Tim Adams

Vanderbilt University

EDD Capstone

Catalyzing Improvement

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Executive Summary:

The focal organization (TFO) is a mid-sized philanthropy fund in the northeastern United States. Historically, the fund has worked in the charter sector primarily, though it is not exclusive to the charter sector. In the early 2010s, much of the focus of the organization centered on starting new charter schools throughout the city. This mission has become untenable as the school board has been hesitant to grant new charters recently (Hanna & Graham, 2021). The organization wishes to use their role to foster collaboration and learning among similar schools, preferably united around some type of "early warning" indicator as opposed to more lagging indicators such as high school graduation rate or SAT scores. The upshot of this goal is that the organization seeks to make changes to the operation of schools within its purview to better support students in their academic journey. The literature reviewed here reflects what utility the fields of implementation and improvement science have to offer towards this end, in addition to a central research framework of Multi-Tiered Systems of Support (MTSS). MTSS is relevant as a central framework because the organization seeks to understand more of what is, and is not, occurring at schools within its purview. The goal of this paper is to situate those questions into a more targeted framework of Multi-Tier Systems of Supports (MTSS), which can lead to a clearer picture of what portfolio schools are experiencing as the crux of MTSS is a way to analyze student support systems in schools to improve student achievement. Thus, the research aims to ultimately answer two key questions. First, what are the conditions for TFO portfolio schools that indicate capacity for schoolwide student support using early warning indicators such as

9th-grade On-Track? Secondly, what trends and patterns exist among member schools, which might point to high-leverage areas for TFO to focus on in the next iterations of collective learning?

Key Findings From The Data

What are the conditions for TFO portfolio schools that indicate capacity for schoolwide student support using early warning indicators such as 9th-grade On-Track?

School leadership capacity has room for improvement to address the myriad priorities facing school leaders, which is resulting in stretched resources and anxiety.

School leaders feel immense pressure to produce results across the spectrum of the school. Prioritization is difficult given the demands placed on assistant principals and principals to make progress on key metrics related to accountability. Oftentimes, administrators feel that they can provide information to teachers but it is hard to take action without more personnel working on common problems. This notion came through in a variety of interactions with school leaders. The most precious resource of all would be time. The leaders felt that they had reached a capacity limit and that any new initiative would mean a current one would have to go.

What trends and patterns exist among member schools, which might point to high-leverage areas for TFO to focus on in the next iterations of collective learning?

School Data Infrastructure Lacks Coherence For Any Collective Improvement Effort

Data infrastructure is focused on more lagging indicators (e.g. standardized test scores) than leading indicators such as attendance or grades. For TFO, this would lead to a limited ability to track what has worked and when during a previous curriculum rollout. At the school level, it seems hard to discern what metrics are being most followed. The data systems are built around the Keystone standardized test assessments and discipline. Grade data is disseminated to teachers, but the results seem mixed. Some teachers are using these to prioritize conferences, but there does not appear to be a systemic way to identify what the outcomes of these conferences would be. School leaders described themselves as "data-driven", but rarely could articulate how teachers used data on a daily or weekly basis to address student issues.

Recommendations

Recommendation 1: Assess Socio-Emotional Health of Leaders To Prevent Burnout

> *Assess the burnout potential of principals and other key school leaders. The Covid-19 pandemic has put school leaders in a novel position, with new responsibilities while trying to maintain student success in a most trying time. Understanding school leader anxiety is an important context for any potential initiative.*

Recommendation 2: Analyze School-Level Capacity For Improvement

> *Use a well-vetted tool to understand the full-scale of school capacity for student support. The SAM is one tool, but many states have developed their own and there may be others more appropriate depending on the context of the school (district, charter, parochial). The data showed that school leaders feel that they have enough responsibilities as it is. If any change is to take root, taking full stock of the school capacity should prove a necessary step.*

Recommendation 3: Facilitate Development of Distributive Leadership Models

> *Leadership literature has changed along with implementation science. Both fields implore organizations to become flatter and more agile compared to yesteryear's top-down, hierarchical models of organizational leadership. This step flows logically out of recommendation two, as schools will likely be at different stages in developing distributive leadership based on their unique contexts and any facilitation should be tailored towards that end.*

