability instead of their grade.

Progress on Section F: Could not be rated. The level of common core preparation and implementation/model curriculum was not discussed.

Progress on Section G: Team Membership was at the Exemplary level. Special Education and ESL staff are included on the Teacher Based Teams and are fully engaged.

Progress in Section H was at the *Exemplary* level. Data collected results in specific changes in professional development opportunities to directly impact the instructional strategies of teachers.

Summary

OIP implementation has had positive effects on school culture, increased parental participation, access to resources and increased job-embedded professional development for teachers and staff. In planning for the future, they will continue to educate staff to be more personally accountable for what happens in the classroom and continue to build trusting relationships with parents and students. School 4 faces many barriers to overcoming Priority Status including the high mobility rate due to student homelessness and lack of consistency on state assessments. These scores are especially impacted by the high mobility rate at the school in which they have little control over. They continue to rise in attendance and make great strides in other areas. They feel they are ready to surpass the stigma and leave Academic Priority Status behind.

OIP Snapshot: School 5, District 3

Introduction

School 5 in District 3 was selected by the Ohio Department of Education as a site for this study of progress on the implementation of the Ohio Improvement Process (OIP). District 3 has 17 "priority" and 36 "focus" schools that must implement OIP. School 5 is a "focus" school. The district began the implementation of OIP three years ago.

Data was collected during a one-hour on-site interview with the principal of School 5. The school principal reported on the current progress made at School 5 in implementing OIP. With participant permission, the interview was audio recorded. It was then transcribed and thematically coded using NVivo, a qualitative data analysis software. Five themes were fixed by the research questions: structural changes, school culture, leadership, resources and professional development. Additional themes also emerged during content analysis: data use; assessment and monitoring; identifying areas of need, goals and strategies; barriers to improvement; and contributors to improvement. Findings are reported by thematic area. Also provided are ratings for the eight sections and associated criteria of the OIP Implementation Criteria and Rubric. School 5 was at the 'developing' level on seven criteria, 'accomplished' level on thirteen criteria,' exemplary' on one and seven were unknown. The school report card for School 5 indicated all Fs in 2015-2016.

Thematic Findings

Structural Changes

School 5 was built in 2007 to consolidate two previously existing schools from two nearby neighborhoods. The current principal at School 5 was previously the principal of one of these elementary schools. It was at this point that the principal reached out to Ohio State and became a literacy collaboration school. In partnership with three other south side elementary schools, they used SIG money to share Leveled Literacy Intervention (LLI) professional development.

School Culture

Communication is key at School 5. Staff use social media to communicate with students and parents. "It's about getting a teacher on Facebook and explaining these are the components of Literacy Collaborative, these are the things you could be doing at home with your kids. You know, and it's ... Like in our newsletter that's going out, as a break down, if you read with your child twenty minutes a night ... If your child is reading twenty minutes a night, they have a huge step up above other kids who are reading five minutes or not reading at all." The idea here is to communicate positive behaviors at home that will result in increased learning and participation at school.

They work hard to get parents involved. There are two parent consultants who develop parent/student activities and work to communicate with parents. They have activities like the Ice Cream Social and Open House, Fall Festival (draws thousands), Community Feast (a giant potluck where teachers cook and students bring in canned goods), 3GRG January (after MAP scores are returned), Mid-Winter Blues Movie Nights, Spring Arts Festival, Field Day, Donuts for Dad, Muffins for Moms and other events. "We have a tradition of having activities where you're having community on the parents' end. It does it take a lot from ... a lot of leg work and heavy lifting from the staff. Yes, but I think it's worth it because our parents trust us." There are also curriculum and math nights where they encourage attendance by providing food and raffles. The most attended academic events are those where the students are demonstrating to their parents something they

have recently learned. Events are about half social and half academic oriented. They do this because they don't want to overwhelm parents and students but instead want them to know that school is a fun, friendly, safe place with people they can trust, where they are also learning. These events are useful to the OIP process because they encourage parental involvement.

At the 3GRG January event parents can see how their child is doing with reading. "The neat thing about the MAP is that it shows a graph, and you can either have a bar graph or a line plot and it really shows the norm reference nationally, the district, and then their child. That is good data that parents can understand." The teachers are available to talk with parents about where the child is making errors and what can be done to improve.

However, they have found that it is hard to get parents in the school because transportation or various shift work is a problem. Therefore, staff is finding ways to use social media to their advantage as a means to communicate with parents. "We have teachers on Facebook giving lessons, on Facebook, you know, this is what you can do at home. How do we use social media to our advantage? These are things we're exploring this year. What can we get away with on Twitter without upsetting the legal communications and everyone else?"

Leadership

Building Leadership. The principal stated that OIP was a district initiative that they followed by attending district professional development and following the process. They met as a BLT to look at data and identify needs based on academics, behavior and attendance. "Each year we present it to the staff, refine it, and then submit it and then visit it ... Basically ... It's hard not to revisit it every month at a BLT meeting because you're looking at your grade level data and seeing how it aligns with what's in the OIP, trying to make that OIP a living document."

Teams. The principal at School 5 is extremely mindful of his staff's time. He acknowledges that there is a lot of staff turnover which sometimes means schedules must be adjusted. However, at the start of each school year they create a schedule which he is very proud of. This year a priority was to identify common planning time embedded into the school day. Teachers get 45 minutes of planning time during the school day in addition to their time before and after school. "So, that schedule has embedded times in it so they can have their Teacher Based Teams (TBT). There's one day where every TBT meets, and then there's another day where every team has uninterrupted planning time embedded in the school day. That's hard fought because I share specialists with [3 other elementary schools]. So, it's cobbling together with four other ... three other principals and their schedules. They know our priorities at School 5." Included in the TBTs are grade level teachers, special education and either the principal or the instructional coach. When the grade level teacher is in these meetings the students are in Unified Arts classes such as gym, art or library time. "It's like planetary alignment but it gets done."

Three years ago the school day was broken into blocks. There was an English/Language Arts Block in the morning or afternoon with a Response to Intervention (RTI) and then opposite that block there was a Unified Arts Specials. This allowed for two TBTs weekly, one for math and one for reading. Schedules are arranged differently now and currently TBT's meet once per week.

Resources

School 5 has a variety of resources available to them. First, they are a Reading Collaborative school. They have two additional LLI tutors that they pay for in addition to the one the district provides. "That was kind of difficult because you're trying to find a retired teacher that wants to come back and help with reading and do Level Literacy Intervention. We were fortunate." The LLI tutors assist with kindergarten, first and second grades in preparation for the Third Grade Reading Guarantee (3GRG). "I like, and the staff likes to add, human capital to the building that are experienced resources." The principal has also created a program at school in which every staff member, including custodial staff, administrative staff and teachers work with struggling students for 30 minutes a day on reading. "They focus on identifying their reading skill set and then focus on intervening so that we're not going to lose ground with them. These are people going outside of their job descriptions, contract, all of that. That's the wonderful thing."

Second, they are working with the county's children's services around Trauma Informed Practices. They also have a full-time in-house behavioral intervention specialist from the local children's hospital to help students with psycho-emotional issues and PTSD.

Third, they are working to reallocate resources for the purchase of Google Carts for every grade level starting with kindergarten. This is necessary because more assessments are computer based and students need the experience of using computers prior to using them for testing, in addition to the increasing importance of learning basic computing skills. "With the way the AIR and PARCC and things are shifting towards computerized testing and assessments, we had to look at something that was viable that would allow kids to have experience on a keyboard and also a computerized assessment. So, we had to allocate resources, buying the Google Chrome Carts and getting a Chromebook in everyone's hand so that we could ... So, that would not be a barrier to relaying their knowledge on a norm reference test."

Fourth, there are other things like sending literacy packets home over break so students don't fall behind and using Aleks, an online program for math tutoring. They also meet regularly with the area civic associations to keep the community involved. They transformed a former middle school into the new public library where they have after school programs including homework help.

Professional Development

The district provides PD days at the beginning of the year which they prioritized at School 5 after looking at their data to get started. In-house PD is offered by an instructional coach on Tuesdays and Thursdays after school. PD generally isn't offered on the weekend because it is not convenient for the staff. "It takes a commitment on the teacher … with the teacher to go to that professional development to take those classes after school, on some weekends, and donate that time. We will use money in professional development funds to pay for that, because we know it has a direct and immediate impact, along with guided reading groups in our school."

The principal of School 5 indicated that there is a constant cycle of professional development needed because there is high staff turnover. "And now, the staff transitions, it's hard to keep the training up with guided reading groups. People come in and they're like, 'I don't know anything about guided reading, I don't know how to manage kids if they're going to centers or stations while I'm pulling my guided reading group.' So, it's a constant cycle of PD, which is okay." To accomplish this they have the "Daily 5 Café" which offers professional development online at various locations throughout the country. Therefore, staff at School 5 can just log-on whenever they need additional PD (https://www.thedailycafe.com/daily-5). Part of the OIP process is to manage which teachers are doing guided reading groups and which ones are not. For those that are not doing it, it will become part of their professional development plan to become familiar and learn how to manage reading centers or stations.

Other PD includes a Reading Recovery Conference that the principal tries to send as many primary education teachers to as possible. There is also training for Aleks and a discipline conference in Atlanta that a few teachers went to last year. As part of the Trauma-Informed Practices PD the entire School 5 staff read "A Boy Who Was Raised as a Dog." "That's something that really had a transformative effect on our staff last year. This year, the newer staff members, we're getting there with them. That's why we're having some suspensions this year, which is kind of ... I'm competitive, I really didn't want any suspensions." Therefore, they are working to get the new staff up to speed to reduce needed disciplinary action.

The principal at School 5 also tries to spend as much time observing classrooms as possible so he can provide informative feedback to the teachers. "I like Literacy Collaborative, I like sitting in, I like observing the classroom, I love watching the spark go off when the teachers are introducing or reviewing a concept and the kid gets it. That's just awesome. I mean, at elementary, their whole body reacts, and so it's kinda cool." He indicates that ideally he would spend a lot of time observing but sometimes that is not possible due to other administrative demands. For example, this year School 5 lost a primary education teacher and a substitute was not available to replace her. Therefore, the principal had to step up and teach the class. After a replacement was found he was able to return to his regular role. He described his days as follows: "Every day, I greet every student that comes through the door. We have breakfast in the classrooms, so as you're eating breakfast, the bell rings at nine o'clock. I start my walk-throughs, and I start my observations after that. I do my walk-through first, and then I check back in the office to see if there are any parents, 'cause, I'd rather nip the problem in the bud. After that, I start doing observations, then, lunch, and recess, and then back to observations or a meeting."

Data Use

At School 5 they take a collaborative approach to assessing the data. First the Building Leadership Team (BLT) looks at the data then the staff. "We throw it up on the wall and we look at our MAP scores, our BAS scores, etc...Because we're literacy collaborative, we also like to integrate the BAS data." The data is stored on the teacher-shared drive so everyone has access. It is important to look at the data together because some people may see things that others don't. "I always think that if there are more eyes on the issue, the better."

Assessment and Monitoring

The principal of School 5 estimates that they are about 3 years away from closing the achievement gap. However, this might be optimistic because a lot relies on staff turnover and involvement. "We're on the south side, our demographic is not attractive to a lot of people," which makes it hard to recruit good, stable staff.

Identifying Areas of Need, Goals and Strategies

The overarching goal at School 5 is to close the achievement gap. In the past they have seen nearly 10% improvement in a year so they are trying to get back there so they can close the gap. Other goals include: discipline, behavioral issues, attendance, reading and math.

There is a disciplinary goal of reducing out-of-school suspensions by either eliminating them all together or turning them into in-school suspensions when needed. The principal indicated that they have regressed due to teacher turnover. "Last year, we were doing really great because we had gone to … We had taken two teams, to the high-poverty, high-performing schools conferences in Houston then last year it was in Virginia Beach and we sent people, and we came back and we did not have a single suspension the whole first semester. It was amazing. And this year, we have newer

staff and its tough because they are from a different culture at different schools, so that's ... they're letting things escalate when we could nip them in the bud."

Another goal is to help kids work through any trauma or PTSD they might be experiencing from home or other environments. To do this the school has a full-time behavior intervention specialist from the local children's hospital.

Prior to this past year attendance wasn't much of an issue but it is a big one now. "There are kids in my ED classrooms whose parents ... It's amazing, they are thinking they can go to a home school, you know do homeschooling, do ECOT or something and take their time. It's crushing our attendance right now. We're working with a social worker, we're working on filing truancy and neglect, unfortunately," in a lot of situations. One way to tackle this problem is by teaching teachers the signs to look for when there might be potential for a child to leave School 5 for one of these other options.

In terms of academics, they are hoping to increase both reading and math scores. "Reading opens doors for every human being. It just opens doors. And if you can read, you can then read the instructions, if you can read the instructions, you can figure out most of the other curriculum. It has ... I agree with the superintendent: reading is it. And to close the achievement gap, which I agree...our socioeconomic situation here is we have to close the achievement gap."

Barriers to Improvement

There are currently 386 students that attend School 5 with the expectation that enrollment will increase after winter break. A significant number of students are transient not necessarily because of homelessness but because of homeschooling and online schooling. Parents try one of these two things but don't contact School 5. Administrators are even going to the absent child's home to track them down and still may not get a response. This issue of transient/truant students contributes highly to the school's poor test scores. "Several years ago I did a study with our kids ... It was right before PARCC ... and ERIC came along, and by fifth grade we had had something like sixty-percent turnover from kindergarten to fifth grade. But, out of those fifth graders that stayed with us, almost all of them were proficient or above on [assessments] but no one measures that, so that's disappointing. But, we've got a good program, if they would just stay."

Another issue is the location of the school and the demographics of the population the school serves. This makes it very difficult to attract new staff and to keep them. It is even hard to get substitute teachers as no one wants to come to that area. "Not everyone's going to come here. We go days where we'll have to split up two or three classrooms if people are sick, because we do not have substitutes. It's hard to be a south side school. Our staff is wonderful. We pick up, we train, we keep education going...that continuity, consistency." On the flip side there are some staff that are overly stressed being in this environment. "I have a staff member that I don't know if she's going to come back after winter break. It's at a critical grade level. She is having so much anxiety about being here. She just job faired in at the beginning of this year. So, it's like, wow, really? The wonderful thing is, already, our other staff members are clued in to it and they are figuring out ways to help."

Contributors to Improvement

At School 5 they have won several awards making them stand out. First, they dedicated money to the special education program and it has paid off. They won an award for the program on the state test and report card. They won the Five-Star Award from the State for Pre-K and Head Start Programs complete with banners hanging in the front of the school. They also won the Platinum

Award for the Breakfast in the Classroom Program which they actually started as a means to reduce fights and increase class time.

The principal talked about a second grade teacher who is making great gains using the Literacy Collaborative. He intends to have her share her techniques at the next staff meeting.

Measuring Progress

The OIP Implementation Criteria and Rubric specify eight areas of progress and associated criteria. Progress at School 5 falls in the *Developing* level on 7 criteria, in the *Accomplished* level on 13 criteria, *Exemplary* on 1 criteria and unknown for 7 criteria.

Progress on Section A: Effective Teams 3 of the 4 criteria met *Accomplished* status while one criteria was unknown. Teams have established processes that work for them and create the most productivity with results.

Progress on Section B: District/Building Leadership Teams were at the *Accomplished* level on 6 criteria, *Developing* on 1 criteria and unknown on 1 criteria. The School 5 BLT appears to have a focused plan which uses available data. A mixture of job-embedded, online and after-school professional development is used. Classroom observation and monitoring occurs daily.

Progress in Section C: Teacher-based Teams was at the *Accomplished* level on 2 of 5 criteria, unknown on the remaining three. Teacher based teams all seemed to function well. Instructional practices are identified based on common assessment and differentiated instructional practices are used as much as possible. Post-test results are evaluated and instruction practices are altered accordingly.

Progress in Section D: Formative Assessment was at the *Developing* level. Data is collected several times per year to assess things like attendance, discipline and academic scores. There is vertical and horizontal articulation. There was no mention of a district-wide data warehouse.

Progress in Section E: Instruction was at the *Accomplished* level. Teachers are employing differentiated instruction when possible.

Progress on Section F: Could not be rated. The level of common core preparation and implementation/model curriculum was not discussed.

Progress on Section G: Team Membership was at the Exemplary level. Special Education teachers are included on the Teacher Based Teams and are fully engaged.

Progress in Section H was at the *Accomplished* level. Data collected results in specific changes in professional development opportunities to directly impact the instructional strategies of teachers.

Summary

OIP implementation has had positive effects on school culture, increased parental participation, access to resources and professional development for teachers and staff at School 5. School 5 faces many barriers to overcoming Focus School Status including attendance due to transient students, teacher turnover due to an undesirable neighborhood and behavioral issues stemming from home life. They hope to close the achievement gap within three years.

APPENDIX A: Qualitative Interview Protocol

Interview Protocol

I like to talk with you about your school's use of the Ohio Improvement Process (OIP). We want to understand what you have done and where you are now.

- How did you get started with the OIP process? (forums, communication)
- How were needs identified? Used OIP Decision Framework (DF) or Building DF?
- What types of data were collected and analyzed? (student performance, demographics, surveys, observations, focus groups, documents)
- Who participated? Teams established? (DLT, BLT, TBT) Members/roles?

How were the major improvement goals determined?

- What Timeline/timeframe was established to accomplish goals?
- How did these goals fit with the district's goals/plans?

What strategies (typically 2-4) were identified to address each goal? written? (Cy)

- How were strategies identified?
- What Professional Development provided? (Job-embedded? One-shot?)
- How about Parental involvement? Explain, training and communication.

Let's talk about implementation. What action steps were identified? (<10)

- Funding, resource reallocation, elimination of initiatives not aligned?
- How did you resource the effort? (ODE \$\$, District \$\$, Personnel, Materials?)

Who participated?

• What was the level of engagement/% participation?

How was it rolled out? Communicated?

• % of targeted faculty, staff, parents, students reached?

How did you monitor implementation? Who monitored? Tools, processes, schedule?

- How did you assess quality of PD?
- How assessed changes in practice? Fidelity? Did you identify "look fors"?
- How assessed changes in student learning? Short-cycle, long-term?

What were your indicators of impact? Progress? Success?

- How were those indicators measured? Data, tools, templates, processes
- Who was responsible for collecting data? Analyzing/interpreting data?
- How did you communicate progress to staff, parents and students?

How are efforts being sustained? Resources, participation, interest?

- Where are you in implementation now?
- % teachers implementing? More PD?
- Student changes? Collecting evidence of impact?

What is your personal evaluation of the effort? How successful was/is it?

- What major factors made/make it successful or got/get in the way?
- What would have made/could make the effort more successful?