Recommendation 4: Set A Clear Strategic Direction With Clear Outcome Goals

> *The goal is strategic direction for any improvement efforts, unified in a way that allows autonomy but still provides direction to schools the organization is looking to improve (Ancona & Bresman, 2007). What a strategic direction does is help teams identify where to prioritize energy and manage overload (Ancona & Bresman, 2007). The school leaders we spoke with are high-capacity individuals, but the notion that they can handle an increasing number of complex projects is, as Deborah Ancona from the MIT Leadership Institute puts it, "dangerous" (Ancona & Bresman, 2007). TFO is situated in a position and is well-equipped to provide the support needed as a funder. Providing leadership teams with leadership development, coaching support, data support, and systems analysis support - all of these ideas are something that could be in their purview.*

Recommendation 5: Build Capacity & Infrastructure For School Data Use

> *There is good reason to make this the final recommendation, as data can frighten educators in this era of accountability. However, if the previous recommendations have been engaged, then fostering a stronger data infrastructure can help set the stage for an improvement initiative. Without such an infrastructure, any type of collective learning across a group of schools would be difficult to gauge until accountability data would be released. Such lagging information prevents TFO and schools under its purview from pivoting with agility as changes occur within schools. This is true no matter the indicator and whatever the initiative chosen.*

Introduction

Philadelphia School District is the nation's 8th-largest district, serving well over 100,000 students. Philadelphia faces similar struggles as any urban district. A significant majority of the students the district serves come from families well below the poverty line and neighborhoods that are greatly affected by the trauma of community violence (Gray, Sirinides, Fink, Flack, DuBois, Morrison, & Hill, 2017).The onus is on the district to produce supportive, safe environments for students. However, many district schools have strained budgets and struggle with maintaining full enrollment as approximately one-third of all Philadelphia students attend one of the many charter schools in the city (Gray et al., 2017; Hanna & Graham, 2021). Despite these concerns, district superintendent William Hite argued upon the unveiling of the latest school progress report numbers in 2019 that, "This is a story of progress" (Hanna & Graham, 2020)**.** By the district's own accountability measures, there has been improvement in the past decade.While two-thirds of the district's third-grade students do not meet state standards in mathematics or English Language Arts, the district does note that the average school score on the citywide report card measure has increased by 11 points on the districts 100 point scale since its introduction in 2014-2015 (Hanna & Graham, 2020).

To better contextualize this information, a brief primer on the district's accountability system may have utility. From a high level, Philadelphia's school report card places schools

within four categories: model, reinforce, watch, and intervene. Since the 2014-2015 school year, the number of schools in the top two categories of “model” and “reinforce” has more than doubled. Of the schools in the city, 220 are traditional and 87 are operated by charters. Charter schools generally outperformed their traditional peers during this time (Graham, 2019). Critics of such claims point to the fact that some charters function as selective enrollment schools, denying entry or removing students for a variety of reasons, which can inflate their numbers. Across all schools, district and charter alike, the district has touted an increase in attendance rates as a bellwether of improvements yet to be seen (Graham, 2019). Given these improvements, there is an argument to be made for the narrative that Philadelphia is moving its schools in a positive direction. These improvements are part of a concentrated effort by the city to improve student outcomes. The city continues to increase investment in the school system, increasing its budget by over 7% in the past year. In the most recent budget, there is significant new money allocated for more math support, school nurses, and support for English Language Learners (Graham & Hanna, 2019). The district has also touted its increase in funding for arts education at the elementary level and other various markers of school improvement in its published “Action Plan” ("Philadelphia School District Action Plan", 2020). While these initiatives and data points highlight a narrative of improvement, some in the city have raised concerns about the methods used to quantify that improvement. Likewise, the Covid-19 pandemic will undoubtedly cast a pall over any progress and be a significant factor in school improvement over the coming years.

Some city leaders and the Philadelphia Inquirer have called some of the recent improvements into question by identifying hidden or manipulated data practices (Calefati &

Graham, 2019). For example, officials argue that the practice of counting a student who swipes their ID card upon entry as "present" all day hides the fact that many do not attend class, data that is easily ascertained by looking at teacher attendance data (Calefati & Graham, 2019). The district and the Philadelphia Inquirer have been at odds over releasing this data, which is just one area where the public has expressed concerns regarding transparency on behalf of the district (Calefati & Graham, 2019). As with most urban school districts, Philadelphia has wide gaps between students of different demographic breakdowns, including race and socioeconomic status. Given this reality, other critics of the district data policy have pointed to a need for more transparency and a granularity of data that can then be utilized to direct resources where they are needed most (Burney, 2020). The question of where to direct resources to where they are most needed is a pressing one facing every school district and will become even more critical as we enter into the unknown public finance world due to the Covid-19 pandemic.

The Focal Organization

The focal organization, hereafter referred to as TFO, is a mid-sized philanthropy fund in the northeastern United States. For its Philadelphia operations and activities, the mission is to improve educational outcomes and opportunities for low-income students and their families through a variety of investment strategies. The organization serves as a grantor of funds to all types of schools in the city - traditional, charter, and parochial. Historically, the focus of the organization has been on creating "high-quality" seats in the city through attracting proven charter networks to create new schools within the city. In recent years, the aim of the

organization has shifted to investing in current schools with an assortment of grants for a variety of initiatives. The results of these efforts have been mixed according to TFO's leadership, as program evaluation has been an area in need of development for the organization. Furthermore, the Covid-19 pandemic has limited progress in this area despite the recent prioritization. Moving forward, the organization is looking for evidence-based approaches to school improvement for investment. This would diverge from the current approach. Currently, the fund is structured to provide help to schools in three ways. One is through direct school investments, which are grants given on a case-by-case basis for schools depending on their needs. Another is through partnering with other organizations, such as graduate schools or educational non-profits such as TNTP (formerly The New Teacher Project), to boost talent pathways for teachers, teacher-leaders, and school leaders. The third pillar of investment is in community strategies that can help families better access high-quality schools across the city. Importantly, the organization has recently begun to analyze the efficacy of their direct investments, so this paper seeks to identify ways to improve the efficacy of direct school investments.

From early-stage problem-identification conversations, TFO made it quite clear that they are seeking a set of early warning indicators for school improvement, which would be predictive of critical outcomes such as high school graduation rate and college matriculation rates. The intention of using such indicators is to find out if an investment is on-track to improve in the traditionally lagging indicators of test-score attainment, growth, high school graduation, and college matriculation. For example, if a grant is provided to help a 6-12 school improve their instructional program, the results may take years to become visible in the aforementioned

lagging indicators. To evaluate on shorter timelines, an “early-warning” indicator would be quite helpful to the organization. TFO operates across educational sectors, with district, charter, and parochial schools all having their own preferred metrics of measurement. The goal of the organization is to not only identify an indicator, but consider how they would organize support to improve on any measure. In short, they operate in a large and complex ecosystem and recognize that some type of infrastructure for support is important to move the work forward. In sum, TFO wants to find an indicator to help identify improving schools more quickly and build the capacity of schools to utilize such a measure for their own improvement.

Oftentimes, the organization has implemented initiatives that affect schools on a set time frame and then wait, hopefully, for the payoff in key metrics such as graduation. However, the organization would like to be able to find something that trends across schools in their portfolio that are on a trajectory of true school improvement, which they can then communicate to their various stakeholders. From their own internal data analysis, there are a few bright points that have led us to a common place to begin investigating. One takeaway from conversations with the team is a belief that strong leadership works in schools to drive student success by successful development of human capital, focus on instructional priorities, and creating an organizational capacity to do this efficiently (Grissom, Egalite, Lindsay, 2021). This is not controversial, but the organization has noticed that schools that begin seeing markers of school climate improvement, such as decreased suspension rates or student survey data, begin to improve in the years to follow by the aforementioned metrics which are more likely to show up in school accountability models. Secondly, one specific high school began seeing more success by creating a middle

school, which provided stronger control over the transition from 8th to 9th-grade. This successful model is Carver High School, which established a middle school and has seen its high school metrics improve greatly in the wake of this decision. This aligns with recent learning, more deeply discussed in the literature review, that the district has been working for years on developing supports for 9th-grade "On-Track" work.