APPENDIX B: Implementation Criteria & Rubric

SECTION A: EFFECTIV	- IEAWS			-	
CRITERION	1 (Beginning)	2 (Developing)	3 (Accomplished)	4 (Exemplary)	Evidence (examples)
A1. Educators work in collaboration.	The team is at the forming stage of team development. Roles/responsibilities are not defined.	The team is at the storming stage of team development. Roles/responsibilities are not clearly defined.	The team is at the norming stage of team development. Roles/responsibilities are defined at each meeting.	The team is at the performing and adjourning stage of team development. Roles and responsibilities are defined at each meeting and applied across the system.	Meeting agendas Meeting schedule Team meeting minutes with defined actions Self-assessment survey results or video of team process
A2. Educators work in leadership teams and have regularly scheduled meetings to support their work.	Less than 25% of recommended members* participate on the team. Meetings are rarely held or not at all. Participants are present but lack engagement.	26-50% of recommended members* participate on the team. Meetings are scheduled but held occasionally. Participants are present and engagement is active or passive based on level of interest.	51-89% of recommended members* participate on the team. Meetings are held according to the prescribed schedule. Participants are present and engaged by asking thoughtful questions and responding to comments.	90-100% of recommended members* participate on the team. Meetings are held according to a prescribed schedule. Participants are present and engaged by asking thoughtful questions and responding to comments.	Meeting schedule List of membership by position Self-assessment survey results or video of team process
A3. Teams meetings are purposeful.	Agendas are not provided during or in advance of the meeting. Teams have no clear data forms/protocols. Individuals do not come prepared.	Agendas are used but may not be provided in advance of the meeting. Agenda topics are not aligned to the plan. Teams inconsistently use team data forms/protocols. Individuals generally come prepared.	Agendas are used but may not be provided in advance of the meeting. Agenda topics are aligned to the plan. Teams consistently use team data forms/protocols. Individuals come to meetings prepared.	Agendas are used and provided in advance of the meeting. Agenda topics are aligned and focused to achieve plan results. Teams consistently use team data forms/protocols to facilitate their work. Individuals come to	Meeting agendas Meeting forms/protocols Meeting notes with monitoring evidence and impact on improving student achievement, educator behavior and/or system changes

OIP IMPLEMENTATION CRITERIA & RUBRIC

ection B: District/Bu	ilding/Community Sch	ool Leadership Teams			
CRITERION	1 (Beginning)	2 (Developing)	3 (Accomplished)	4 (Exemplary)	Evidence (examples)
B5. The DLT/BLT/CSLT identifies and prioritizes needs using reliable, valid and timely quantitative and qualitative data generated from completion of the Decision Framework (DF)/Building Decision Framework (BDF).	Based on state and district data, the DF is completed with limited quantitative and/or qualitative data beyond pre-populated DF data and priorities are selected on need. Only buildings that are in school improvement complete the BDF. Data are not organized and there is limited accessibility to all DLT/BLT/CSLT members.	Based on state and district data, the DF is completed using quantitative and qualitative data for all levels within the DF and priorities are selected on need. Buildings in school improvement and some other schools but not all buildings in the district complete a BDF. Data are somewhat organized and DLT- CSLT/BLT members have varying degrees of access.	Based on state and district data, the DF is completed using quantitative and qualitative data for all questions within the DF and priorities are selected on need. All buildings in the district complete a BDF. Data are organized and accessible to all DLT/BLT/CSLT members.	Based on state and district data, the DF is completed using valid, reliable, and timely quantitative and qualitative data for all questions within the DF and priorities are selected on need. All buildings in the district complete a BDF. Data are organized and easily accessible to all DLT/BLT/CSLT members.	Quantitative and qualitative data, that is valid, reliable and timely (e.g., Special Education Profile, State Diagnostic Team Report, special education reviews, Early Learning reviews, LEP, PACTS, summative and formative assessments) Completed DF/BDF
B6. The DLT/BLT/CSLT develops a focused plan with limited goals, strategies, and action steps.	Focused goals meet some but not all SMART requirements: Specific, Measurable, Achievable, Attainable, Relevant, Timely) Strategies are not aligned to goals. Action steps are not aligned to district goals and strategies. Action steps are written in general terms. The CCIP and IMM are not completed with SMART goals, goal targets,	Focused goals meet all SMART requirements. Strategies and action steps are vaguely aligned to goals. Action steps are somewhat aligned to district goals and strategies. Action steps are written more specifically but may or may not lead to achieving strategies/goals. The CCIP and IMM are partially complete with SMART goals, goal targets,	Few, focused goals meet all SMART requirements. Few, research-based, tightly aligned strategies based on prioritized needs Action steps are aligned to district goals and strategies. Action steps are specifically written and have the probability of achieving strategies/goals. The CCIP and IMM are	Few, focused goals meet all SMART requirement Few, research-based, tightly aligned strategies based on prioritized needs. Action steps are clearly aligned to district goals and strategies. Action steps are written specifically and targeted to achieving strategies/goals. The CCIP and IMM are fully complete with SMART goals, goal targets,	Action steps that respond to compliance items, i.e., HOT, Transition, Help Me Grow, Class Size Reduction) List of district and building SMART Goals if not in the CCIP and/or IMM Completed CCIP and IMM

[OIP Implementation Criteria & Rubric]

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CRITERION	1 (Beginning)	2 (Developing)	3 (Accomplished)	4 (Exemplary)	Evidence (examples)
	strategies, indicators and action steps. Goals, strategies and action steps meet 25% or less of the descriptors.**	strategies, indicators and action steps. Goals, strategies and action steps meet 26-50% of the descriptors.**	fully complete with SMART goals, goal targets, strategies, indicators and action steps. Goals, strategies and action steps meet 51- 89% of the descriptors.**	strategies, indicators and action steps. Goals, strategies and action steps meet 90% of more of the descriptors.**	
B7. The DLT/BLT/CSLT implements the plan and ensures instruction and the learning process for students and adults is standards- based, evidence-based, accessible and high quality.	Few adults are held accountable for implementing the plan. Few students have full access to challenging curriculum content. Professional development is inconsistent with plan priorities. Teachers have discretion professional development. 25% or less implementation with fidelity of action steps and monitoring of impact (opportunities for mid- course corrections).	Some adults are held accountable for implementing the plan. Some students have full access to challenging curriculum content. Professional development is consistent with plan priorities and the majority is job-embedded. Teachers are expected but not required to participate in professional development. 26-50% implementation with fidelity of action steps and monitoring of impact (opportunities for mid- course corrections).	Most adults are held accountable for implementing the plan. Most students have full access to challenging curriculum content. Professional development is consistent with plan priorities, the majority of which is job-embedded for all teachers. Teacher behavior in the classroom has changed as a result of professional development. 51-89% implementation with fidelity of action steps and monitoring of impact (opportunities for mid-course corrections).	All adults in the system are held accountable for implementing the plan. All students have full access to challenging curriculum content. Professional development is consistent with plan priorities, the majority of which is job-embedded for all teachers. Teacher behavior in the classroom has changed as a result of professional development. 90% or more implementation with fidelity of action steps and monitoring of impact (opportunities for mid- course corrections).	Title of person(s) responsible for implementation of the plan(s) if not specified in the IMM Professional development embedded in the CCIP Professional development agendas and materials PD participation summary Data on assurance of implementation (e.g., walk- throughs, coaching, peer observation) Master professional development schedule and/or calendar
B8. The DLT/BLT/CSLT has adult implementation	Adult implementation indicators clearly measure the effective implementation of the	Adult implementation indicators clearly measure the effective implementation of the	Adult implementation indicators clearly measure the effective implementation of the	Adult implementation indicators clearly measure the effective implementation of the	CCIP Monitoring process and tools
[OIP Implementation Criter	ia & Rubric]		[July 2	013]	4

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CRITERION 1 (B	dicators (Cause strategy. ata) that are Data on th onitored to provide randomly latistically verifiable not easily nd reproducible data monitoring at show progress observatio ward goal and teaching c irategy occasiona ccomplishment. Made son toward str indicators less of the	9. The DLT/BLT/CSLT Data on the second second sector and easily erformance dicators (Effect Data) Made son that are monitored to toward an towide statistically endicators erfifiable and strategy beso of the scomplishment.	10. The Made son toward re: LT/BLT/CSLT and closir and closir and closir and closir achievem valuates the impact of applicable he focused plan. Has not co
(eginning)	ne indicator is collected but is accessible. g to include on of classroom occurs ne progress ategy meet 25% or e descriptors.***	ne indicator is collected but is accessible. ne progress inual growth goal. meet 25% or e descriptors.***	ne progress aching goals ng the ent gap for all e subgroups. ompleted the uation Section.
2 (Developing)	strategy. Data on the indicator is regularly collected but is not easily accessible. Monitoring to include observation of classroom teaching regularly occurs. Made substantial growth toward strategy indicators. Indicators meet 26-50% of the descriptors.***	Data on the indicator is regularly collected but is not easily accessible. Made substantial growth toward annual growth goal. Indicators meet 26-50% of the descriptors.***	Made substantial progress toward reaching goals and closing the achievement gap for all applicable subgroups. Partial completion of the IMM Evaluation Section.
3 (Accomplished)	strategy. Data on the indicator is regularly collected and is easily accessible. Monitoring to include observation of classroom teaching regularly occurs and has a considered strategy for improving the quality of instruction. Met strategy indicators. Indicators meet-51-89% of the descriptors.***	Data on the indicator is regularly collected and is easily accessible. Met annual growth goal. Indicators meet-51-89% of the descriptors.***	Met goals and made substantial progress toward closing the achievement gap for all applicable subgroups. Completed the IMM Evaluation Section.
4 (Exemplary)	strategy. Data on the indicator is regularly collected and is easily accessible. Monitoring to include observation of classroom teaching regularly occurs and has a considered strategy for improving the quality of each teacher's instruction. Exceeded strategy indicators. Indicators meet 90% or more of the descriptors.***	Data on the indicator is regularly collected and is easily accessible. Exceeded annual goal target(s). Indicators meet 90% or more of the descriptors.***	Exceeded goals and closed the achievement gap for all applicable subgroups. Completed and used the results of the IMM Evaluation Section.
Evidence (examples)	Examples of data reviewed Examples of walk-throughs, coaching, peer observation	CCIP Examples of data reviewed. Examples of walk-throughs, coaching, peer observation	Evidence of goal attainment and positive trend data regarding achievement. IMM

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[OIP Implementation Criteria & Rubric]

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Evidence (examples)	ps Community names and/or organizations represented Meeting schedules, agendas, minutes	CCIP List of district/building d to pursued and/or implemented List of district/building plans if there is more than the CCIP
4 (Exemplary)	Developing partnershi in addition to DLT/BLT processes focused on district goals	Vertical articulation is occurring between the DLT and BLTs and mc resources are allocate plan implementation. The DLT/BLT has secu funds that support plar implementation. Resources are leveraged and allocated to plan implementation. There is one plan.
3 (Accomplished)	Community is fully engaged with DLT/BLT processes.	Vertical articulation is occurring between the DLT and BLTs and most resources are aligned to plan implementation. The DLT/BLT has chosen to seek funds that support plan implementation. There are a few discrete plans that are aligned.
2 (Developing)	Community is involved in goal identification process.	Vertical articulation is occurring between the DLT and BLTs and prioritizes the allocation of resources toward the plan goals. There are multiple, discrete plans that are aligned.
1 (Beginning)	Community is invited but engagement is minimal.	Vertical articulation is occurring between the DLT and BLTs as to how resources <u>have</u> been allocated and are working toward aligning resources to plan implementation. There are multiple, discrete plans that may or may not be aligned.
CRITERION	B11. The DLT/BLT/CSLT engages the community in continuous improvement.	B12. The DLT/BLT/CSLT manages resources effectively and efficiently to ensure plan implementation.

**B6 – Goal, Strategy and Action Step Descriptors SMART Goals

Specific

- The goal describes in action words what the district wants to accomplish.
- The goal is clear about what the district intends to do for all students and designated student populations. •

Measurable

The goal identifies the annual target and multi-year indicator of what the district will see annually and when it reaches the goal.

The goal ensures there are data that will be collected to demonstrate appreciable change (in quantity or quality) that can be calculated. Attainable and Achievable .

- The goal stretches the district to improve yet it is possible to attain.
- The goal targets the population(s) that data show is in greatest need.

Realistic and Relevant

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The bar is set high enough for significant achievement.

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The goal has an end point.

Timely

The time frame for accomplishment of the goal is realistic.

Strategies

- The strategies are focused and address the core of the goal.
- The strategies are achievable, feasible, reasonable and practical (i.e., time, skill, knowledge, and culture can support them).
 - The strategies are the right grain size (i.e., not so broad that it is a goal but not so narrow that it is an action or task)
- The strategies have a sufficient research base
- The strategies respond to the prioritized data needs and cause and effect analysis.
- The strategies are written so they can be understood by stakeholders (i.e., clear, jargon-free language, able to stand on its own without additional explanation).
- The goal will likely to be achieved if the strategies are implemented with fidelity
- There are a reasonable number of strategies for the goal (two to four).
- If applicable, the strategies respond to the needs of the student populations for which the goal is directed.
- The strategies can be applied in multiple settings (e.g., elementary schools, secondary schools or district departments)

Action Steps

- The action steps are backed by evidence of effectiveness.
- The actions identify the monitoring evidence/data sources that will be used to document implementation.
- The actions identify who is responsible for implementation, the timeline for implementation of the actions and the resources needed to execute the actions.
- There are a reasonable number of actions for each strategy (no more than 10).
- The actions will reach a critical mass of targeted school staff, students and/or facilities.
- Given the goal of improving student performance, the benefits of each action outweigh the costs, i.e., time, number of people, money, materials, supplies, technology
 - The set of actions allow the district to accomplish its goals and strategies and enable the district to meet the plan indicators
 - The actions, taken as a whole, are coherent and aligned

***B8, B9 - Indicator Descriptors

Indicators

- Valid, reliable and accurate data are available for the indicators.
- The data are understandable and meaningful.
- The indicator measures are practical, relevant and realistic.
- The indicators measure the effective implementation of the strategy.
- There is assigned responsibility for collecting, organizing, analyzing and interpreting the data.
- The data provide an early warning of any potential problems.
- The indicators are capable of being monitored to provide statistically verifiable and reproducible data that show changes over time.
- The indicators and data contribute to the fulfillment of reporting obligations under federal and state requirements. 72
| Evidence (examples) | Common assessment
samples
TBT protocols and
rubrics
Example of displayed
data | TBT Minutes/Agenda
Scoring rubric. |
|---------------------|--|---|
| 4 (Exemplary) | All teachers organize
data prior to meeting
using forms and
protocols.
Common assessments
aligned to standards
are regularly given to
ALL students at that
level (e.g., SWD, ELL,
Title I).
There are
rubric/scoring guides
with defined
benchmarks and used
by all team members. | Student work is
analyzed for all groups
of students.
There is a process in
place to select/use
samples of student
work that is
representative of all
students.
TBT makes consistent
connections between
data being analyzed |
| 3 (Accomplished) | Most teachers organize
data prior to meeting
using forms and
protocols.
Common assessments
aligned to standards
are given to ALL
students at that level at
least quarterly (e.g.,
SWD, ELL, Title I).
There are
rubric/scoring guides
with defined
benchmarks and
agreed to by all
members. | Student work is
analyzed for most
groups of students.
There is a process in
place to select/use
samples of student
work that is
representative of most
students.
TBT makes many
connections between
data being analyzed
and its connection to |
| 2 (Developing) | Some teachers bring
data to meetings.
A common pre-
test/formative data is
used inconsistently.
There are
rubric/scoring guides
with defined
benchmarks but not
agreed to by all team
members. | Student work is
analyzed but only on an
individual, student-by-
student basis.
There is a process in
place to select/use
representative samples
of student work.
TBT makes some
connections between
data being analyzed
and its connection to
the building/district |
| 1 (Beginning) | Data is not assembled.
A common pre-
test/formative
assessment is not
used.
No rubric/scoring
guides exist. | Student work is not
analyzed to identify
learning needs.
No process is in place
to select/use
representative samples
of student work.
TBT makes little or no
connection between
data being analyzed
and its connection to
the building/district
strategies/actions. |
| CRITERION | C13. Step 1: Collect
and Chart Assessment
Data Aligned to
Standards | C14. Step 2: Analyze
Student Work Specific to
the Data |

Ohio Education Research Center | Evaluating the Ohio Improvement Process

SECTION C: TEACHER-BASED TEAMS

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[OIP Implementation Criteria & Rubric]

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Evidence (examples)		Examples of specific, measureable targets for subgroups of students. Meeting minutes/agendas. Evidence of job- embedded professional development Evidence of implementation of instructional practices if not included in the building plan
4 (Exemplary)	the building/district strategies/actions. TBT makes consistent connections between data being analyzed and its connection to benchmarks and grade level indicators (Ohio Academic Content Standards).	Instructional practices are evidence-based on common assessment data and are timely and intervention based. Differentiating instructional practices to meet academic levels and subgroup needs is evident. Specific, measureable targets established for each academic level and/or subgroups. Job embedded professional development is systemically implemented to support teachers use of the instructional practices (modeling, coaching).
3 (Accomplished)	the building/district strategies/actions. TBT makes many connections between data being analyzed and its connection to benchmarks and grade level indicators (Ohio Academic Content Standards).	Instructional practices to implement are identified and based on common assessment data. Differentiating instructional practices to meet academic levels and subgroup needs is somewhat evident. Specific, measureable group targets reflect consideration of enrichment groups. Job embedded professional development is available to support teacher use of the instructional practices (modeling, coaching, demonstration, co-teaching).
2 (Developing)	strategies/actions. TBT makes some connections between data being analyzed and its connection to benchmarks and grade level indicators (Ohio Academic Content Standards).	Instructional practices to implement are identified but not based on common assessment data. Differentiating instructional practices to meet academic levels is somewhat evident. Established targets are academic or behavioral but may not be specific and measureable. Professional development is limited to traditional methods, e.g., workshops.
1 (Beginning)	TBT makes little or no connection between data being analyzed and its connection to benchmarks and grade level indicators (Ohio Academic Content Standards).	Instructional practices are not identified. Differentiating instructional practices to meet academic levels and subgroup needs is not evident. Targets are not established. Job embedded professional development is not present.
CRITERION	o Education Decoards Contrast First at	C15. Step 3: Establish shared expectations for implementing specific effective changes.

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Evidence (examples)	Any TBT self- assessment procedures.	TBT protocol, agendas, minutes. Examples of documented, shared and duplicated instructional practices
4 (Exemplary)	100% of teachers implement agreed upon instructional practices. Agreed upon instructional practices are implemented with all identified groups of students.	Common post-test results are analyzed relative to the targets. Instructional practices are evaluated on their effectiveness and level of implementation. Instructional practices are always documented, shared and duplicated. Course correction is defined and timely.
3 (Accomplished)	75% of teachers implement agreed upon instructional practices. Agreed upon instructional practices are implemented with most identified groups of students.	Common post-test results are analyzed relative to the targets. Instructional practices are evaluated on their effectiveness and level of implementation. Instructional practices are generally documented, shared and duplicated. Course correction is documented.
2 (Developing)	50% of teachers implement agreed upon instructional practices. Agreed upon instructional practices are implemented with some identified groups of students.	Common post-test results are inconsistently analyzed. Instructional practices are inconsistently evaluated on their effectiveness and level of implementation. Instructional practices are occasionally documented, shared and duplicated. Course correction is discussed.
1 (Beginning)	25% or less of teachers implement agreed upon instructional practices. Agreed upon instructional practices are implemented with few identified groups of students.	Common post-test results are not analyzed. Instructional practices are inconsistently evaluated on their effectiveness and level of implementation. Instructional practices are not documented, shared and duplicated. Course corrections are not discussed.
CRITERION	C16. Step 4: Implement Changes Consistently	C17. Step 5: Collect, chart and analyze post- data

SECTION D: FORMATIVE ASSESSMENT

CRITERION	1 (Beginning)	2 (Developing)	3 (Accomplished)	4 (Exemplary)	Evidence (examples)	
D1. Formative	Annual summative	All of the assessments in	Benchmarking common	Formative classroom	Meeting notes	
Assessments are	district/state assessments	the beginning stage in	assessments occurring	assessments for learning		
developed and utilized for	data are distributed to	addition to data collection	quarterly or end-of-unit.	are occurring	Formative Common	
data driven decisions.	ALL staff members for	and analysis 2-4 times a		daily/weekly in ALL	Assessments	
	use in lesson planning,	year with ALL staff	ALL staff would be	classrooms.		
	tiered instructional	members in the use of	utilizing common grade		Data warehouse	
[OIP Implementation Criteri	a & Rubric]		[]uly 20	13]	10	_

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CRITERION	1 (Beginning)	2 (Developing)	3 (Accomplished)	4 (Exemplary)	Evidence (examples)
	delivery and differentiated instruction.	curriculum maps, demographic or enrollment figures,	level tests that include item analysis.	A district-wide data warehouse is fully operational.	Curriculum maps Sample classroom
	Item analysis and	observational data and/or	Formative common		assessments
	are consistently being	auvey responses.	analyzed 1-4 times a	All three teams (DLTS/BLTs/TBTs) are	
	pi aciliceu.	The DLT and Building Level Teams (BLTs) are		responsible in sharing these additional	
	The District Level Team	responsible for	The Teacher Based	assessments through	
	(DLT) is responsible for	sharing/discussing data	Teams (TBTs) are	vertical and horizontal	
	this articulation.	through vertical and	responsible for	articulation.	
		horizontal articulation with	sharing/discussing data		
		the focus aligned to the unified district and	unrougn verucar and horizontal articulation.		
		building plans.			
			A district-wide data		
			warehouse is under		
			construction.		

SECTION E: INSTRUCTION

rerion	1 (Beginning)	2 (Developing)	3 (Accomplished)	4 (Exemplary)	Evidence (examples)
ntiated	Students are occasionally exempted from basic skills work in areas where	Teacher provides guidance and structure to sumlement the structure'	Teacher is coaching and monitoring students' understanding and	Assessment is used to formally record student prowth and inform	Assessments Lesson plans
	they demonstrate a high level of performance.	capacity to monitor their own learning.	progress.	instructional decisions.	Ohservations hy neers
	Students are matched to skills work by virtue of	Teachers and students establish criteria for success.	Lessons are designed to accommodate differences in readiness, interests and learning style	Various means of assessment are used so that all students can fully display their skill and	
		Teachers encourage student independence.	preferences among students.	understanding.	

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Evidence (examples)	Curriculum maps PD calendars Gap analysis documents	Curriculum maps
4 (Exemplary)	Full implementation of the refined district curriculum based on revised Academic Content Standards and Model Curriculum. Provide opportunities for staff to participate in state and district sponsored professional development on Academic Content Standards, model curricula, instructional practice and assessment.	Full implementation of the refined district curriculum
3 (Accomplished)	Continue to implement transition plan. Fully implement (and continue to modify) the refine district curriculum based on revised Academic Content Standards and Model Curriculum. Provide opportunities for staff to participate in state and district sponsored professional development on Academic Content Standards, model curricula, instructional practice and assessment.	Continue to implement transition plan.
2 (Developing)	Continue to implement transition plan. Make changes (if needed) to the plan based on the gap analysis data. Pilot and refine the redesigned district curriculum based on revised Academic Content Standards and Model Curriculum. Phase out content no longer present in the common core and revised Academic Content Standards and Model Curriculum. Provide opportunities for staff to participate in state and district sponsored professional development on Academic Content Standards, model curricula, instructional practice and assessment.	Continue to implement transition plan. Make
1 (Beginning)	Develop and initially implement an organized transition plan which includes gap analysis work, beginning with K-2. Redesigned district curriculum based on revised Academic Content Standards and Model Curriculum. Provide opportunities for staff to participate in state and district sponsored professional development on Academic Content Standards, model curricula and instructional practice.	Develop and initially implement an organized
CRITERION	F1. Common Core preparation and implementation.	F2. Model Curriculum

SECTION F: STANDARDS

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[OIP Implementation Criteria & Rubric]

Evidence (examples)	PD calendars PD plans Gap analysis documents
4 (Exemplary)	based on revised Academic Content Standards and Model Curriculum. Provide opportunities for staff to participate in state and district sponsored professional development on Academic Content Standards, model curricula, instructional practice and assessment.
3 (Accomplished)	Fully implement (and continue to modify) the refine district curriculum based on revised Academic Content Standards and Model Curriculum. Provide opportunities for staff to participate in state and district sponsored professional development on Academic Content Standards, model curricula, instructional practice and assessment.
2 (Developing)	changes (if needed) to the plan based on the gap analysis data. Pilot and refine the redesigned district curriculum based on revised Academic Content Standards and Model Curriculum. Phase out content no longer present in the common core and revised Academic Content Standards and Model Curriculum. Provide opportunities for staff to participate in state and district sponsored professional development on Academic Content Standards, model curricula, instructional practice and assessment.
1 (Beginning)	transition plan which includes gap analysis work, beginning with K-2. Redesigned district curriculum based on revised Academic Content Standards and Model Curriculum. Provide opportunities for staff to participate in state and district sponsored professional development on Academic Content Standards, model curricula and instructional practice.
CRITERION	preparation and implementation.

SECTION G: TEAM MEMBERSHIP

CRITERION	1 (Beginning)	2 (Developing)	3 (Accomplished)	4 (Exemplary)	Evidence (examples)
G1. Inclusion of Special Education/Early Childhood Staff on Teacher Based Teams	Special Education/Early Childhood staff is invited to the meetings, but may not attend.	Special Education/Early Childhood staff attends meetings on either a Teacher Based Team or	Special Education/Early Childhood staff attends meetings and provides input into the plans.	Special Education/Early Childhood staff attends meetings and are fully engaged in the	List of membership by position Meeting notes
[OIP Implementation Criteri	ia & Rubric]		[July 20	13]	13

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Evidence (examples) improvement process. 4 (Exemplary) 3 (Accomplished) a Building Level Team but not regularly. 2 (Developing) 1 (Beginning) and Building Level Teams. CRITERION

	Evidence (examples)	Data is assembled and organized prior to meeting.	Student work samples are analyzed.	Alignment between the data and discussion is evident.	Specific instructional strategies are listed in the minutes.	Specific measurement for each instructional strategy is listed in the minutes.	Instructional correction is evident if student achievement does not improve.
	4 (Exemplary)	Data results in a specific designated change in adult indicators and	instructional strategies. Strategies with the	desired impact are being documented, shared and duplicated.			
	3 (Accomplished)	Data is organized by students' performance against the measurement	standard and consistently used to guide the discussion.	Differentiated strategies to meet levels and subgroup needs are	evident.		
TBT MINUTES	2 (Developing)	Roles and responsibilities are clearly defined.	Data is assembled and organized prior to meeting.	Student work samples are analyzed. Needs are prioritized across	subgroup areas.		
review of DLT/CSLT/BLT/	1 (Beginning)	TBTs are meeting weekly and BLTs are meeting monthly.	Staff members are familiar with the OIP	template and have a basic understanding of the OIP Five Step Process.	Data was not prepopulated for the meeting.		
SECTION H: DESK TOP R	CRITERION	H1. The OIP Five Step Process is utilized with fidelitv.					

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APPENDIX C: Ohio School Turnaround Interventions: Impacts on Achievement, <u>Attainment</u>, and Administration

Ohio School Turnaround Interventions: Impacts on Achievement, Attainment, and Administration

A Report Prepared for the Ohio Department of Education

October 27, 2016

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I. Executive Summary

The Every Student Succeeds Act (ESSA) of 2015 requires states to identify and improve their lowest performing schools. This study assesses the impact of recent school improvement initiatives in Ohio to inform the state's plans for meeting this ESSA requirement. Specifically, the analysis estimates the impacts of the federal School Improvement Grant (SIG) program and Priority school interventions Ohio implemented as part of its No Child Left Behind Act (NCLB) waivers. Both initiatives can be characterized as "school turnaround" efforts because they sought to produce rapid and lasting improvements in school quality by requiring significant changes to many aspects of schools' educational delivery, such as the replacement of principals and teachers and the use of data to drive instructional and managerial decision-making. Schools qualified for these interventions if they ranked in the bottom 5 percent of eligible schools in terms of student proficiency rates or if they were high schools with graduation rates below 60 percent.

This study evaluates the impact of the first two rounds of the SIG program and the first round of Priority school identification. The state identified the first two cohorts of schools eligible for SIG awards in 2009 and 2010, respectively, and districts could apply for these awards to help them implement one of four federally-approved school improvement models in the eligible schools. The awards were distributed over three years (state fiscal years 2011-2013 for cohort 1 and fiscal years 2012-2014 for cohort 2) as schools implemented the models—primarily the SIG Transformation and SIG Turnaround models.¹ The state identified the first set of Priority schools in 2012. All Priority schools were required to implement a turnaround model much like the SIG Turnaround and SIG Transformation models if they had not previously received a SIG award. Efforts to turn around the first wave of Priority schools lasted from the 2012-13 through the 2014-15 school years.

Consistent with the goals of these interventions, the analysis focuses on their impacts on math and reading achievement and graduation rates. The analysis also considers the mechanisms that might explain changes in school quality, such as the principal and teacher turnover that the SIG and Priority models require. The results of the analysis are as follows:

1) SIG awards had a positive impact on student achievement and graduation rates.

SIG eligibility and, more specifically, the receipt of a SIG award had a large positive impact on school quality as measured by annual student achievement growth in math and reading. The analysis indicates that students in schools that received SIG awards experienced achievement advantages of around 0.10-0.15 standard deviations annually, which is the equivalent of approximately 60 extra "days of learning" each year if one assumes a 180-day school year. These improvements to annual school "value added" occurred primarily during the three years of the interventions and taper off afterward, but we generally cannot rule out substantively large advantages in school quality in those later years.

The annual achievement gains accumulate over time such that student achievement levels ultimately are much higher than they would have been without the interventions. By one estimate, by 2014 the average test scores of a SIG school's students were around 0.55 standard deviations higher than they would have been without the intervention. That is the equivalent of

¹ Both of these models are considered school "turnaround" models in the more general sense of the term.

students moving from the 5th percentile (the cutoff to identify low-performing schools) to approximately the 14th percentile on the achievement distribution.

There is also evidence that SIG awards had a positive impact on high school graduation rates. Our most conservative and credible estimates indicate that graduation rates for the first SIG cohort were 7 to 9 percentage points higher than they would have been without the interventions. Estimates for the second SIG cohort ranged from negligible to positive.

2) SIG awards generally led to less principal and teacher turnover in the long term.

Personnel turnover was already so great in these low-achieving schools that SIG eligibility often failed to measurably increase overall turnover rates. Contrary to what one might expect, actually receiving an award led the first cohort of SIG schools to experience significantly less turnover than other SIG-eligible schools that did not receive an award. Although there is some evidence that the second cohort of SIG schools receiving an award experienced more principal turnover, on average SIG awards led to less principal and teacher turnover.

3) The SIG Turnaround model was more disruptive in the short term than the SIG Transformation model.

The SIG Turnaround model required more personnel replacement than the SIG Transformation model. Accordingly, the analysis indicates that the SIG Turnaround model led to annual principal and teacher turnover rates that were 20 to 30 percentage points higher. This disruption corresponded to a negative impact on the achievement of students in attendance when schools were granted the awards. On the other hand, there is also some evidence that implementing the SIG Turnaround model may have had a more positive initial impact on school "value added", which also captures the annual achievement growth of students who were not there when a school was initially identified as SIG eligible.

4) Priority school identification had no clear impact on school quality as measured by student achievement, but there is some evidence of a positive impact on graduation rates.

Priority school interventions generally did not have discernable impacts on school quality as measured by student achievement growth. On the other hand, the few Title I-served high schools included in the analysis reveal that Priority designations had positive impacts on graduation rates of between 3 and 8 percentage points.

5) Priority school identification led to more principal and teacher turnover, but it did not have a negative impact on the achievement of students who experienced the disruption.

Students who attended schools at the time they were identified as Priority schools generally did not experience achievement declines. Indeed, the achievement effects we detected were sometimes positive for these students.

The research designs we employed provide confidence that these were the causal impacts of the SIG and Priority school interventions. That is because the methods we used entail comparing the performance trajectories of schools that were similar in every way except whether or not they were eligible for or required to implement the interventions. Consequently, we were able to observe how schools receiving the interventions would likely have performed had they not received them.

There are many possible reasons for the results above. For example, the research we review in the report indicates that whether or not replacing principals and teachers leads to improvements in school quality depends on the relative quality of the incoming personnel. Turnover is generally harmful to student achievement—at least in the short term—unless incoming teachers are of sufficiently greater quality to compensate for the negative disruptive effects. Similarly, there is some evidence that providing districts and schools with technical assistance can help, but that surely depends on the nature of the assistance, the needs of particular schools and districts, and the extent to which the assistance imposes an administrative burden that distracts from a school's core mission. It is conceivable that SIG's large positive impact (particularly relative to Priority interventions) is due to the funding provided or the fact that districts could decide to apply for a grant and participate in the program if they anticipated a marginal benefit from doing so. For example, schools and districts identified as SIG eligible could forgo obtaining a grant and implement their own strategies if they did not think SIG models would help them get out of the bottom five percent of schools.

Overall, the study provides convincing evidence that interventions such as the SIG turnaround models have the potential to improve school quality very quickly, which is consistent with the theory underlying school turnaround reforms as well as research in other contexts. We also find, however, that initial positive impacts dissipated after the first 2-3 years of implementation, which is inconsistent with the hope that turnaround interventions lead to long-term improvements in school quality. There is suggestive evidence that some more modest positive effects persisted 4-5 years later, but we are unable to discern whether or not that is truly the case. Beyond that, the report is necessarily limited to describing some of the differences in the nature of these interventions and, via a literature review, providing some insights as to how they might affect school quality. We leave it to administrators and policymakers to determine which mechanisms are likely to play out in a particular context.

II. Introduction

The Every Student Succeeds Act (ESSA) of 2015 requires states to identify and improve their lowest performing schools. This study evaluates the impact of recent school "turnaround" initiatives in Ohio to inform the state's plans for meeting this ESSA requirement. Specifically, the analysis estimates the impacts of the federal School Improvement Grant (SIG) program and Priority school interventions Ohio implemented as part of its No Child Left Behind Act (NCLB) waivers. Both initiatives sought to produce rapid and lasting improvements in school quality by requiring significant changes to many aspects of schools' educational delivery—particularly their leadership and staffing, as well as their use of data to drive instructional and managerial decision-making. Additionally, in both cases, eligible schools qualified for interventions if they ranked in the bottom 5 percent of eligible schools in terms of student proficiency or if they were high schools with graduation rates below 60 percent.²

The primary purpose of SIG and Priority school interventions in Ohio was to improve school quality as captured by student achievement and attainment. Thus, the analysis operationalizes school quality primarily in terms of schools' contributions to student performance on math and reading tests and, to a lesser extent, school-level graduation rates.³ Additionally, because the interventions emphasized rapid and substantial changes to school operations—particularly by requiring changes in leadership and staff—the analysis assesses the extent to which the interventions brought about such changes. Finally, in part to examine the extent to which changes in the composition of students might explain some of the school-level educational outcomes we report, the analysis examines the impact of SIG and Priority school interventions on student mobility and school closure.

The strict performance cutoffs determining SIG eligibility and priority school identification (i.e., the 5th percentile in terms of student proficiency or a 60 percent graduation rate for high schools) allowed us to estimate the causal impact of these programs on school administration and educational outcomes using a Regression Discontinuity (RD) design. The RD design essentially entails comparing schools that were very close to but on either side of the performance threshold determining SIG eligibility or Priority school status. For example, we compared the performance trajectories of schools with 2012 proficiency rates that put them just above the 5th percentile to those with proficiency rates that put them just below the 5th percentiles (i.e., those schools identified as Priority schools). Provided that the assumptions of the design are met (something that we test as part of the analysis) schools close to but on either side of the performance cutoff should be essentially identical in every respect except whether they received Priority school interventions.

Additionally, because not all schools eligible for SIG ultimately applied for and received grants, we compared the performance trajectories of SIG-eligible schools that did and did not receive SIG awards. We emphasize the results of those comparisons only when the statistical analysis indicates that the schools are sufficiently comparable. Most notably, we do not report these results for Priority schools in the main text, as all Priority schools were required to implement the turnaround model and, thus, there was no set of similar, low-performing schools to which we could compare them.

² The pool of eligible schools differed between the first SIG cohorts and the identification of "priority" schools associated with the NCLB waiver.

³ The report de-emphasizes the latter in part because it is difficult to attribute changes in graduation rates to the efforts of a particular school as opposed to changes in the composition of students over time, for example. Additionally, the samples of high schools for which we can implement the RD design is small.

The report is organized as follows. First, it provides context with a very brief history of school turnaround interventions and a review of research examining their impacts (Section III). Second, it provides a thorough description of the interventions that are the focus of this study, beginning with the first two rounds of SIG (Section IV) and then the first round of Priority school identification (Section V). The report then provides an overview of the research design, including the primary data and statistical modeling strategies (Section VI), followed by a review of the results (Section VII) and concluding thoughts on the implications of these results (Section VIII).

It is important to note that our research design and results sections focus on providing intuition for the methodologies we employed and the results we obtained. Readers who want more technical details and a more thorough description of the results should consult the technical appendix (Section IX).

III. Research Relevant to School Turnaround Initiatives

"Whole-school" or "comprehensive" school reform (CSR) programs steadily gained popularity late in the 20th century. They were based on the notion that coordinated efforts to improve schools as a whole are more likely to have an impact than piecemeal efforts targeting particular aspects of educational delivery. Beginning in the late 1980s, the federal government shifted its efforts from targeted programs aimed at improving the achievement of impoverished students to CSR programs targeting entire schools serving impoverished students. These federal grant programs were quite specific about which interventions qualified as CSR, stipulating that they must involve evidencebased strategies for improving everything from school management and instruction to fostering parental and community involvement. Research examining the impact of various CSR programs on student achievement found mixed results. Though many studies were of limited quality (Herman et al., 2008), there is good evidence that some CSR models had a positive impact on achievement (e.g., see Bifulco, Duncombe, and Yinger, 2005; Borman et al., 2003; Gross, Booker, and Goldhaber, 2009).

The federal government subsequently stepped up these efforts by incentivizing the implementation of more aggressive "turnaround"⁴ models of reform, most notably by distributing billions of dollars via a revamped School Improvement Grants (SIG) program and state Race to the Top (RttT) grants, as well as offering waivers from the accountability provisions of NCLB. Unlike CSR, what has come to be called school turnaround initiatives are meant to produce rapid improvements in school quality via dramatic changes to school operations. In particular, the four federally defined SIG models entailed closing a school completely (the Closure model), restarting a school as a charter school or one managed by an independent management organization (the Restart model), or, to various degrees, reconstituting a school's leadership and instructional staff through mandatory and data-driven hiring and firing processes (the SIG Transformation and SIG Turnaround models). For example, the Turnaround and Transformation models both required replacing a school's principal, and the Turnaround model goes further by allowing a school to rehire no more than 50 percent of teachers.

Research indicates that these turnaround models could lead to improvements in student achievement. Research on school closure, for example, indicates that closure can benefit students in

⁴ "Turnaround" is the school improvement strategy that SIG and Priority school models sought to implement. Confusingly, it also is the label assigned to a specific SIG model. We capitalize all referends to the specific SIG model and use lower-case "turnaround" to refer to the more generic reform strategy.

failing schools provided that affected students switch to schools of sufficiently higher quality to compensate for the disruption that closure can introduce (Brummet, 2014; Carlson and Lavertu, 2015; Carlson and Lavertu, 2016). The SIG Closure model is consistent with this research in that it requires that students be directed to higher-performing schools. The required leadership and managerial changes in the other three SIG models could also yield benefits. Principal quality is particularly variable in high poverty schools and appears to have a substantively significant impact on student achievement (Branch, Hanushek, & Rivkin, 2012; Grissom et al., 2015). Thus, schools with poor-performing principals could benefit significantly. Additionally, providing new principals with greater managerial discretion could enable them to respond to their organizational environments, which research suggests is particularly important in the education sector (Bloom et al., 2015). For example, more discretion might enable principals to recruit and retain high-quality teachers (Ladd, 2011), which is the most important known school-based factor determining student achievement (Hanushek, 2011). Indeed, teacher turnover has been shown to increase student achievement if new teachers are of sufficiently greater quality than the teachers they replace (Adnot et al., 2016)

Some other strategies that the SIG models require have also been shown to be effective in some contexts. For example, extended instructional time and data-driven managerial and instructional decision-making seem to correlate with school quality both domestically and internationally (Angrist et al., 2013; Bloom et al., 2015; Dobbie and Fryer, 2013). And providing schools and districts with technical assistance to implement school improvement strategies—such as data-driven decision-making—was found to improve the achievement of students in low-performing California districts (Strunk and McEachin, 2014; Strunk, McEaching, and Westover, 2014).