Problem of Practice

The problem of practice is building the capacity of schools to engage in ongoing learning to effect meaningful, measurable change. TFO attempted to organize communities of practice around common goals with limited success. In the 2018-2019 school year, TFO began an initiative for curriculum adoption in both high school literacy and middle school mathematics. The two groups included five to seven schools who would work together to improve their core instructional program, including their curriculum and assessments. The TFO team did not see success or traction on this project over a two year timespan. While some of that is attributable to the pandemic, the leadership of TFO believes that schools and school leaders need to be assessed on their capacity to lead change at the building level. The evidence for this is mostly anecdotal, from the TFO leadership team, based on this experience and working with schools in other capacities. This will be explored in the data analysis portion of this paper. For now, TFO is concerned with pursuing any large-scale initiative prior to having a deeper understanding of what schools need and are able to accomplish. Thus, the problem of practice is that TFO seeks to understand how to effectively organize schools under its portfolio for collective, sustained

improvement centered on key metrics for school improvement and accountability for Philadelphia and Pennsylvania such as test score attainment, graduation rates, and college matriculation rates.

The Research Question & Theoretical Framework

The problem of practice seeks to improve in the key indicators for school improvement, which are often lagging indicators. Such indicators, while useful for accountability, do not have as much utility for organizational agility and learning around improvement. Consequently, a key suggestion brought by the partner organization has centered on finding early warning indicators of improvement in the schools that they serve that are predictive of these lagging indicators. It seems logical that the indicator, whatever it may be, is a way to assess how well schools are supporting their students in their academic progression. Such an indicator could be calculated more often than the traditional accountability measures, making it more useful for strategic, agile planning. Thus, it is important for the research to help the organization understand what the context of portfolio schools actually is prior to instituting any change such as investigating "On-Track" work. The goal of this paper is to situate those questions into a more targeted framework of Multi-Tier Systems of Supports (MTSS). The crux of MTSS is a way to analyze student support systems in schools, which centers on a three tier prevention model. The first tier serves the purpose of preventing the emergence of new issues by providing strategies for all students. A second tier is more supportive, but still relatively modest. A third tier is more intensive and individualized for the student-specific needs.

The reasoning for the utilization of this framework is that most states are using an MTSS framework for improving the instructional program of schools under their purview (Schiller, Chow, Thayer, Nakamura, Wilkerson, & Puma, 2021). Moreover, there is ample effort being made to identify tools that can provide actionable data for both schools and districts that intend to improve the MTSS, and thus the educational outcomes of their students (Schiller et al, 2021). One tool adopted by multiple states is the SAM (Self-Assessment of MTSS), developed for use by the State of Florida (Schiller et al, 2021). The creators of the SAM point to the sheer complexity of our educational systems as a driver for the tool's development, hoping to use it to provide a systems view of the processes in place in the hopes of identifying areas of critical improvement (Stockslager, Castillo, Brundage, Childs, & Romer, 2016). As such, this paper seeks to use this framework of analyzing MTSS from a systems level to answer the two critical research questions at hand:

1. What are the conditions for TFO portfolio schools that indicate capacity for schoolwide student support using early warning indicators such as 9th-grade On-Track?
2. What trends and patterns exist among member schools, which might point to high-leverage areas for TFO to focus on in the next iterations of collective learning and improvement?

Literature Review

MTSS | The Importance of Multi-Tiered System of Supports For School Improvement

The purpose of high school education has shifted in the previous two decades towards a focus on preparation for college and other postsecondary educational opportunities and away from high school serving as an endpoint before entry to the workforce (U.S. Department of Education, 2012). The lofty and admirable goal of getting every student to and through their postsecondary education brings significant challenges that push schools, districts, and their associated partners in the work (e.g. universities, philanthropy organizations) to bring systemic improvement that can ensure no individual student slips through the proverbial cracks. MTSS (Multi-Tiered System of Supports) is being used to address that specific challenge. This framework originated in education at the elementary level and within special education, but has its roots in healthcare. The crux of MTSS is a way to analyze student support systems in schools, which centers on a three tier prevention model. The first tier serves the purpose of preventing the emergence of new issues by providing strategies for all students. A second tier is more supportive, but still relatively modest. A third tier is more intensive and individualized for the student-specific needs. Moreover, MTSS is viewed as a tool to help students at-risk for poor learning outcomes, serving as a lever for equity (Schiller et al, 2021).