On the other hand, the effectiveness of principal and teacher replacement depends on the supply. Replacing experienced principals with novices could be problematic, as principal inexperience has been shown to have a significant negative impact on educational outcomes (Clark, Martorell, & Rockoff, 2009). Similarly, there is increasing evidence that teacher experience can have a significant impact on student educational outcomes (e.g., Harris and Sass 2011). Thus, if the supply of quality teachers is low or recruitment is difficult, as tends to be the case in low-achieving, high-poverty urban and rural districts (e.g., see Boyd, Lankford, & Wyckoff, 2007; Cowen et al., 2012; Jackson, 2009; Clotfelter, Ladd, & Vigdor, 2007, 2010), new teachers could very well be of comparable or lower quality than those they replace. Or perhaps schools obtain higher quality teachers from elsewhere in their districts, thereby having a negative effect on other district schools. Moreover, even if teachers are replaced with new teachers of comparable quality, such teacher "churn" has itself been shown to have a negative impact on student achievement (Atteberry et al., 2016). Finally, although the SIG Turnaround model introduces more managerial discretion for principals, researchers have suggested that working with districts rather than specific schools within them is more likely to be effective in part because districts have more managerial discretion (e.g., see Schueler et al, 2016).⁵

Although the work reviewed above is undoubtedly relevant to turnaround initiatives, there is little published research that actually estimates the impact of recent federal school improvement programs using rigorous research designs. There have been some in-depth case studies of the implementation of all SIG models (e.g., see Le Floch et al., 2016), but the U.S. Department of Education's Institute for Education Sciences has not yet released its report of SIG's impact on student educational outcomes. And independent researchers have only begun to publish their analyses. To our knowledge, there are no published papers that examine the impact of closure in

⁵ It is unclear the extent to which SIG schools coordinate well with the districts.

the context of SIG, RttT, or NCLB waivers. There is one published study that examines the SIG Restart option in Boston and New Orleans that identifies substantively significant positive achievement effects in math and reading when schools convert to charter schools (Abdulkadiroğlu et al., 2016), but it is worth keeping in mind that the study focuses on relatively high-performing charter sectors (e.g., see CREDO, 2015). Indeed, unpublished papers that examine the Restart option alongside other school improvement models in California and Tennessee find that there were no positive achievement effects when school management is taken over by charter management organizations (Dee, 2012; Zimmer et al., 2016).

More relevant to this report, Abdulkadiroğlu et al. (2016) also found that SIG Turnaround interventions in Boston yielded achievement gains comparable to those they found from charter conversion provided that there was sufficient staff reconstitution. Schools that implemented turnaround strategies that involved less staff turnover yielded smaller achievement gains. This latter finding is consistent with a published study of Los Angeles turnaround interventions (Strunk et al., 2016a) and a working paper focused on the impact of SIG grants in California as a whole (Dee, 2012). They found that the more disruptive SIG Turnaround model, which mandated that at least 50 percent of teachers be dismissed, was the only SIG model with a positive effect on student achievement. It is important to note, however, that these studies typically employ few years of data, so it is unclear whether the achievement effects persist after the initial 2-3 years after implementation. Additionally, although Dee (2012) employs a regression discontinuity design, he employs a school-level achievement index. Thus, changes in school-level achievement could be due to changes in school effectiveness.

Heissel and Ladd's (2016) evaluation of turnaround efforts in North Carolina is perhaps the most rigorous study available. They employ a regression discontinuity design, student- and staff-level administrative data, and, importantly, teacher survey data that enables them to estimate the causal impact of federal school improvement models. Like Dee (2012), and as per the federal SIG models, they found that the implementation of SIG Turnaround models indeed led to principal and teacher turnover. They also found that teachers reported more professional development, more communication with parents, a greater focus on tests, and more administrative burdens in terms of required meetings and paperwork, for example. And they found that receiving a SIG grant led buildings to have a higher concentration of students receiving free- and reduced-price lunches. Finally, they found that the interventions had a negative average impact on school-level proficiency rates (which could be due to the student compositional changes mentioned in the previous paragraph). It is important to note, however, that in a separate analysis of these efforts in North Carolina, Henry and Guthrie (2015) found immediate and significant positive impacts on school quality as measured by student achievement growth, though these initial effects diminished over time.

There are a number of additional unpublished papers in circulation that utilize regression discontinuity and other quasi-experimental designs to estimate the causal impact of SIG and similar turnaround models, such as those used for Priority schools as part of NCLB waivers. On balance, they seem to find null or positive achievement effects.⁶ Like the studies we describe above, however, these studies are generally limited to no more than three years of post-treatment effects. This limitation is particularly important because research in many contexts has found that initial

⁶ For example, Dougherty and Weiner (2015), Papay (2015), and Ruble (2015) recently presented such papers at the Association for Public Policy Analysis and Management (APPAM) 2015 annual conference. There were also papers in very early stages presented at the 2016 conference of the Association for Education Finance & Policy.

positive or negative achievement effects tend to dissipate (e.g., see Strunk et al., 2016b; Favero and Rutherford, 2016). On the other hand, there is some evidence that a turnaround model implemented in many Cleveland and Cincinnati schools might have had lasting impacts on achievement (see Player and Katz, 2016). These studies employ good research designs, but those designs are generally less convincing than those we employ in this report. To our knowledge, this study is the first to examine the long-term achievement impacts of turnaround models in Ohio using the rigorous RD design. And this is the first study to estimate the impact on school quality as measured by the achievement gains of students whether or not they directly experienced the reforms.

IV. Ohio SIG Schools⁷

School turnaround efforts intensified in the fall of 2009 when the Obama Administration revamped the federal SIG program. Eligible districts could apply for SIG funds to turn around poor-performing schools using one of the four new SIG models. There were three types of schools eligible for the funds: Title I-served schools under NCLB's "school improvement" process that were either among the lowest achieving five percent or secondary schools with a five-year graduation rate less than 60 percent ("Tier 1"); Title I-eligible secondary schools that were either among the lowest achieving five percent or rate less than 60 percent ("Tier 2"); and Title I-served schools under NCLB's "school improvement" process that were not identified as Tier 1 ("Tier 3"). The Tier 1 and Tier 2 schools were those labeled as "persistently low-achieving" and those required to implement one of the four SIG turnaround models if their districts applied for and received SIG funds on their behalf. However, districts receiving SIG funds could also spend them in Tier 3 schools. ODE awarded the SIG grants of between \$50,000 and \$2 million per building through a competitive application process that required districts to demonstrate their commitment and capacity to implement the models in the identified buildings. District applications included detailed budgets and narratives for each building.

Consistent with federal guidelines, the Ohio Department of Education (ODE) determined the lowest five percent of schools under NCLB's "school improvement" status using an average of two proficiency calculations: a weighted proficiency rate in math and reading for each building as of the most recent school year—2008-09 (state fiscal year 2009, or FY09) for Cohort I and 2009-10 (FY10) for Cohort II—and a five-year average of this weighted proficiency rate over the last five school years (FY05-FY09 for Cohort I and FY06-FY10 for Cohort II). ODE then rank-ordered schools based on a "combined proficiency rate" that weighted these two proficiency calculations equally. Additionally, ODE also ranked all high schools under NCLB's "school improvement" status based on an average graduation rate across five years of data (FY04-FY09 for Cohort I and FY05-09 for Cohort II). These ranking rules were applied separately for the Tier 1 and Tier 2 schools in each cohort. Most of the analysis below focuses on estimating the effect of SIG on Tier 1 schools because too few Tier 2 schools were identified for the analysis. It also focuses on SIG Turnaround and Transformation interventions because very few districts chose the Restart and Closure models.

Table 1 describes the SIG Transformation and Turnaround models that Tier 1 and Tier 2 schools implemented. It is worth noting that because many of the eligible schools were going through NCLB's "school improvement" process at the time, many likely had begun implementing features of

⁷ Unless otherwise noted, all information in sections III and IV comes from internal documentation provided by the Ohio Department of Education.

the SIG models. Indeed, the "other" improvement option under NCLB very much resembled the Transformation model. Additionally, it is worth noting that federal rules stipulated that a district that had nine or more Tier 1 and Tier 2 schools was not permitted to implement the transformation model in more than 50 percent of those schools.

Table 1. SIG T	'urnarou	nd vs. SIG Transformation Model
SIG Models	Count	Model Description
Transformation	58 Schools	 Replace principal, provide managerial flexibility (over staffing, budget, and curriculum), and develop leadership. Use data to design and implement instructional programs aligned to state standards. Provide high quality professional development. Develop new teacher evaluations and retain only those who are deemed to be effective. Engage with families and community. Direct Title I funds to expanded learning time and professional development activities. A range of other optional activities.
Turnaround	16 Schools	 All of the above (with minor differences) Rehire no more than 50 percent of current teachers Create a district office focused on school turnaround
Note. Counts repo the table are base	orted above d on docum	are for cohort I and II schools included in our statistical analysis. The contents of nentation ODE provided.

The most dramatic change in schools implementing the Transformation model might have been the receipt of SIG funds, provided that districts distributed those funds above and beyond the funds those schools would have received in the absence of SIG. If this indeed was the case, the average SIG school would have received over \$2,000 more per pupil over the course of three years. As Table 2 indicates, over 50 percent of this funding was dedicated to salaries and benefits, and over 25 percent was dedicated to contracting for services.

Table 2. SIG Spe	ending						
	Median	Median		Allocat	tion of SIG Fu	nds	
SIG Model	Annual School SIG Budget	Annual School SIG Budget Per Pupil	Salaries	Retirement/ Fringe Benefits	Purchased Services	Supplies	Capital Outlays
Transformation	\$772,000	\$2,234.04	43.25%	9.88%	28.22%	12.06%	5.90%
Turnaround	\$809,200	\$2,237.81					
NOTE. Above stats for "transformatio were calculated by	are for all SIG n" and "turnan the authors u	Tiers. Tier 1 sp round" respectiv ising data ODE p	ending per vely), but Tio provided.	building is a bit l er 1 spending pe	nigher (\$897,2 r pupil is simil	15.10 and \$8 ar. Figures in	18,400, the table

Schools received funding for three years—FY11-FY13 for Cohort I and FY12-FY14 for Cohort II, although a handful of schools refused funding or closed before they could receive all of it. But it is important to consider that many SIG-eligible schools (i.e., those deemed "persistently low

achieving") either did not apply for SIG funds or applied and did not receive them (at least not initially); and some districts applied for and received funding for schools that were not labeled as "persistently low achieving" ("Tier 3" schools described above). Table 3 provides counts of schools that were and were not identified as "persistently low achieving" and counts of schools in each category that applied for and received SIG awards.

Table 3. SIG Schools Identified and Included in Analysis							
SIG Round	Tier 1 Schools Identified as Persistently Low Achieving	Number Funded in Corresponding SIG Round					
Ι	55 of 724 schools in pool	25 of 55 low performers (12 additional schools eventually funded in round 2, for a total of 37 of 55 schools) 6 non-low performers (Tier 3 schools)					
II	47 of 695 schools in pool (excludes schools awarded SIG grants in first round)	21 of 47 low performers0 non-low performers (Tier 3 schools)					
Note. Figures in the table were calculated by the authors using data ODE provided.							

It is important to note that all schools that applied for but did not receive SIG funds in the first round were awarded SIG funds in the second round. Thus, a much larger proportion of SIG I-eligible schools received funds than SIG II-eligible schools. It is also worth noting that the vast majority of the SIG I-eligible schools that received funding in the first round were district schools, whereas most charter schools that had applied in the first round received funding in the second round.

V. Ohio Priority Schools

In 2011 President Obama announced that states could receive waivers from some of the accountability requirements of NCLB if they developed alternative systems to hold schools and districts accountable and intervened to turn around the lowest performing schools. States submitted plans to identify and turn around low-performing "Priority" schools as part of their waiver applications. Ohio submitted its plans to identify and intervene in Priority schools— including a list of the schools it identified with its proposed procedure—as part of its waiver application in February, 2012.

The methods Ohio used to identify and turn around Priority schools mirrored those from the SIG program. The first wave of Ohio Priority schools—those identified in 2012—consisted of Title I-served schools ("Tier 1") and Title I-eligible secondary schools ("Tier 2") that had a combined proficiency rate that placed them in the bottom five percent of eligible schools, had an average graduation rate below 60 percent, or that had received School Improvement Grant (SIG) funds beginning in FY2011 (cohort 1) or FY2012 (cohort 2). Using FY2007-FY2011 data, ODE identified 167 Priority schools, just over half of which had received SIG funds. Specifically, ODE identified 77

Priority schools that would undergo turnaround interventions but that did not previously receive SIG grants. These schools eventually were given the option of applying for SIG funding that would begin in FY2015.

Table 4. Priority School Included in the Analysis and Description of Interventions								
Tier 1 Schools ID'd	Highlights of Model Used							
72 of 1,904 eligible schools that had not previously received a SIG grant	 Replace principal or justify to state that keeping current principal is appropriate, provide managerial flexibility (over staffing, budget, and curriculum), and develop leadership. Use data to design and implement instructional programs aligned to state standards. Provide high quality professional development. Develop new teacher evaluations and retain only those teachers deemed to be effective. Engage with families and community. Direct Title I funds to expanded learning time and professional development activities. A range of other optional activities. 							
Note. Counts above are based on the sample of schools that enter the analysis below. The contents of the table are based on documentation ODE provided.								

The Tier 1 Priority schools that had not previously received SIG funds—those implementing the model in Table 4—are the focus of this analysis. Like all Priority and SIG schools, they were required to implement a series of interventions for at least three years. As Table 4 indicates, the Priority schools identified in 2012 were required to implement a model much like the SIG Transformation model. The most notable difference between the two models is that Priority schools could retain their principals if they demonstrated to the state that s/he should be retained. ODE also provided significant technical assistance and put processes in place to monitor and ensure fidelity of implementation, which began in fall 2012 (FY2013).

VI. Research Design

The ideal research design would entail randomly assigning a subset of persistently poorperforming schools to receive the SIG or Priority intervention (the treatment group) and then comparing their performance over time to schools that did not implement the turnaround models (the control group). If a sufficient number of schools were randomly assigned, the two groups would be composed of schools that are, on average, similar in every imaginable way except whether they implemented a turnaround model. If that were the case, the control group would provide an excellent proxy for how SIG or Priority schools would have performed had they not been required to implement a turnaround model.

The turnaround policies were not implemented in this way. However, the strict performance cutoff by which schools were identified as SIG-eligible or Priority school nonetheless provided an opportunity to estimate the causal effects of these interventions for a sample of schools. Specifically, the strict performance cutoff allowed us to employ a Regression Discontinuity (RD) design. The RD design entails comparing the outcomes of schools with proficiency or graduation rates that placed them close to but on either side of the performance threshold used to identify SIG- eligible and Priority schools (i.e., a proficiency rate at the 5th percentile or a graduation rate of 60 percent). The logic of the design is that these schools (and their students) should be nearly identical in every respect except for their exposure to the turnaround intervention. In other words, if the assumptions of the RD design hold, it is as if schools near the performance cutoffs were randomly assigned to the treatment and control conditions. We tested this assumption by comparing the characteristics of schools near the cutoff and found that the assumption holds.⁸

A limitation of the RD design is that it focuses on schools near the performance threshold determining SIG eligibility and priority school identification—that is, schools with composite proficiency rates in math and reading near the threshold demarcating the 5th percentile (specifically, 29.175 percent for SIG cohort I, 33.66 percent for SIG cohort II, and 40.6 percent for the first wave of Priority schools), or graduation rates near 60 percent. Another potential problem is that there are sometimes too few schools near the threshold to detect differences in outcomes. To address these potential issues, we also estimated models that compare the performance trajectories of all schools that were and were not treated. For example, we calculated the change in school quality before and after schools were identified as SIG-eligible, before and after they received a SIG award, and before and after they received a Priority designation, and we compared those changes to the trajectories we observed in schools that did not receive these treatments. A potential advantage of this approach is that it entails estimating the average effect across all schools receiving a treatment, as opposed to the small sample near the performance cutoffs.

The assumption of this "difference in differences" (DID) approach, however, is that the performance trajectories of schools that ultimately received the treatment would have been the same as those that did not receive treatment. At times the results of our analyses lead us to question whether this assumption holds, particularly when it comes to estimating the effect of SIG eligibility and the Priority designation on student achievement.⁹ Consequently, we emphasize the results of this approach only when it appears that the assumption should hold. In particular, we rely on this approach when looking at the impact of actually receiving a SIG award (as opposed to merely being SIG-eligible) and when estimating the impact of the interventions on graduation rates. Although the design is particularly problematic for estimating the impact of the Priority designations, we still employ it for graduation rates because it enabled us to generate estimates for the small sample of Tier 1 Priority high schools that had not previously received a SIG award.

The analysis focuses on two measures of school quality: ODE's estimates of annual student growth in math and reading achievement (i.e., school "value added") and school-level graduation rates. We use the former because it takes into account the characteristics of the student body a school educates, which could change after the treatment is administered. We also include the analysis of graduation rates in the body of the report because it is the best measure available for high schools. But it is important to keep in mind that it is sensitive to changes in the student body. Additionally, we examined the impacts on the achievement levels of a school's students using student-level test scores. Finally, we estimated the impact of these interventions on school administration, focusing primarily on principal and teacher turnover because other measures of teacher characteristics and mobility largely yielded negligible results (see Appendix F).

The remainder of this section describes our data and sample of schools, as well as our modeling strategies. We point the reader to the technical appendix at the end of this report for a more detailed description of our methodological approach and the results for each of the analyses.

⁸ See Appendix A for details.

⁹ See Appendix B for details.

Data

The ODE provided the combined proficiency and graduation rates used to identify persistently low achieving schools for the first two rounds of SIG and the first round of Priority schools. The remaining FY2007-FY2015 building-level data we used in the analysis are generally publicly available on the ODE website, although ODE provided some of these data in a format we requested. We obtained FY2007-FY2014 student- and staff-level data from the Ohio Education Research Center (OERC).

The measure of school quality on which we focus most is ODE's annual, school-level "value added" estimates in math and reading. These building-level measures are arguably the most valid estimates of school quality because they control for multiple prior years of student test scores, thereby accounting for differences in the students that schools educate. These estimates capture one-year achievement gains in grades 4-8 and are reported in "normal curve equivalent" (NCE) units, but we converted them to standard deviation units when presenting the results in the body of the report.¹⁰ Additionally, we estimated student achievement levels on state math, reading, and science tests in grades 3-8 using student-level achievement data, which also allow us to control for changes in student populations over time.

The analysis also examines schools' graduation rates¹¹ and their scores on the state's performance index, which captures the performance level of a school's students across multiple subjects (math, reading, writing, science, and social studies) on all state assessments (the OAA in grades 3-8 and the Ohio Graduation Test) on a 0-120 scale. Graduation rates and performance index scores may not accurately reflect differences in school quality because they do not account for changes in the characteristics of students schools educate. Additionally, performance index scores aggregate a number of censored measures (counts of students meeting certain thresholds), as opposed to a continuous measure of achievement for all students, and the tests included in the metric change over time. We present some results using these measures because they capture dimensions of achievement and attainment that school value-added estimates miss. The performance index captures performance in more grades and subjects—and it is available for more schools—than the value-added measures. And both graduation rates and the performance index enable us to examine educational outcomes in high schools. However, because we have the more valid value-added achievement estimates available—as well as continuous measures of average school-level achievement that we calculated using student-level data—we present the results for the performance index only in the appendix.

Finally, we examine a number of building-level characteristics, including student and staff characteristics and mobility rates. We review only some of these results in this report because school staffing measures generally yielded negligible results. However, we report some of these additional analyses in the appendix.¹²

¹⁰ See appendix H for details of this conversion. It is important to note that the value-added estimates we use are gain scores, as opposed to the gain "index" used to grade schools. It also is important to note that the 2013 and 2014 value-added estimates publicly available are three-year averages that must be converted to annual gains.

¹¹ It is important to note that the measurement of graduation rates changed in FY2012. We use the "four year" graduation rate in subsequent years.

¹² In particular, see Appendix F.

Description of Schools Included in the Analysis

Table 5 below presents some statistics summarizing the characteristics of the Tier 1 schools that were and were not identified as being below the 5th percentile in terms of their combined proficiency rates as of FY2009 (SIG I), FY2010 (SIG II), and FY2011 (first wave of non-SIG Priority schools). The table reveals that, compared to other schools in their respective pools, schools identified as "persistently low achieving" (PLA--i.e., below the 5th percentile) had much smaller enrollments, had more economically disadvantaged and minority students, had far more teacher turnover, and were far more likely to be charter schools. Indeed, about 50 percent of SIG-eligible schools, and over one quarter of Priority schools, were charter schools.

Table 5. Comparing Tier 1 Schools that Were and Were Not Identified as Being Below the 5 th										
Percentile in terms of a Combined Proficiency Rate in Math and Reading										
	SIG I (FY2009)		SIG II (FY2010)		Priority (FY2011)					
	PLA	Not PLA	PLA	Not PLA	PLA	Not PLA				
Average Enrollment	230.11	473.16	234.18	480.03	337.64	435.01				
Percent "Economically Disadvantaged" Students	84.34	72.63	85.68	73.81	91.80	56.13				
Percent Black Students	70.29	42.33	66.03	38.17	76.21	19.32				
Percent Charter Schools	50.00	14.10	57.89	11.72	25.76	8.56				
Combined Proficiency Rate (Math & Reading)	24.33	58.83	27.74	61.99	35.14	77.03				
Average Performance Index Score	54.41	79.97	57.00	82.54	64.78	94.10				
Average Value-Added Estimate in Reading (SDs)	-0.05	0.02	-0.04	0.01	-0.05	0.01				
Average student-teacher ratio	13.45	15.80	12.63	15.77	18.35	16.71				
Average Annual Principal Turnover Rate	0.17	0.17	0.14	0.09	0.10	0.06				
Average Annual Educator Turnover Rate	0.43	0.21	0.38	0.17	0.25	0.14				
Proportion of Baseline Principals Gone by FY2014	0.95	0.79	1.00	0.78	0.76	0.52				
Proportion of Schools Closed by FY2014	0.31	0.14	0.18	0.08	0.08	0.02				

The schools identified as low performers also had somewhat lower value-added estimates, which capture annual student achievement growth. Whereas a school with students whose annual achievement growth is average should have a value-added estimate of 0 standard deviations (SDs), schools identified as low performers have students whose annual achievement growth was between 0.05 and 0.07 standard deviations lower. That puts these schools' students at around the 48th percentile in terms of student achievement growth, whereas students in non-PLA schools were

at around the 51st percentile. If one assumes that students get about 180 days' worth of learning in a school year, these statistics suggest that students in schools below the 5th percentile in terms of proficiency rates receive the equivalent of around 30 fewer days of learning each year than students in schools above the 5th percentile.

Statistical Modeling

The RD strategy entails comparing the outcomes of schools that were close to but on either side of the performance thresholds for SIG eligibility and Priority identification. There are a number of ways to do this statistically. One way is to use data from all schools in the sample and to model the relationship between the assignment or "running" variable (e.g., the "combined proficiency rate" used to rank schools) and the outcome of interest using a flexible functional form that accounts for the relationship completely. Alternatively, one can restrict the schools in the analysis to those within a narrow bandwidth of the threshold—for example, schools with a combined proficiency rate within 20 percentage points of the performance cutoff—and compare their outcomes. We report the results of models that employ both approaches at once because they yield little evidence of differences in the pre-treatment characteristics of treated and untreated schools.¹³

We also employed the difference-in-differences (DID) design we describe above on its own (e.g., see Appendix B) as well as to enhance our RD analysis (see Appendix C). As we detail in the appendix, the DID design entails comparing a school's outcomes after treatment to its outcomes in the latest pre-treatment year (FY2009 for SIG I, FY2010 for SIG II, and FY2011 for Priority), and comparing those changes between treated and untreated schools. We examine these differences through the 2014-15 school year, as well as up to three years prior to the interventions. We do the latter to look for differences in pre-treatment trajectories between treated and untreated schools, which would invalidate the DID and RD designs. As we note above, we primarily emphasize results in which there are no significant pre-treatment trends.

Conducting the RD analysis within a DID framework helps increase confidence in our estimates. In particular, it should help minimize pre-treatment differences between the treatment and control groups, and it should enhance our ability to detect statistically significant effects. That said, it is important to reiterate that comparing treated and untreated schools using the RD design is as if comparing identical schools that were randomly assigned to the treatment condition. As we note above, treated and un-treated schools near the performance thresholds for SIG eligibility and Priority identification do not reveal statistically significant differences across the numerous characteristics we consider. For example, the results reveal that the differences in pre-treatment trends that invalidated some of the difference-in-differences analyses¹⁴ generally disappear in our RD analysis. Thus, it is reasonable to interpret the results we emphasize below as causal effects of SIG eligibility and Priority school identification.

Finally, as we noted above, estimating the impact of SIG models is not as straightforward as estimating the impact of Priority identification because not all SIG-eligible schools applied for and received SIG awards. We estimated a number of models that account for this fact. Ultimately, we typically chose to report the results of DID models comparing SIG-eligible schools that did and did not receive SIG awards because of the desirable properties we detail above. However, we report in

¹³ See Appendix A and Appendix C for more details.

¹⁴ See Appendix B.

the appendix additional analyses that account for the fact that only a fraction of SIG-eligible schools ultimately received awards.¹⁵

VII. Results

The results below are organized into five sections: the impacts of SIG eligibility and Priority identification on school quality; impacts of receiving SIG awards on school quality; comparisons of the SIG Turnaround and Transformation models; impacts of SIG awards and Priority school identification on principal and teacher turnover; and impacts of SIG and priority school identification on students attending schools at the time they were identified. These results are meant to provide a general summary of those we report in the appendixes. It is important to note that we found little evidence that SIG and priority school designations and interventions had an impact on the probability of school closure.¹⁶ Thus, the estimates of the impacts we review below are unlikely to be due to treated or untreated schools leaving the sample. Additionally, although we did not find statistically significant changes over time in the composition of students in these schools, it is important to keep in mind that changes in student composition could still affect analyses involving graduation rates or achievement levels (as opposed to growth).

Impact of SIG Eligibility and Priority School Identification on School Quality

Figure 1 on the following page presents the impact of identifying schools as being in the lowest achieving five percent—that is, the impact of SIG eligibility (whether or not schools ultimately received a SIG award) or Priority identification—on school-level annual student achievement growth in math and reading (i.e., school "value added"). Treatment effects are reported in standard deviation units. Positive numbers indicate that the treatments had a positive impact, and solid bars indicate that the estimate is statistically different from zero (p<0.10 for a two-tailed test). In light of evidence we review later in this report, one can reasonably interpret empty bars as revealing a more suggestive estimate of the intervention's impact in a given year.

Figure 1a reveals that by the end of the 2011-12 school year (FY2012), identifying a school as SIG eligible—or, put differently, identifying a school as being in the bottom 5 percent of Title I-served schools under NCLB's "school improvement" program—led to improvements in achievement of 0.28 standard deviations in reading and 0.21 standard deviations in math. Assuming a 180-day school year and based on estimates of average achievement growth, that translates to schools imparting almost a full year of additional reading content (the equivalent of 159 extra days of learning) and about 89 days of extra math content in FY2012 than they would have without being identified as being a low-performer.¹⁷ However, the positive impact in reading seems to go away completely by FY2015. Similarly, the effect in math is nearly halved by FY2015, although the statistically insignificant effect still equates to achievement gains of about 53 extra days of learning per year.

¹⁵ See Appendix G.

¹⁶ See Appendix F.

¹⁷ See Appendix H for a description of the procedure used to calculate "days of learning."

Figure 1. Impact of SIG Eligibility & Priority School Designation on Schools' Annual Student Achievement Growth



Figure 1b. Impactof SIG II Eligibility



Figure 1c. Impactof Priority School Identification



Note. The figures report the results of a regression discontinuity analysis of the impact of SIG eligibility and Priority identification on schools' annual student gains in reading and math. The effects are reported in standard deviations. Solid bars indicate that the effects reach statistical significance (p<0.10 for a two-tailed test). Appendix C (Tables C1-C3) provides more details on the modeling strategy and results.

The second wave of SIG eligibility determinations and the first wave of Priority school identification did not have statistically significant positive impacts on annual value-added estimates, and there is some evidence that they had some negative effects by FY2015. However, the statistical insignificance of the estimates does not mean that the interventions did not have lasting impacts. We lack the statistical power to make that determination. Also note that annual value-added estimates reveal how much more a school's students learned over a single year. Thus, achievement gains can accumulate over time, resulting in schools having significantly higher achievement levels, even if the size of annual value-added advantages declines. Figure 2 illustrates such increases in reading achievement levels based on SIG eligibility. Results for math are similar.¹⁸



Figure 2. Impact of SIG Eligibility on Student Achievement Levels

Note. The figure reports the results of an RD analysis of the impact of SIG eligibility on achievement levels in reading. Results are reported in standard deviation units. Solid bars indicate that the effects reach statistical significance (p<0.10 for a twotailed test). Appendix C (Table C4) provides more details on the modeling strategy and results.

Figure 2 illustrates just how large the improvement in reading achievement these SIG eligible schools (i.e., the lowest 5 percent) experienced in absolute terms. By FY2013, SIG eligibility had given schools' students the equivalent of over two extra "years of schooling." By 2014, even with a dip from FY2013, the average test scores of a SIG school's students were around 0.55 standard deviations higher than they would have been without the intervention, which is the equivalent of students moving from the 5th percentile (the cutoff to identify low-performing schools) to approximately the 14th percentile on the achievement distribution. Thus, even statistically insignificant annual value-added estimates of 0.05-0.15 standard deviations may capture real annual benefits that accumulate into substantial achievement advantages at the school level. Nevertheless, annual value-added remains the superior measure of school quality. Value-added estimates approaching zero or that become negative in later years (as in the case of reading for SIG II) indicate that a SIG-eligible school's students are learning the same or less from year to year than they would have without SIG eligibility.

¹⁸ See Table C4 in Appendix C.

Finally, Figure 3 provides estimated impacts on graduation rates using a difference-in-differences design (for the reasons we discuss above). Specifically, Figure 3 focuses on Tier 1 schools that could qualify for SIG based on their graduation rates. In this case, positive numbers can be interpreted as SIG eligibility or Priority identification having a positive impact on graduation rates, reported as percentage point increases. Consistent with the pattern of results reported in Figure 1, the results in Figure 3 indicate that SIG I eligibility led to improvements in school graduation rates of around 7-9 percentage points, whereas SIG II eligibility is not associated with statistically significant impacts. However, it appears that Priority school identification led graduation rates to increase by about 8 percentage points in FY2013 and about 3.5 percentage points in FY2014, although the latter estimate does not reach statistical significance. Finally, it is worth noting that this analysis includes only Tier 1 high schools that qualified for SIG or received a Priority designation based on graduation rates. Thus, there are few high schools included in the analysis: 19 treated schools for SIG I, 9 for SIG II, and 6 for priority school identification.



Figure 3. Impact of SIG Eligibility & Priority School Designation on School Graduation Rates

Note. The figure reports the results of a difference-in-differences analysis of the impact of SIG eligibility and priority school identification on school graduation rates. Results are reported in percentage points. Solid bars indicate that the effects reach statistical significance (p<0.10 for a two-tailed test). Appendix B (Table B2) provides more details on the modeling strategy and results.

Impact of Receiving a SIG Award on School Quality

To calculate the average achievement effect of actually receiving a SIG award across both rounds, we conducted a difference-in-differences analysis that compares achievement growth in SIG-eligible schools that did and did not receive a grant to implement a SIG model. This analysis also has the benefit of providing a single estimate of SIG's impact from the first two cohorts.



Figure 4. Impact of Receiving a SIG Award on Schools' Annual Student Achievement Growth

Note. The figure reports the results of a difference-in-differences analysis of the impact of SIG eligibility and priority school identification on schools' annual student achievement growth. Effects are reported in standard deviation units. Solid bars indicate that the effects reach statistical significance (p<0.10 for a two-tailed test). Appendix B (Table B3) provides more details on the modeling strategy and results.

The results in Figure 4 indicate that the average improvements in school performance due to SIG awards peaked at around 0.10-0.15 standard deviations in additional student learning. That corresponds to students receiving the equivalent of 60 extra days of learning in a single year.¹⁹ Again, however, these positive effects decline and no longer reach statistical significance by 2015. It could be that the 2015 effects of 0.05-0.08 standard deviations—corresponding to around 30 extra days of learning—are quite real but that we lack the sample size necessary to confirm it. These would remain substantively significant impacts if that were the case.

Comparing the Impacts of SIG Turnaround and SIG Transformation on School Quality

Finally, Figure 5 compares the impacts of the SIG Transformation and Turnaround models, the latter of which is meant to be more aggressive and potentially more disruptive. This analysis is limited to comparing changes in schools' value-added estimates between the few that implemented the SIG Turnaround model to the many that implemented the SIG Transformation model. Again, although this design requires arguably more untestable assumptions than the RD analysis, we found that pre-treatment trends were generally similar between these two sets of schools.²⁰ Thus, the results in Figure 5 can be considered reasonable estimates of the differences in the causal impact of the two SIG models.

¹⁹ See Appendix H for the "days of learning" calculation.

²⁰ See Appendix E.

Figure 5. Impact of Implementing a SIG Turnaround Model (as opposed to a SIG Transformation Model) on Schools' Annual Student Achievement Growth



Note. The figure reports the results of a difference-in-differences analysis of the impact of the SIG Turnaround model as opposed to a SIG Transformation model on schools' annual student achievement growth. Effects are reported in standard deviation units. Solid bars indicate that the effects reach statistical significance (p<0.10 for a two-tailed test). Appendix E provides more details on the modeling strategy and results.

Figure 5 reveals that SIG Turnaround schools had somewhat inferior performance before they received the SIG awards (during FY2010 and FY2011), although these results do not reach statistical significance. However, consistent with some of the studies we reviewed above, by FY2012 the Turnaround model outperformed the Transformation model. These advantages dissipate and fail to attain statistical significance in later years, however.

Impacts on School Administration

The SIG and Priority models required administrative changes that could affect the quality of school leadership and instruction. Thus, we estimated the impact of SIG awards and Priority school interventions on the displacement of principals and teachers. The analyses are done using school-level measures of turnover, some of which we created using staff-level data, and the results we present below in Figure 6 are based on RD designs.²¹

²¹ See Appendix F, Table F3, and Appendix G, Table G1.

Figure 6. Impact of Receiving a SIG Award or Priority School Designation on the Turnover Rates of Principals and Teachers

Figure 6a. Impact of Receiving a SIG Award on the Turnover Rates of Principals and Teachers Present in 2009 (SIG I elegible schools)



Figure 6b. Impact of Receiving a SIG II Award on the Turnover Rates of Principals and Teachers Present in 2009 (SIG II eligible schools)



Figure 6c. Impactof Receiving a Priority School Designation on the Turnover Rates of Principals and Teachers Present in 2011



Note. The figures report the results of a regression discontinuity analysis of the impact of receiving a SIG award or a priority school designation on principal and teacher attrition since 2009 (for SIG I and II) and since 2011 (for Priority schools). Solid bars indicate that the effects reach statistical significance (p<0.10 for a two-tailed test). Appendix F (Tables F3 and F4) and Appendix G (Table G1) provide more details on the modeling strategies and results.

As Figure 6 reveals, schools that received SIG awards based on SIG I eligibility had lower principal and teacher turnover rates than they would have had otherwise. Specifically, the proportion of principals in place in 2009 that were gone by 2013 was 75 percentage points lower. Similarly, the proportion of a school's 2009 teachers who were not present in 2013 was 0.30 percentage points lower. On the other hand, schools that received awards based on SIG II eligibility appear to have had higher rates of turnover, though none of the results reaches statistical significance. Although SIG schools seem to have complied with the staff replacement provisions of the SIG turnaround models (see Table 5 above), staff turnover was already so great in these low-achieving SIG schools that turnaround-induced turnover may have failed to have a statistically significant impact on these schools. Indeed, if one combines both SIG cohorts, the results indicate that receiving a SIG award significantly reduced turnover among a school's staff.²²

Priority school interventions had the effects one would expect, however. The turnover rate among principals in place when the schools were identified (FY2011) was substantially higher in FY2013 (the first year of the reforms) than it would have been had schools not been subjected to the interventions. Indeed, the turnover rate of principals—which was already high in these schools, though not nearly as high as schools in the SIG pools—was 35 percentage points higher than it would have been without the interventions. Similarly, the turnover rate of teachers was about 15 percentage points higher than it would have been otherwise.

Although both SIG Turnaround and Transformation models required the replacement of the principal, only the Turnaround model mandated that at least 50 percent of teachers be replaced. Thus, one might expect more teacher attrition in schools implementing Turnaround. Figure 7 confirms that schools that implemented Turnaround experienced greater annual turnover among staff labeled "education professionals"—most of whom are classroom teachers. Specifically, Turnaround schools were around 20-30 percentage points more likely to replace educators in a given year while implementing the models. Interestingly, Turnaround had greater annual principal turnover rates by a comparable margin.



Figure 7. Impact of Implementing a SIG Turnaround Model (relative to a SIG Transformation Model) on Annual Principal and Educator Turnover Rates

Note. The figure reports the results of a difference-in-differences analysis of the impact of the SIG Turnaround model relative to a SIG Transformation model on the annual attrition rates of school principals and education professionals. Solid bars indicate that the effects reach statistical significance (p<0.10 for a two-tailed test). Appendix E provides more details on the modeling strategy and results.

²² See Table F4 in Appendix F.

In spite of the clear evidence that these interventions affected staff turnover, we found little evidence that the interventions led to significantly less experienced teachers, fewer "high quality" teachers (as defined by the State of Ohio), or lower student-teacher ratios.²³

Impacts on Students Attending at the Time of Identification

We found little evidence that the implementation of SIG and Priority turnaround models increased student mobility or otherwise disrupted the learning of students attending schools at the time they were identified. Among these students, there is some evidence that the Priority school interventions had a positive impact on math achievement and some evidence that SIG models had a negative average effect on reading achievement, but the results generally do not reach statistical significance. We also found that these interventions had little impact on student mobility.

There is one effect worth reporting, however. As Figure 8 indicates, SIG Turnaround appears to have had an immediate negative impact on the achievement of students who attended SIG schools when they were identified, although students whom we observe for five years (up to grade 8) appear to recover. Note that unlike the effects reported in previous figures, these effects are not annual achievement gains. They are cumulative.



Figure 8. Impact of Implementing a SIG Turnaround Model (relative to a SIG Transformation Model) on the Achievement of Students Attending SIG Schools at the Time Schools Were Identified

Note. The figure reports the results of a difference-in-differences analysis of the impact of the SIG Turnaround model relative to a SIG Transformation model on the achievement of students who attended schools the year in which they were identified. Effects are reported in standard deviation units. Negative coefficients indicate that SIG Turnaround is associated with lower student achievement. Solid bars indicate that the effects reach statistical significance (p<0.10 for a two-tailed test). Appendix E (Table E2) provides more details on the modeling strategy and results.

²³ See Appendix F for details.

VIII. Conclusion

The analysis employed regression discontinuity and difference-in-differences methods to estimate the impact of the SIG and Priority turnaround programs on school administration and quality. The purpose was to determine whether prior experiences with school turnaround efforts might provide insights about how Ohio should pursue school improvement under ESSA. The analysis provides convincing evidence that, on average, SIG interventions led to improvements in school quality as measured by annual student achievement growth in math and reading. It also indicates that both SIG and Priority school interventions had positive impacts on the graduation rates of Title I-served high schools. However, the analysis reveals that the effects generally diminished over time until they became statistically insignificant. That does not mean in all cases that the statistically insignificant positive effects (which are sometimes substantively large) did not persist. It may just be that the effects were too small to distinguish them from zero using available data.

The analysis also examined mechanisms that might explain these effects. Contrary to what one might expect given SIG's focus on school reconstitution, schools that received a SIG award generally experienced less principal and teacher turnover than they likely would have without the award. Priority school interventions, on the other hand, caused significant principal and teacher turnover. It is tempting, therefore, to conclude that staff churn undermined Ohio's Priority School interventions. But it is also important to keep in mind that the more disruptive SIG Turnaround model—which had a significant disruptive effect on the staff and students attending the schools when reforms were implemented—appears to have had an edge (at least initially) over the SIG Transformation model when it comes to school quality as captured by annual value-added.

There are many possible reasons for the results above. For example, the research we reviewed indicates that whether or not replacing principals and teachers leads to improvements in school quality depends on the relative quality of the incoming personnel. Turnover is generally harmful to student achievement—at least in the short term—unless incoming teachers are of sufficiently greater quality to compensate for the negative disruptive effects. Similarly, there is some evidence that providing districts and schools with technical assistance can help, but that surely depends on the nature of the assistance, the needs of particular schools and districts, and the extent to which the assistance imposes an administrative burden that distracts from a school's core mission. It is conceivable that SIG's large positive impact (particularly relative to Priority interventions) is due to the relatively low performance of its schools, the significant amount of funding provided, or the fact that districts could decide to apply for a grant and participate in the program if they anticipated a marginal benefit from doing so.

Overall, the study provides convincing evidence that interventions such as the SIG turnaround models have the potential to improve school quality very quickly, which is consistent with the theory underlying school turnaround reforms as well as research in other contexts. We also find, however, that initial positive impacts dissipated after the first 2-3 years of implementation, which is inconsistent with the notion that turnarounds lead to long-term improvements in school quality. There is suggestive evidence that some more modest positive effects persisted 4-5 years later, but we have too few observations to discern whether or not that is truly the case. Beyond that, the report is necessarily limited to describing some of the differences in the nature of these interventions and, via a literature review, providing some insights as to how they might affect school quality. We leave it to administrators and policymakers to determine which mechanisms are likely to play out in a particular context.

IX. Technical Appendix

This appendix assumes knowledge of econometric methods. It provides the details of the specific models we used to generate the estimates presented in the main body of the report, as well as the results of additional analyses we performed but chose not to emphasize in the main body (sometimes because tests indicated that a research design was questionable in a particular context).

The appendices are in the order in which the analyses were conducted. Appendix A tests the assumption of the regression discontinuity (RD) design that, near the cutoff determining assignment to treatment, schools receiving a treatment (SIG eligibility or Priority identification) were similar to those that did not receive treatment. Appendix B introduces the difference-in-differences (DID) framework underlying all of our analyses and reports the results of models we used to examine whether the pre-treatment trends of treated and untreated schools were similar. For example, Appendix B reveals that the pre-treatment trends in school value-added are not comparable if one compares schools that qualified for SIG or Priority status to those that did not (Table B1), but it also reveals that pre-treatment trends in value-added are comparable if one compares SIG-eligible schools that did and did not receive a SIG award (Table B3).

After testing the basic RD assumption and outlining and examining the assumptions of the DID framework, we begin the RD analysis of school value-added and graduation rates by showing how we embedded the RD design into the DID framework to generate the first set of results presented in the body of the report (Appendix C). The next few sections are ordered based on the substantive topics they explore—including the impact of SIG and Priority identification on students attending schools when they were identified (Appendix D), the comparison of the two SIG models (Appendix E), and impacts on school closure and staffing (Appendix F). Finally, Appendix G supplements the DID analysis estimating the impact of actually getting a SIG award using a "fuzzy RD" design, and Appendix H presents our calculation for converting value-added scores from Normal Curve Equivalent (NCE) scores, to standard deviation units (which are reported in the tables and figures in the main body of the report), to "days of learning."
APPENDIX A. Covariate Balance Tests

The regression discontinuity design assumes that there is no discontinuous change in pretreatment building characteristics at the performance threshold that determines whether or not a building was SIG-eligible or qualified as a Priority school. One can test this assumption by comparing differences in observed building characteristics at the threshold. To do so, we tested for differences in the FY2009 (SIG I), FY2010 (SIG II), and FY2011 (Priority school) building characteristics using the same modeling techniques we used to implement our RD design. (As we note below, the panel methods we employed in the main analysis also provide tests of other pretreatment building characteristics—namely pre-treatment trends in those building characteristics.) Specifically, we report the results of a series of covariate balance tests based on the following OLS model:

 $O_i = \tau Lowest5pct_i + \beta_1 X_i + \beta_2 X_i^2 + \beta_3 (Lowest5pct_i \times X_i) + \beta_4 (Lowest5pct_i \times X_i^2) + \alpha + \epsilon_i$

where *O* is an FY2009, FY2010, or FY2011 characteristic of building *i*, *Lowest5pct_i* is a variable indicating whether or not a building qualified for SIG or was identified as a Priority school due to a proficiency rate that placed them in the bottom five percent of schools, and *X* is the weighted proficiency rate used to determine eligibility (known as the "running" or "forcing" variable capturing distance from the threshold). Note that the proficiency rate is modeled as a quadratic polynomial and interacted with the "lowest 5 percent" indicator to allow separate functional forms on either side of the performance threshold. We selected the quadratic polynomial based on Gelman and Imbens (2014), and because it provides better balance than a linear specification. Importantly, *X* is centered at the performance threshold (29.175 percent for SIG I, 33.66 percent for SIG II, and 40.6 percent for priority schools) so that the coefficient τ captures the difference in the observable characteristics at the cutoff. Finally, α is the intercept for each regression model.

Table A1 below reports the results of a series of OLS models for each characteristic. In the interest of space—and because the results we present are based on models with restricted bandwidths—we provide the covariate balance estimates based on samples that include only those schools with combined proficiency rates that place them within 20 percentage points of the respective performance thresholds (i.e., X > -20 and X < 20). That includes all treated schools (or nearly all, depending on the year) but only a subset of untreated schools. We selected this bandwidth because the bandwidth selection procedure suggested by Imbens and Kalyanaraman (2012) usually indicated a bandwidth of around that size. We focus on results based on a restricted sample because pre-treatment covariate balance was superior to what we obtained using the full sample.

The results in Table A1 indicate that schools near the cutoffs generally are similar, as the RD design requires. The SIG-eligible schools in the first round have a smaller percentage of Black students and a greater number of teachers with bachelor's degrees, and treated schools in the second round of SIG have higher value-added scores in reading. But balance is quite good across the other cohorts and characteristics. One important fact to note, however, is that the value-added estimates are very noisy. Thus, we also estimated differences in the prior year score (FY-1), and a three-year average of value-added scores leading up to the fiscal year of identification. As the table illustrates, when a three-year average is used the coefficients reduce dramatically in size and the value-added estimate in reading no longer approaches substantive or statistical significance. This is important to note, as our RD analysis below often uses three prior years of value-added estimates as a baseline to minimize bias and improve the precision of our estimates of treatment impacts on school quality.

Table A1. Covariate Balance Using Quadratic Specification and Restricted Sample								
	SIG	I (FY2009)	SIG	II (FY2010)	Priority	v (FY2011)		
	N	Coeff./(SE)	N	N Coeff./(SE)		Coeff./(SE)		
Math Value-Added (t)	232	-2.01	254	1.58	330	-1.70		
	_	(1.31)	_	(1.26)		(1.05)		
Math Value-Added (FY-1)	224	0.20	241	0.80	330	0.37		
		(2.18)		(1.47)		(1.15)		
Math Value-Added (3-yr avg.)	213	-1.81	229	0.40	312	0.08		
		(1.06)		(0.81)		(0.73)		
Reading Value-Added	232	-2.61	254	2.24*	330	-1.22		
		(1.59)		(1.31)		(1.09)		
Reading Value-Added (t-1)	224	-0.08	242	-0.01	330	0.83		
		(2.30)		(1.47)		(1.16)		
Reading Value-Added (3-yr avg.)	213	-0.62	229	0.44	313	0.43		
		(1.25)		(0.86)		(0.53)		
Performance Index	224	-3.41	261	-0.17	372	-0.57		
		(2.19)		(1.14)		(1.27)		
Performance Index (t-1)	237	-2.95	256	-3.88	358	3.95		
		(3.43)		(2.78)		(1.84)		
Pct Econ Disadvantaged	244	-0.05	261	-0.02	373	0.05		
		(0.06)		(0.06)		(0.04)		
Pct Disabled	244	0.13	261	-0.12	373	-0.07		
		(0.11)		(0.10)		(0.08)		
Pct Limited English Prof.	244	-0.003	261	-0.01	373	0.03		
		(0.05)		(0.05)		(0.04)		
Percent Asian	244	-0.01	261	0.001	373	-0.01		
		(0.01)		(0.003)		(0.01)		
Percent Black	244	-0.20*	261	-0.07	373	0.02		
		(0.11)		(0.12)		(0.10)		
Percent Hispanic	244	0.04	261	0.05	373	0.04		
		(0.05)		(0.06)		(0.04)		
Enrollment	243	-1.40	261	78.85	373	-81.19		
		(71.35)		(68.98)		(115.42)		
Attendance Rate	244	-1.30	261	-1.10	373	-0.92		
		(1.20)		(1.40)		(0.86)		
Charter (0,1)	244	0.20	261	0.17	373	-0.07		
		(0.20)		(0.19)		(0.14)		
Teacher Count	243	-3.07	260	2.09	372	-7.22		
		(5.04)		(4.65)		(4.58)		
Teacher Attendance Rate	243	-9.02	260	6.29	372	3.06		
		(8.41)		(9.41)		(3.37)		
Teacher Experience (Yrs)	243	-1.43	260	-3.27	372	-0.49		
		(2.60)		(2.76)		(2.25)		
Percent Teachers Certified	242	4.59	259	2.32	373	2.33		
		(2.84)		(3.35)		(1.80)		
Percent Teachers w/ BA	243	1.52**	260	-1.06	372	-11.77		
		(0.69)		(1.04)		(7.71)		
Percent Teachers w/ MA	243	-5.77	260	-5.00	372	0.46		
		(8.06)		(8.00)		(7.59)		
Avg Teacher Salary (dollars)	243	-4,012.75	260	-8,123.81	372	-6,375.11		
		(6,896.75)		(5,593.82)		(6,283.27)		
Percent Teachers Certified	242	0.26	259	-0.02	373	-2.80		
		(0.24)		(0.02)		(1.88)		
Pct Teachers "High Quality"	242	2.63	259	-0.95	373	1.28		
		(6.03)		(3.98)		(3.47)		
Pct Staff Turnover Since t-1	242	-0.04	259	0.11	358	-0.01		
		(0.06)		(0.09)		(0.05)		
Note. The table presents coefficient e	stimates a	nd standard error	s for the i	indicator of scor	ing below t	the threshold		

Note. The table presents coefficient estimates and standard errors for the indicator of scoring below the threshold for priority designation from OLS models. Each coefficient is from a separate regression. Robust standard errors are in parentheses below coefficient estimates: *p<0.10; **p<0.05; ***p<0.01

Appendix B. DID Analysis

The difference-in-differences analysis compares treated schools' pre- and post-treatment performance to the changes in performance over the same time period in buildings that did not receive treatment. The first treatment we consider is whether or not schools were identified as being in the lowest five percent, therefore making them eligible to apply for SIG funds or requiring them to implement priority school interventions. Specifically, we estimated the following OLS model:

$$Y_{it} = \alpha_i + \theta_t + \tau^t (Lowest5pct_i \times \theta_t) + \epsilon_{it}$$

where the school performance measure Y for building i in fiscal year t is a function of building fixed effects (α_i), fiscal year fixed effects (θ_t), and an interaction between a variable indicating whether or not a building was in the bottom 5 percent (*Lowest5pct_i*). The building fixed effects are differenced out. The fiscal year fixed effects (θ_t) are captured through the inclusion of indicator variables for all years except the last pre-treatment year (FY2009 for SIG I, FY2010 for SIG II, and FY2011 for Priority). Thus, the model captures differences relative to FY2009, FY2010, or FY2011. The coefficient vector τ^t captures differences in trends between buildings that did and did not receive the "lowest five percent" designation. Finally, we clustered the standard errors at the building level to account for within-building correlations over time.

Note that samples of Tier 1 schools are limited to schools that did not receive SIG grants in a prior round. Also note that our preferred school quality measure is ODE's value-added measure, which is in Normal Curve Equivalent (NCE) units. Conversations to standard deviations—on which figures in the report are based—and annual "days of learning" are described in Appendix H. Finally, as we note in the main body, Table B1 reveals pre-treatment trends and, thus, invalidates the DID approach when it comes to estimating the impact of SIG eligibility and Priority status on VA.

	SI	GI	SIG II (No Prie	or SIG Award)	Priority (No	Priority (No Prior SIG)	
	Reading VA	Math VA	Reading VA	Math VA	Reading VA	MathVA	
Fiscal Year	(NCEs)	(NCEs)	(NCEs)	(NCEs)	(NCEs)	(NCEs)	
2007	0.31	-0.31	-0.19	0.01	0.60	2.31***	
	(1.05)	(1.06)	(1.17)	(0.94)	(0.61)	(0.80)	
2008	1.14	2.44**	1.86*	2.93***	1.71**	0.64	
	(1.08)	(1.03)	(1.07)	(1.11)	(0.67)	(0.63)	
2009			0.35	0.49	-0.14	2.08***	
			(1.09)	(0.91)	(0.58)	(0.53)	
2010	2.27**	3.15***			1.70**	1.51**	
	(0.97)	(0.85)			(0.67)	(0.62)	
2011	1.11	3.53***	2.08**	2.58***			
	(1.00)	(0.10)	(0.94)	(0.81)			
2012	1.89*	2.97***	0.48	2.02**	-0.35	0.28	
	(1.07)	(1.12)	(0.86)	(0.95)	(0.56)	(0.48)	
2013	1.75**	2.44***	1.50	2.03***	1.00*	2.05***	
	(0.89)	(0.91)	(0.94)	(0.64)	(0.55)	(0.56)	
2014	1.38	3.07***	1.73**	2.37***	0.94**	3.37***	
	(1.09)	(0.71)	(0.82)	(0.68)	(0.39)	(0.52)	
2015	0.07	0.35	-1.71	-1.00	1.72**	-0.56	
	(1.06)	(1.06)	(1.23)	(1.00)	(0.84)	(0.59)	
N	5,471	5,471	5,488	5,487	15.193	15,190	
Bldg Count	681	681	662	662	1,794	1,794	
Method/Model	DID / Panel	DID / Panel	DID / Panel	DID / Panel	DID / Panel	DID / Panel	
Reference Year	2009	2009	2010	2010	2011	2011	

Table B1. Impact of SIG Eligibility and Priority Identification on School-Level Value-Added Estimates

Note. The table presents coefficient estimates for the indicator of scoring below the 5 percent proficiency threshold. Standard errors clustered by building are in parentheses below coefficient estimates: p<0.10; p<0.05; p<0.01

We also estimated similar models for graduation rates. Specifically, we identified Tier 1 high schools that could qualify as persistently low-achieving based only on graduation rates and conducted the same analysis as above. Importantly, note that pre-treatment differences in graduation rates are minimal for SIG I (see first column). Thus, the DID method may in fact allow us to identify the causal impact of the intervention on graduation rates. To retrieve more precise estimates, we re-estimated all three models using graduation rates from 2007 through 2009 as the baseline for SIG and 2009 through 2011 as a baseline for the priority school analysis (see last three columns). Note that we once again removed schools that received SIG grants in a prior round.

$$Y_{it} = \alpha_i + \theta_t + \tau^t (GradRateBelow60pct_i \times \theta_t) + \epsilon_{it}$$

	SIG I	SIG II	Priority 2012	SIG I	SIG II	Priority 2012
	Grad Rate	Grad Rate	Grade Rate	Grad Rate	Grad Rate	Grade Rate
Fiscal Year	(Pct)	(Pct)	(Pct)	(Pct)	(Pct)	(Pct)
2007	-1.94	11.95	5.02	_	_	_
	(3.21)	(9.48)	(5.60)			
2008	-2.26	8.19**	7.16	_	_	_
	(2.04)	(3.86)	(4.81)			
2009	_	_	0.86	_	_	_
			(4.06)			
2010	1.64	1.61	1.87	3.01	-4.65	_
	(3.80)	(5.44)	(3.17)	(4.02)	(6.27)	
2011	0.25	4.82	_	1.62	-1.40	_
	(4.99)	(4.90)		(5.16)	(5.49)	
2012	6.14*	2.82	-0.95	7.53*	-3.37	-1.26
	(3.60)	(5.67)	(2.84)	(3.94)	(6.00)	(2.21)
2013	7.82*	3.94	8.38***	9.20**	-2.25	8.07**
	(4.14)	(5.95)	(2.39)	(4.50)	(6.69)	(3.48)
2014	6.33	3.97	4.22	7.71	-2.22	3.56
	(4.71)	(5.94)	(4.81)	(4.94)	(6.69)	(4.02)
Ν	482	378	738	482	378	565
Bldg Count	66	50	96	66	50	96
Method/Model	DID / Panel	DID / Panel	DID / Panel	DID / Panel	DID / Panel	DID / Panel
Reference Year	2009	2011	2011	2007-09	2007-09	2009-11

Table B2. Impact of SIG-eligibility or Priority Identification on Graduation Rates

Note. The table presents coefficient estimates for the indicator of scoring below the 60 percent graduation rate threshold. Standard errors clustered by building are in parentheses below coefficient estimates: p<0.05; p<0.05; p<0.01

Finally, among schools eligible for SIG, we compared the outcomes of those that did and did not receive SIG grants. Note that there is likely selection bias, as districts that applied for and received SIG grants might have been more motivated to improve their schools and more committed to implementing the prescribed models. On the other hand, this comparison involves schools with similar characteristics, which addresses the concern with comparing SIG-eligible schools with those that were not SIG eligible. Specifically, we estimated the following OLS model

$$Y_{it} = \alpha_i + \theta_t + \tau^t (SIGRecipient_i \times \theta_t) + \epsilon_{it}$$

where $SIGRecipient_i$ indicates whether or not a SIG-eligible school received a SIG grant in either cohort I or II. Note the minimal differences in pre-treatment trends in the results presented in Table B3. Thus, at least for building value-added measures, the DID approach might provide us with a plausibly causal estimate of SIG's impact.

	Bldg VA	Bldg VA	Bldg	Bldg VA	Bldg VA	
	Math	Reading	Grad	Math	Reading	Bldg Grad
Fiscal Year	(NCEs)	(NCEs)	Rate (Pct)	(NCEs)	(NCEs)	Rate (Pct)
2007	2.18	-0.82	13.69**	_	_	_
	(2.04)	(1.64)	(6.61)			
2008	0.86	-0.55	6.77	_	_	_
	(1.90)	(1.78)	(4.83)			
2009	_	-	-	_	-	-
2010	2.00	-1.58	15.30**	1.05	-1.14	9.37
	(1.57)	(1.52)	(7.41)	(1.39)	(1.30)	(7.85)
2011	3.42**	1.80	25.51***	2.50**	2.22*	19.59**
	(1.64)	(1.30)	(7.85)	(1.22)	(1.14)	(8.29)
2012	3.14	1.24	22.07**	2.22	1.66	16.43*
	(2.11)	(1.44)	(9.11)	(1.61)	(1.35)	(9.26)
2013	4.04*	1.60	20.88**	3.13**	2.02*	15.24
	(2.07)	(1.22)	(9.60)	(1.52)	(1.06)	(9.41)
2014	2.93*	1.25	18.76**	2.01	1.67	13.12
	(1.75)	(1.48)	(8.68)	(1.38)	(1.17)	(8.47)
2015	2.00	1.19	_	1.08	1.61	_
	(2.09)	(1.52)		(1.82)	(1.44)	
Ν	507	507	193	507	507	193
Bldg Count	74	74	32	74	74	32
Stdnt Count	N/A	N/A	N/A	N/A	N/A	N/A
	DID /	DID /	DID /	DID /	DID /	DID /
Method/Model	Panel	Panel	Panel	Panel	Panel	Panel
Ref. Year	2009	2009	2009	2007-09	2007-09	2007-09

Table B3. Impact of Receiving a SIG Award (SIG-Eligible Schools Only)

Note. The table presents coefficient estimates for the indicator of implementing a SIG model and receiving SIG funding (1) as opposed to being SIG eligible but not applying for and receiving the grant. Standard errors clustered at the building level are in parentheses below coefficient estimates: *p<0.10; **p<0.05; ***p<0.01

APPENDIX C. RD Analysis of Building Value-Added & Achievement Levels

The RD design uses the strict cutoff determining SIG eligibility and Priority designations to estimate the causal impact of these treatments on school quality. (See Lee and Lemieux [2010] for a description of the RD design.) In particular, we employ a combination of the RD modeling strategy we used for the covariate balance test (see Appendix A) and the DID modeling strategy (see Appendix B), as per Cellini et al (2010). The reason for this is that building value-added estimates are noisy are reveal some potential imbalance, so examining pre- and post-treatment changes in building value-added should help minimize bias from any remaining pre-treatment covariate imbalances and enhance the precision of our estimates. Modeling in this way also provides the added benefit of allowing us to easily check balance in pre-treatment trends associated with these buildings.

Specifically, we report the results of the following OLS model for each outcome:

$$Y_{it} = \alpha_i + \theta_t + \tau^t (Lowest5pct_i \times \theta_t) + \beta_1^t (X_i \times \theta_t) + \beta_2^t (X_i^2 \times \theta_t) + \beta_3^t (Lowest5pct_i \times (X_i \times \theta_t)) + \beta_4^t (Lowest5pct_i \times (X_i^2 \times \theta_t)) + \epsilon_{it}$$

where the performance measure Y for building *i* in fiscal year *t* is a function of building fixed effects (α_i) , fiscal year fixed effects (θ_t) , and an interaction with a variable indicating whether or not a building was in the bottom 5 percent based on the combined proficiency rate (*Lowest5pct*_i). Once again, the building fixed effects are differenced out. The fiscal year fixed effects (θ_t) are captured through the inclusion of indicator variables for all years except the baseline pre-treatment year. As in the covariate balance tests, we include a quadratic specification for the running variable that is allowed to differ on each side of the threshold. The coefficient vector τ^t captures differences in performance trends between buildings that did and did not reside in the bottom 5 percent but that were near the proficiency cutoff.

In some specifications, we use FY2009 (for SIG), FY2010 (for SIG II), and FY2011 (for Priority) as the omitted pre-treatment baselines, but in our preferred specifications we constrain to zero multiple pre-treatment years (FY07-FY09, FY07-FY10, or FY09-FY11) in order to minimize bias and increase precision. As the tables below reveal, the method generally (though not always) reveals no discernable pre-treatment differences between treated and untreated schools. There are some instances of such imbalances, however, which is why we generally preferred to feature results from models that use three pre-treatment years as a baseline.

	Reading Value	-Added (NCEs)	Math Value-A	Added (NCEs)	Performance Index	
2007	0.94	_	-2.93		3.46	_
	(2.47)		(2.72)		(3.23)	
2008	1.91	_	2.07	_	0.41	_
	(2.96)		(2.49)		(2.88)	
2009	-	-	-	-	-	-
2010	2.77	1.82	0.96	1.27	1.22	-0.06
	(2.14)	(2.31)	(1.54)	(2.01)	(2.27)	(2.64)
2011	3.02	2.07	2.37	2.69	-1.39	-2.66
	(2.22)	(2.23)	(2.24)	(2.28)	(3.06)	(2.84)
2012	6.77***	5.85**	4.04*	4.37*	3.28	2.02
	(2.44)	(2.62)	(2.39)	(2.39)	(5.16)	(4.89)
2013	3.79*	2.83	1.44	1.87	-6.19	-7.46
	(1.93)	(2.00)	(2.03)	(1.94)	(8.87)	(8.52)
2014	2.02	1.02	2.66	3.10**	-1.63	-2.97
	(1.95)	(1.71)	(1.62)	(1.34)	(4.56)	(4.30)
2015	0.84	-0.13	2.17	2.62	7.18	5.89
	(3.21)	(2.96)	(2.61)	(2.40)	(4.44)	(4.07)
Ν	1,836	1,836	1,836	1,836	1,896	1,896
Bldg Count	242	242	242	242	244	244
Method/Model	RD/Panel	RD/Panel	RD/Panel	RD/Panel	RD/Panel	RD/Panel
Reference Year	2009	2007-09	2009	2007-09	2009	2007-09
Rest. Bandwidth	Yes	Yes	Yes	Yes	Yes	Yes

Table C1. Impact of SIG I Eligibility on Annual Building Value-Added and Performance Index

Note. The table presents coefficient estimates for the indicator of scoring below the 5 percent proficiency threshold. Standard errors clustered by building are in parentheses below coefficient estimates: p<0.10; p<0.05; p<0.01

|--|

	Reading Value	-Added (NCEs)	Math Value-A	Added (NCEs)	Performance Index	
2007	-3.16*		-1.23		-4.85	
	(1.75)		(2.36)		(3.56)	
2008	-2.44	_	-1.03	_	-3.51	_
	(1.89)		(2.07)		(2.55)	
2009	-1.87	_	-0.27	_	-2.66	_
	(2.28)		(2.53)		(2.59)	
2010	_	_	_	_	_	_
2011	-0.50	1.12	-1.98	-1.45	-1.73	0.81
	(1.79)	(1.26)	(2.12)	(1.57)	(2.19)	(2.35)
2012	1.03	2.65	0.76	1.28	4.52	7.03**
	(1.93)	(1.76)	(1.72)	(1.77)	(3.59)	(3.23)
2013	-0.26	1.34	-0.98	-0.46	3.45	5.95*
	(1.93)	(1.64)	(1.45)	(1.58)	(3.47)	(3.21)
2014	-0.14	1.47	0.30	0.82	3.28	5.77**
	(1.46)	(1.21)	(1.40)	(1.47)	(2.73)	(2.56)
2015	-5.15**	-3.58*	0.45	0.94	1.61	4.14
	(2.36)	(2.11)	(2.45)	(2.04)	(4.64)	(4.70)
Ν	1,992	1,992	1,993	1,993	2,052	2,052
Bldg Count	246	246	246	246	247	247
Method/Model	RD/Panel	RD/Panel	RD/Panel	RD/Panel	RD/Panel	RD/Panel
Reference Year	2010	2007-10	2010	2007-10	2010	2007-10
Rest. Bandwidth	Yes	Yes	Yes	Yes	Yes	Yes

Note. The table presents coefficient estimates for the indicator of scoring below the 5 percent proficiency threshold. Standard errors clustered by building are in parentheses below coefficient estimates: *p<0.10; **p<0.05; ***p<0.01

t	Reading Value	-Added (NCEs)	Math Value-A	Added (NCEs)	Performa	nce Index
2009	-0.22	_	2.99**	_	2.44	_
	(1.23)		(1.30)		(1.83)	
2010	0.95	_	1.63	_	3.08*	_
	(1.52)		(1.42)		(1.64)	
2011	_	_	_	_	_	_
2012	1.20	0.86	2.35*	0.63	0.48	-2.33*
	(1.35)	(1.16)	(1.34)	(1.23)	(1.58)	(1.38)
2013	0.53	-0.02	1.99	-0.21	-0.77	-3.00
	(1.12)	(0.99)	(1.34)	(1.10)	(1.83)	(1.83)
2014	0.69	0.07	2.90**	1.53	-0.18	-2.54
	(1.10)	(1.01)	(1.32)	(1.22)	(2.27)	(2.22)
2015	-0.52	-1.54	-1.01	-1.91	-1.80	-3.58
	(2.19)	(2.21)	(1.64)	(1.44)	(3.05)	(2.97)
Ν	2,063	2,063	2,062	2,062	2,166	2,166
Bldg Count	315	315	315	315	325	325
Method/Model	RD/Panel	RD/Panel	RD/Panel	RD/Panel	RD/Panel	RD/Panel
Specification	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.
Reference Year	2011	2009-11	2011	2009-11	2011	2009-11
Rest. Bandwidth	Yes	Yes	Yes	Yes	Yes	Yes

Table C3. Impact of Priority Identification on Building Value-Added and Performance Index (no prior SIG)

Note. The table presents coefficient estimates and standard errors for the indicator of scoring below the 5 percent proficiency threshold. Standard errors clustered by building are in parentheses below coefficient estimates: *p<0.10; **p<0.05; ***p<0.01

Main and Keau	mg				
	SIG I Eli	gibility	SIG II Eligibility (no prior SIG award)		
	Reading (SDs)	Math (SDs)	Reading (SDs)	Math (SDs)	
2010	0.26	0.12	_	_	
	(0.19)	(013)			
2011	0.56**	0.30	0.21	-0.05	
	(0.24)	(0.20)	(0.17)	(0.12)	
2012	0.59**	0.25	0.40*	0.27*	
	(0.28)	(0.19)	(0.22)	(0.15)	
2013	0.80*	0.42	0.67**	0.44**	
	(0.41)	(0.36)	(0.28)	(0.22)	
2014	0.56**	0.23	0.58***	0.23	
	(0.27)	(0.19)	(0.21)	(0.16)	
N	1,209	1,209	1,350	1,350	
Bldg Count	243	243	246	246	
Method/Model	RD/Panel	RD/Panel	RD/Panel	RD/Panel	
Reference Year	2009	2009	2009-10	2009-10	
Rest. Bandwidth	Yes	Yes	Yes	Yes	

Table C4. Impact of SIG Eligibility on Building Achievement Levels in Math and Reading

Note. The table presents coefficient estimates for the indicator of scoring below the 5 percent proficiency threshold. Standard errors clustered by building are in parentheses below coefficient estimates: *p<0.10; **p<0.05; ***p<0.01

APPENDIX D. Analysis of Student-Level Data

We also conducted DID and RD analyses using student-level data that enable us to examine how interventions affected students attending schools at the time they were identified. Specifically, we focused on the achievement of students who attended the treated and untreated schools during the baseline years used to allocate the treatment: FY2009 for SIG I, FY2010 for SIG II, and FY2011 for the Priority school analysis. The logic of this analysis is that whereas schools might improve their ability to educate children as a result of these interventions, the disruption or excitement associated with the intervention might affect existing students differently than students who enter later.

First, we conducted the RD analysis using the same models as in the Appendix C. The primary difference is that observations are now at the student level instead of the building level, and students, as opposed to buildings, are identified during the baseline years. Thus, the analysis follows treated students if they transition to other schools. Table D1 presents the results of analyses of student achievement (standardized by grade, subject, and year and reported in standard deviation units) in reading, math and science.

Table D1.	impact of B.	IO Engivin	ly on Bluue	his Attenun	ng when ben	loois iucinii	icu			
		SIG I		SIG II	SIG II (no prior SIG award)			Priority (no prior SIG award)		
	Reading	Math	Science	Reading	Math	Science	Reading	Math	Science	
	(SDs)	(SDs)	(SDs)	(SDs)	(SDs)	(SDs)	(SDs)	(SDs)	(SDs)	
2010	-0.03	0.02	0.05	_	_	_	_	_	_	
	(0.05)	(0.06)	(0.07)							
2011	0.02	0.08	0.03	0.07	0.08	-0.02	_	_	_	
	(0.09)	(0.08)	(0.09)	(0.06)	(0.08)	(0.08)				
2012	-0.01	0.04	0.02	0.07	0.08	0.08	-0.01	0.01	-0.03	
	(0.07)	(0.07)	(0.08)	(0.08)	(0.10)	(0.08)	(0.03)	(0.04)	(0.07)	
2013	-0.01	0.06	0.01	0.11	0.05	-0.02	-0.07	0.03	-0.07	
	(0.07)	(0.07)	(0.09)	(0.08)	(0.09)	(0.11)	(0.05)	(0.04)	(0.09)	
2014	-0.01	0.01	0.05	0.14	0.10	0.02	-0.00	0.10*	0.04	
	(0.07)	(0.08)	(0.11)	(0.09)	(0.08)	(0.11)	(0.06)	(0.05)	(0.08)	
N	233,601	233,410	10,540	234,868	234,651	10.604	261,484	261,229	14,280	
Stdnt Cnt	60,869	60,839	10,540	66,636	66,592	10,604	83,188	83,102	14,280	
Bldg Cnt	244	244	228	247	247	234	325	325	302	
Mthd/Mdl	RD/Panel	RD/Panel	RD/Yrly	RD/Panel	RD/Panel	RD/Yrly	RD/Panel	RD/Panel	RD/Yrly	
Specif.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	
Ref. Yr	2007-09	2007-09	N/A	2008-10	2008-10	N/A	2009-11	2009-11	N/A	
Rest.										
Bndwdth	Ves	Ves	Ves	Ves	Ves	Ves	Ves	Ves	Ves	

Table D1. Impact of SIG Eligibility on Students Attending when Schools Identified

Note. The table presents coefficient estimates for the "lowest five percent" indicator variable for each year. The coefficients for science are estimated separately for each year, whereas the coefficients for math and reading are estimated using panel methods. The science achievement models include controls for a student's math and reading achievement in FY09 for SIG I, FY10 for SIG II, and FY11 for priority school identification. Observation counts for the science achievement models are from the earliest listed model. Robust standard errors clustered at the building level are in parentheses below coefficient estimates: *p<0.05; **p<0.01

Table D2 examines whether the intervention led students to switch buildings and districts (since treatment identification) or whether it affected annual mobility rates. For example, "Diff Bldg" indicates whether a student is in a different building than in 2009 for SIG I, 2010 for SIG II, and 2011 for priority identification. "Switched building" on the other hand, identifies whether a student is in a different building than in the previous year. Thus, the estimates present the impacts of the treatments on student mobility rates.

	1	SIGI		SIG II	(no prior SIG	award)	Priority (no prior SIG award)		
			Switched			Switched			Switched
	Diff Bldg	Diff Dist	Bldg	Diff Bldg	Diff Dist	Bldg	Diff Bldg	Diff Dist	Bldg
	(2009)	(2009)	(Annual)	(2010)	(2010)	(Annual)	(2011)	(2011)	(Annual)
2010	-0.03	-0.03	-0.03	_	_	_	-	_	-
	(0.07)	(0.06)	(0.07)						
2011	0.05	-0.03	0.02	0.15	0.35**	0.15	_	_	_
	(0.09)	(0.10)	(0.09)	(0.13)	(0.14)	(0.13)			
2012	0.00	-0.03	-0.01	0.13	0.39**	0.10	-0.05	-0.07*	-0.05
	(0.05)	(0.10)	(0.06)	(0.11)	(0.17)	(0.08)	(0.10)	(0.04)	(0.10)
2013	-0.01	-0.07	0.07	0.05	0.46**	0.06	-0.02	-0.08	0.00
	(0.03)	(0.12)	(0.06)	(0.06)	(0.16)	(0.11)	(0.09)	(0.05)	(0.06)
2014	0.002	-0.15	0.14**	0.04	0.45***	0.15**	-0.05	-0.08	-0.06
	(0.003)	(0.12)	(0.05)	(0.03)	(0.15)	(0.08)	(0.05)	(0.06)	(0.08)
2015									
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N	20,167	20,167	20,167	19,860	19,860	19,860	25,860	25,860	25,860
Stdnt Cnt	20,167	20,167	20,167	19,860	19,860	19,860	25,860	25,860	25,860
Bldg Cnt	230	230	230	237	237	237	305	305	305
Mthd/Mdl	RD/Yrly	RD/Yrly	RD/Yrly	RD/Yrly	RD/Yrly	RD/Yrly	RD/Yrly	RD/Yrly	RD/Yrly
Specif.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.
Rest.	-	-	-	-	-	-	-	-	-
Bndwdth	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table D2. Impact of SIG Eligibility on Student Mobility

Note. The table presents coefficient estimates and standard errors for the "lowest 5 percent" indicator variable for each year. Mobility is for students in non-terminal grades. Robust standard errors clustered at the building level are in parentheses below coefficient estimates: p<0.10; **p<0.05; **p<0.01

Finally, we conducted the DID analysis (see Appendix B for model specification) at the student level to compare students attending SIG-eligible schools whose schools did and did not receive a SIG award. Table D3 presents the results.

racintinea			
	Reading	Math	
	(SDs)	(SDs)	
2010	-0.02	0.02	
	(0.03)	(0.03)	
2011	0.03	0.05	
	(0.04)	(0.03)	
2012	-0.07*	0.03	
	(0.04)	(0.04)	
2013	-0.04	0.05	
	(0.07)	(0.08)	
2014	-0.08	0.05	
	(0.08)	(0.08)	
Ν	64,591	64,532	
Stdnt Cnt	20,751	20,742	
Bldg Cnt	75	75	
Method/Model	DID/Panel	DID/Panel	
Ref. Year	2007-09	2007-09	
Rest. Bndwdth	Yes	Yes	

Table D3. Impact of SIG Award on Students Attending when Schools Identified

Note. The table presents coefficient estimates for the indicator of implementing a SIG model and receiving SIG funding (1) as opposed to being SIG eligible but not applying for and receiving the grant. Standard errors clustered at the building level are in parentheses below coefficient estimates: p<0.10; p<0.05; p<0.01

Appendix E. Comparison of SIG Models

The table below presents the results of a "difference-in-differences" analysis (see Appendix B for model specification) comparing schools that implemented the SIG Turnaround model as opposed to the SIG Transformation model. As before, we estimated models that use 2009 as a baseline (so that we can look for pre-treatment differences in trends) and that use 2007-2009 as a baseline to minimize bias and enhance precision. The first six columns examine building-level school quality measures, whereas the last two examine the impact on standardized achievement scores of students attending these schools in 2009.

11204015 (52	Bldg	(), (), (), (), (), (), (), (), (), (),	Bldg	Bldg	Bldg	Bldg
	VA	Dida VA	Grad	V A	MA	Grad
Fiscal	V A Moth	Diug VA Daading	Diau	V A Moth	Paading	Bete
Fiscal	(NCEa)	(NCEa)	(Dat)	(NCEa)	(NCEa)	(Dat)
1 eai	(NCES)	(NCES)	(FCl)	(INCES)	(INCES)	(FCl)
2007	1.19	0.69	7.29	-	-	-
2000	(1.37)	(2.25)	(5.59)			
2008	-2.39	-2.11	5.10	-	_	_
	(1.51)	(1.40)	(6.55)			
2009	_	_	_	_	_	_
2010	-1.72	-2.23	4.54	-1.30	-1.74	0.46
	(2.23)	(1.90)	(5.45)	(1.95)	(1.47)	(4.68)
2011	-1.10	-1.34	4.90	-0.69	-0.85	0.83
	(1.97)	(1.61)	(5.86)	(1.83)	(1.31)	(4.91)
2012	2.13	2.88	9.71	2.50	3.33**	5.64
	(1.90)	(1.80)	(7.06)	(1.87)	(1.59)	(5.87)
2013	-0.26	1.19	15.31*	0.10	1.64	11.24
	(1.46)	(1.35)	(8.50)	(1.18)	(1.06)	(7.17)
2014	0.55	-1.04	26.13***	0.91	-0.60	22.06***
	(1.51)	(1.33)	(6.87)	(1.26)	(1.17)	(6.17)
2015	0.18	0.92	. ,	0.59	1.40	. ,
	(2.21)	(2.81)	N/A	(1.98)	(2.69)	N/A
N	404	404	252	404	404	252
Bldg						
Count	57	57	36	57	57	36
Stdnt						
Count	N/A	N/A	N/A	N/A	N/A	N/A
	DID /	DID /	DID /	DID /	DID /	DID /
Mthd/Mdl	Panel	Panel	Panel	Panel	Panel	Panel
initia/initia	i unoi	i unei	i unoi	2007-	1 unor	i unoi
Ref. Year	2009	2009	2009	09	2007-09	2007-09
	-007	-007			2007 07	1007 07

Table E1. Comparison of SIG "Tur	naround" vs. "Transformation"
Models (SIG I & II combined)	

Note. The table presents coefficient estimates for the indicator of implementing a "turnaround" model (1) as opposed to a "transformation" mode (0). Standard errors clustered at the building level are in parentheses below coefficient estimates: *p<0.10; **p<0.05; ***p<0.01

combined; Student-level data)									
Fiscal	Math	Reading	Math	Reading					
Year	(SDs)	(SDs)	(SDs)	(SDs)					
2007	-0.02	-0.05	_	_					
	(0.08)	(0.05)							
2008	-0.05	-0.01	_	_					
	(0.06)	(0.04)							
2009	_	_	_	-					
2010	-0.06	-0.12**	-0.04	-0.11**					
	(0.05)	(0.06)	(0.05)	(0.06)					
2011	-0.11*	-0.10	-0.09	-0.09					
	(0.07)	(0.07)	(0.06)	(0.06)					
2012	-0.06	-0.08	-0.05	-0.07					
	(0.07)	(0.05)	(0.07)	(0.04)					
2013	-0.06	-0.10**	-0.05	-0.09**					
	(0.09)	(0.05)	(0.08)	(0.04)					
2014	0.00	-0.07	0.02	-0.05					
	(0.10)	(0.06)	(0.09)	(0.05)					
2015									
	N/A	N/A	N/A	N/A					
Ν	47,233	47,286	47,233	47,286					
Bldg									
Count	48	48	48	48					
Stdnt									
Count	14,472	14,478	14,472	14,478					
	DID /	DID /	DID /	DID /					
Mthd/Mdl	Panel	Panel	Panel	Panel					
Ref. Year	2009	2009	2009	2009					

Table E2. Impact of SIG Turnaround modelrelative to SIG Transformation model (SIG I & II combined; Student-level data)

Note. The table presents coefficient estimates for the indicator of implementing the Turnaround model (1) as opposed to the Transformation model (0). Standard errors clustered at the building level are in parentheses below coefficient estimates: *p<0.10; **p<0.05; ***p<0.01

APPENDIX F. School Closure and Staffing

We estimated numerous models examining building closure and staffing changes. We report below the results of models that illustrate the types of changes we observed in schools' staffs. We do not report models of salaries, part-time vs. full-time staff, and temporary vs. certificated teachers because they did not yield significant results. Note that we indicate the analysis type (RD vs. DID) and whether coefficients were estimated simultaneously across all years (panel) or whether they were estimated year by year (yearly) at the bottom of each table. Note that the first four columns reveal turnover or closure rates since the baseline year. Thus, the closure estimates capture the impact on the proportion of schools present in the baseline year that were no longer open in a later year. Similarly, the principal turnover measure captures the proportion of principals in place in 2009 that were no longer in place in a given year.

		Principal		Staff					
		Change	Teacher	Change	Staff	Average	Percent of		Ed Prof
	Closure	Rate	Change Rate	Rate	Retiremen	Teacher	Teachers	Student -	Turnover
	(since	(relative to	(relative to	(relative to	t Rate	Experienc	that are	Teacher	Rate
	2009)	2009)	2009)	2009)	(annual)	e (years)	"HQ"	Ratio	(annual)
2010	0.00	0.26	-0.02	-0.05	0.00	-0.77	-10.11	-1.78	-0.01
	(0.003)	(0.24)	(0.05)	(0.05)	(0.01)	(0.87)	(7.19)	(3.42)	(0.10)
2011	-0.02	0.30	-0.08	-0.09	0.03**	-1.08	-2.71	2.07	0.06
	(0.16)	(0.26)	(0.07)	(0.06)	(0.01)	(1.05)	(5.84)	(5.53)	(0.14)
2012	-0.06	-0.19	-0.04	-0.11*	-0.04	-0.49	-7.94	-4.47	-0.08
	(0.16)	(0.22)	(0.07)	(0.07)	(0.04)	(1.14)	(4.97)	(4.11)	(0.12)
2013	-0.09	-0.26	-0.04	-0.10	0.00	-1.12	-4.09	-3.01	-0.06
	(0.17)	(0.23)	(0.08)	(0.07)	(0.01)	(1.26)	(5.52)	(3.62)	(0.12)
2014	-0.05	-0.10	-0.04	-0.09	0.00	-1.92	-3.66	-1.42	0.03
	(0.18)	(0.17)	(0.08)	(0.08)	(0.01)	(1.97)	(6.14)	(3.41)	(0.14)
2015						1.00	4.39	-0.18	
	N/A	N/A	N/A	N/A	N/A	(2.07)	(9.93)	(4.07)	N/A
Mthod/Mdl	RD/Yearly	RD/Yearly	RD/Yearly	RD/Yearly	RD/Panel	RD/Panel	RD/Panel	RD/Panel	RD/Panel
Specification	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.
Ref. Year	N/A	N/A	N/A	N/A	2009	2007-09	2007-09	2007-09	2009
Rest.									
Bandwidth	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table F1. Impact of SIG I Eligibility on Staffing

Note. The table presents coefficient estimates for the indicator of scoring below the combined proficiency threshold. Standard errors clustered by building are in parentheses for the panel models, whereas robust standard errors are reported in parentheses for the OLS models estimate by year. *p<0.10; **p<0.05; **p<0.01

Table F2. Impact of SIG II Eligibility (no prior	r SIG award)	on Staffing
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		Principal		Staff			Percent		
		Change	Teacher	Change	Staff	Average	of		Ed Prof
	Closure	Rate	Change Rate	Rate	Retirement	Teacher	Teachers	Student -	Turnover
	(since	(relative to	(relative to	(relative to	Rate	Experience	that are	Teacher	Rate
	2009)	2009)	2009)	2009)	(annual)	(years)	"HQ"	Ratio	(annual)
2011	0.01	0.01	-0.07	-0.03	-0.02	-0.52	-3.48	2.05	-0.14
	(0.01)	(0.23)	(0.07)	(0.07)	(0.02)	(0.86)	(4.95)	(2.37)	(0.09)
2012	-0.02	0.29**	-0.01	0.06	0.02	-0.17	-4.58	1.68	-0.07
	(0.12)	(0.12)	(0.08)	(0.08)	(0.09)	(1.18)	(6.59)	(1.51)	(0.11)
2013	0.04	0.27**	-0.04	0.00	-0.05**	-0.10	1.68	-1.91	-0.23
	(0.16)	(0.12)	(0.09)	(0.09)	(0.02)	(1.36)	(5.64)	(1.94)	(0.17)
2014	0.02	0.07	-0.06	-0.02	-0.02	2.36	4.27	-4.28***	-0.24**
	(0.17)	(0.07)	(0.08)	(0.09)	(0.02)	(1.9)	(5.36)	(1.48)	(0.11)
2015						6.68***	-4.78	2.97	
	N/A	N/A	N/A	N/A	N/A	(2.12)	(11.00)	(3.45)	N/A
Mthod/Mdl	RD/Yearly	RD/Yearly	RD/Yearly	RD/Yearly	RD/Panel	RD/Panel	RD/Panel	RD/Panel	RD/Panel
Specification	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.
Ref. Year	N/A	N/A	N/A	N/A	2009-10	2008-10	2008-10	2008-10	2009-10
Rest. Band.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note. The table presents coefficient estimates for the indicator of scoring below the combined proficiency threshold. Standard errors clustered by building are in parentheses for the panel models, whereas robust standard errors are reported in parentheses for the OLS models estimate by year. *p<0.10; **p<0.05; ***p<0.01

Tuble I et Im	puet of 1 1101	ny fachtine	ation on Stain	ing (ino prior)	310 u ⁽¹⁾ u ⁽¹⁾ u ⁽¹⁾				
		Principal		Staff			Percent		
		Change	Teacher	Change		Average	of		Ed Prof
	Closure	Rate	Change Rate	Rate	Staff	Teacher	Teachers	Student -	Turnover
	(since	(relative to	(relative to	(relative to	Retirement	Experience	that are	Teacher	Rate
	2011)	2011)	2011)	2011)	Rate	(years)	"HQ"	Ratio	(annual)
2012	0.06	0.06	0.13**	0.12**	-0.01	0.70	-3.20	-0.17	0.08
	(0.06)	(0.15)	(0.06)	(0.06)	(0.01)	(1.12)	(2.25)	(2.76)	(0.07)
2013	0.09	0.35*	0.14**	0.13**	-0.01	-0.20	-4.46*	-0.87	0.10
	(0.08)	(0.20)	(0.06)	(0.06)	(0.01)	(1.30)	(2.51)	(2.96)	(0.08)
2014	0.09	0.36*	0.15**	0.17***	-0.01	-0.98	-3.94	-0.95	0.14
	(0.11)	(0.19)	(0.06)	(0.06)	(0.01)	(1.54)	(4.00)	(3.17)	(0.10)
2015						-1.23	-0.01	0.20	
	N/A	N/A	N/A	N/A	N/A	(1.51)	(3.16)	(3.26)	N/A
Mthod/Mdl	RD/Yearly	RD/Yearly	RD/Yearly	RD/Yearly	RD/Panel	RD/Panel	RD/Panel	RD/Panel	RD/Panel
Specification	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.
Ref. Year	N/A	N/A	N/A	N/A	2009-11	2009-11	2009-11	2009-11	2009-11
Rest.									
Bandwidth	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

 Table F3. Impact of Priority Identification on Staffing (no prior SIG award)

Note. The table presents coefficient estimates for the indicator of scoring below the combined proficiency threshold. Standard errors clustered by building are in parentheses for the panel models, whereas robust standard errors are reported in parentheses for the OLS models estimate by year. *p<0.10; **p<0.05; **p<0.01

Table F4. Impact of Receiving a SIG Award (SIG-eligible buildings only)

140101111				Brote Standard	8. (11.)	
	Principal	Ed Prof	Staff	Average	Pct "High	Student-
	Turnover	Turnover	Retirement	Teacher	Quality"	Teacher
	Rate	Rate	Rate	Experience	Teachers	Ratio
	(yearly)	(yearly)				
2010	-0.10	-0.16**	-0.00	-1.13	7.05	-1.73
	(0.16)	(0.08)	(0.01)	(0.77)	(6.54)	(1.88)
2011	-0.35*	-0.19**	0.00	0.64	-0.75	-9.84
	(0.19)	(0.08)	(0.01)	(1.84)	(3.23)	(8.27)
2012	-0.53***	-0.15	0.00	1.10	2.16	-0.47
	(0.20)	(0.10)	(0.02)	(1.63)	(3.92)	(1.86)
2013	-0.71***	-0.18	0.01	2.82	4.70	1.37
	(0.22)	(0.11)	(0.01)	(3.25)	(3.86)	(3.10)
2014	-0.40**	-0.11	-0.01	2.98	1.48	3.11
	(0.19)	(0.10)	(0.007)	(3.58)	(4.13)	(3.54)
2015	_	_	_	-0.75	-2.04	-0.67
				(1.66)	(4.28)	(4.49)
Ν	284	463	530	660	641	643
Bldg Count	69	85	85	85	85	85
Method/Model	DID/Panel	DID/Panel	DID/Panel	DID/Panel	DID/Panel	DID/Panel
Reference Yrs	2009	2009	2009	2007-09	2007-09	2007-09

Note. The table presents coefficient estimates comparing SIG eligible schools that did and did not receive a SIG award. Robust standard errors clustered at the building level are in parentheses below coefficient estimates: $^{p}<0.15$; $^{*p}<0.05$; $^{**p}<0.01$

Table F5. Turnaround vs. Transformation (Buildings with SIG awards only)									
	Principal	Ed Prof	Teacher	Average	Pct "High	Student-			
	Turnover	Turnover	Retirement	Teacher	Quality"	Teacher			
	Rate	Rate	Rate	Experience	Teachers	Ratio			
	(annual)	(annual)							
2010	-0.01	0.03	-0.02	0.61	0.39	-4.31			
	(0.14)	(0.05)	(0.02)	(0.64)	(2.33)	(4.42)			
2011	0.22	0.22***	-0.01	0.39	3.28	-4.79			
	(.019)	(0.06)	(0.02)	(0.75)	(3.31)	(4.51)			
2012	0.23	0.31***	0.07	0.47	5.72	-4.73			
	(0.18)	(0.06)	(0.05)	(0.90)	(3.55)	(4.48)			
2013	0.32**	0.18**	0.00	0.45	6.03**	-3.58			
	(0.12)	(0.07)	(0.02)	(1.13)	(3.00)	(4.48)			
2014	-0.02	0.01	0.00	0.86	4.90	-3.23			
	(0.14)	(0.09)	(0.01)	(1.31)	(4.84)	(4.45)			
2015				-0.34	0.67	-4.40			
	N/A	N/A	N/A	(1.41)	(8.78)	(4.75)			
N	312	422	490	621	614	614			
Bldg Count	68	73	73	73	73	73			
Method	DID/Panel	DID/Panel	DID/Panel	DID/Panel	DID/Panel	DID/Panel			

Table F5. Turnaround vs. Transformation (Buildings with SIG awards only

Note. The table presents differences-in-differences (DID) estimates and standard errors for models comparing SIG schools that implemented the "turnaround" model relative to those that implemented the "transformation" model. Robust standard errors clustered at the building level are in parentheses below coefficient estimates: $^{p}<0.15$; $^{*p}<0.05$; $^{**p}<0.01$

APPENDIX G. Impact of Receiving a SIG Award (Fuzzy RD)

We also estimated the impact of SIG awards using an instrumental variables approach. Specifically, we used a Two-stage Least Squares model to conduct a "fuzzy RD" analysis. The first stage estimates the impact of the FY2009 or FY2010 proficiency rate threshold for SIG eligibility on the probability of schools receiving a SIG award using a quadratic specification of the running variable interacted with the treatment indicators, and the second stage employs the predicted probability of the SIG award indicator on various outcomes. The models include baseline value-added and achievement levels in the regressions to minimize bias and enhance precision.

First stage results indicate that the SIG I and SIG II thresholds are good predictors of receiving SIG funding in 2011, 2012, 2013, and 2014. The SIG I threshold indicator has coefficients (and significance levels) of 0.59 (p=0.001) for 2011 and 0.40 (p=.015) for 2012-2014. The SIG II threshold indicator has a coefficient (and significance level) of 0.23 (p=0.078) for 2011 and 0.72 (p=0.000) for 2012-2014. We do not review these results thoroughly because of the relative imprecision of the estimates. The tables below present second-stage results for some key covariates using models that exclude charter schools, which yield comparable but somewhat stronger effects than models that include charter schools.

Excluded)						
				Principal	Staff	Teacher
	Reading			Change	Change	Change
	VA	Math VA	Closure	Since 2009	Since 2009	Since 2009
2011	2.27	2.90	0.09	-0.31	-0.12*	-0.11
	(2.33)	(2.79)	(0.33)	(0.29)	(0.06)	(0.08)
2012	5.62**	3.30	-0.08	-0.67*	-0.21**	-0.16
	(2.51)	(2.67)	(0.37)	(0.35)	(0.08)	(0.11)
2013	0.19	-1.55	-0.20	-0.75**	-0.22**	-0.29**
	(1.80)	(1.47)	(0.34)	(0.33)	(0.10)	(0.11)
2014	-2.51	-1.34	-0.21	-0.33	-0.14	14
	(1.53)	(1.30)	(0.24)	(0.33)	(0.09)	(0.12)
	Fuzzy RD/	Fuzzy RD/	Fuzzy RD/	Fuzzy RD/	Fuzzy RD/	Fuzzy RD/
Method/Model	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Specification	Quad.	Quad.	Quad.	Quad.	Quad.	Quad.

Table G1. Impact of SIG Funding (Instrument is SIG I indicator; Charter Schools Excluded)

Note. The table presents coefficient estimates for a variable capturing the probability that a school received a SIG award. The estimate for each year is from a separate regression. Robust standard errors are in parentheses below coefficient estimates: p<0.10; p<0.05; p<0.01

				Principal	Staff	Teacher
	Reading			Change	Change	Change
	VA	Math VA	Closure	Since 2009	Since 2009	Since 2009
2011	-2.87	-9.39	0.01	0.35	-0.10	-0.09
	(8.68)	(14.60)	(0.04)	(0.68)	(0.28)	(0.30)
2012	2.18	1.62	-0.08*	0.13	0.05	0.01
	(1.69)	(1.70)	(0.04)	(0.14)	(0.07)	(0.09)
2013	-2.20	-1.72	0.08	0.23	-0.04	-0.06
	(1.65)	(1.78)	(0.21)	(0.17)	(0.09)	(0.10)
2014	-0.75	-0.99	0.08	0.00	-0.08	-0.09
	(0.68)	(1.64)	(0.25)	(0.10)	(0.06)	(0.07)
	Fuzzy RD/	Fuzzy RD/	Fuzzy RD/	Fuzzy RD/	Fuzzy RD/	Fuzzy RD/
Method/Model	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Specification	Ouad.	Ouad.	Ouad.	Ouad.	Ouad.	Ouad.

Table G2. Impact of SIG Funding (Instrument is SIG II indicator; Charter Schools Excluded)

Note. The table presents coefficient estimates for a variable capturing the probability that a school received a SIG award. The estimate for each year is from a separate regression. Robust standard errors are in parentheses below coefficient estimates: p<0.10; **p<0.05; **p<0.01

APPENDIX H. Converting Estimates to Student-Level SDs and Days of Learning

All of the school-level value-added impact estimates in the body of the report are reported in standard deviation units. However, the analyses themselves—which we report in the appendix—were done using ODE's value-added measures, which are in Normal Curve Equivalent (NCE) units. To characterize effects in terms of standard deviation units, we converted the results in the appendix from NCE units to standard deviations by dividing the NCE estimates by 21.063. Those are the estimates of impacts on student achievement growth that we report in the figures. When discussing the results in those figures, we frequently refer to them in terms of extra "days of learning." To obtain this estimate, we divided the standard deviation estimates by the average annual achievement growth of students in those grades (providing us with a proportion in terms of an annual year of learning) and multiplied by 180 days to get "days of learning" based on an 180-day school year. Specifically, based on Hill et al. (2008), we assumed average learning gains in grade 4-8 of 0.314 in reading and 0.422 in math. We provide the calculations below for each figure reported in the main body of the report.

RD - Bidg Data (NCE) RD - Bidg Dat			Data (SD)		Days of Le	arning		
Figure 1a. S	SIG I Eligibili	ty						
	Reading	Math		Reading	Math		Reading	Math
2010	1.82	1.27	2010	0.09	0.06	2010	49.53	25.72
2011	2.07	2.69	2011	0.10	0.13	2011	56.34	54.47
2012	5.85	4.37	2012	0.28	0.21	2012	159.21	88.50
2013	2.83	1.87	2013	0.13	0.09	2013	77.02	37.87
2014	1.02	3.10	2014	0.05	0.15	2014	27.76	62.78
2015	-0.13	2.62	2015	-0.01	0.12	2015	-3.54	53.06
Figure 1b. S	SIG II Eligibil	ity						
	Reading	Math		Reading	Math		Reading	Math
2011	1.12	-1.45	2011	0.05	-0.07	2011	30.48	-29.36
2012	2.65	1.28	2012	0.13	0.06	2012	72.12	25.92
2013	1.34	-0.46	2013	0.06	-0.02	2013	36.47	-9.32
2014	1.47	0.82	2014	0.07	0.04	2014	40.01	16.61
2015	-3.58	0.94	2015	-0.17	0.04	2015	-97.43	19.04
Figure 1c. P	riority Scho	ol Identificatio	n					
	Reading	Math		Reading	Math		Reading	Math
2012	0.86	0.63	2012	0.04	0.03	2012	23.41	12.76
2013	-0.02	-0.21	2013	0.00	-0.01	2013	-0.54	-4.25
2014	0.07	1.53	2014	0.00	0.07	2014	1.91	30.98
2015	-1.54	-1.91	2015	-0.07	-0.09	2015	-41.91	-38.68
Figure 2. In	npact of SIG	Eligibility on A	chievem	ent Levels				
				SIG I			Reading	Reading
				Reading	SIG II Readi	ng	(SIG I)	(SIG II)
			2010	0.26	N/A	2010	149.04	N/A
			2011	0.56	0.21	2011	321.02	120.38
			2012	0.59	0.40	2012	338.22	229.30

2013

2014

0.80

0.56

0.67

0.58

2013

2014

384.08

332.48

458.60

321.02

	Reading	Math		Reading	Math		Reading	Math
2010	-1.14	1.05	2010	-0.05	0.05	2010	-31.03	21.26
2011	2.22	2.50	2011	0.11	0.12	2011	60.42	50.63
2012	1.66	2.22	2012	0.08	0.11	2012	45.18	44.96
2013	2.02	3.13	2013	0.10	0.15	2013	54.98	63.38
2014	1.67	2.01	2014	0.08	0.10	2014	45.45	40.70
2015	1.61	1.08	2015	0.08	0.05	2015	43.82	21.87

Figure 4. Impact of SIG Award (SIG Eligible Only)

Figure 5. SIG Turnaround vs. SIG Transformation

	Reading	Math		Reading	Math			
2010	-1.74	-1.30	2010	-0.08	-0.06	2010	-47.36	-26.33
2011	-0.85	-0.69	2011	-0.04	-0.03	2011	-23.13	-13.97
2012	3.33	2.50	2012	0.16	0.12	2012	90.63	50.63
2013	1.64	0.10	2013	0.08	0.00	2013	44.63	2.03
2014	-0.6	0.91	2014	-0.03	0.04	2014	-16.33	18.43
2015	1.4	0.59	2015	0.07	0.03	2015	38.10	11.95

Figure 8. SIG Turnaround vs. SIG Transformation (DID; Student-Level Achievement)

	Reading	Math			
2010	-0.11	-0.04	2010	-63.06	-17.06
2011	-0.09	-0.09	2011	-51.59	-38.39
2012	-0.07	-0.05	2012	-40.13	-21.33
2013	-0.09	-0.05	2013	-51.59	-21.33
2014	-0.05	0.02	2014	-28.66	8.53

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