MTSS is born out of the RTI (Response to Intervention), which serves to identify learners in the early grade levels who are in need of more support. Students would be provided support at

increasing intensity. If these tiers of intensive support failed to address the student needs, a student may be recommended for special education (Schiller et al, 2021). Over time, the ideas of MTSS/RTI have become less tightly coupled with special education and viewed as a practical tool for all learners (Schiller et al, 2021). Moreover, there is significant research on what are key practices for MTSS, which broadly fall into the categories below (Morningstar, Lombardi, & Test, 2018):

1. Schoolwide support for students, staff, & families
2. Using data to drive problem solving and decision making
3. Fostering tiers of proactive support which increase student's academic success
4. Utilizing screening and progress monitoring
5. Having a spectrum of evidence-based practices across increasingly intensive supports (Tier 1: Universal, Tier 2: Targeted/Small-Group, Tier 3: Intensive and Individualized)

The goal of such measures is designed to keep students academically successful. Integration with a school or district's goals for college and career readiness may be variable, but the core tenet is a deliberate approach towards supporting students as needed throughout their academic career (Morningstar et al, 2018). The link between MTSS and postsecondary success is in the nascent stage of research (Morningstar et al, 2018). What is more concrete given the study is what conditions set the stage for an effective implementation of an MTSS system.

School leadership is a critical mediating factor in the success of a school's MTSS program (Rowan, Camburn, Correnti, & Miller, 2009). Effective MTSS is highly complex and requires distilling evidence-based practices and effective implementation practices into a coherent approach across a school, district, or network (Fixen, Naoom, Blasé, Friedman, & Wallace, 2005). Such a process requires that the schools have considerable leadership capacity for such undertakings (Rowan et al, 2009). It is not surprising that combining the concepts of MTSS and implementation science increase the chances of success (Bohanon & Wu, 2014). Common successful implementation of MTSS characteristics include generating buy-in across stakeholders, increasing resources for the success via financial and/or human capital, and focusing on the roles, culture, and procedures of staff members to effect changes that may impact student achievement (Bohannon, Gilman, Parker, Amell, Sortino, 2016). Identifying personnel who are dedicated to this task is quite important as an "MTSS Team" can help operationalize the necessary improvements and disseminate the learnings to the staff more broadly (Bohannon et al, 2016). The team, importantly, cannot work in isolation and would need substantial training to be efficacious in their support of students and in staff development (Bohannon et al, 2016). It cannot be understated how important training and norming on common language for MTSS is to the success of any school or district's efforts (Schiller et al, 2021).

A powerful catalyst for improvement is collaboration between the local educational agencies and other organizations which may provide support and funding towards these ends (Bohannon et al, 2016). If such a partnership is to be established, the importance of a strategic plan is critical in addition to data collection on the current state of the MTSS within a school or

district (Stockslager et al, 2016). In the development of the Self-Assessment of MTSS as part of Florida's Problem Solving/Response to Intervention Project, the researchers noted the difficulty of effective scaling with regard to implementation (Stockslager et al, 2016). Thus, while MTSS is a useful framework in establishing what is happening at a school and how it aligns to evidence-based practices, the practical reality of schools, districts, and partnering organizations is figuring out how to effectively scale the improvement once an area of focus has been determined.

Implementation Science

Education is full of ideas that have worked somewhere for someone. Google Scholar and the What Works Clearinghouse (WWC) will highlight an endless array of interventions and strategies for establishing an effective MTSS system. However, the devil is often in the details of how to get the ideas from the research to successful implementation. Oftentimes, an initiative will fail without a concentrated effort to implement the change well (Fixsen, Blase, Metz, Van Dyke, 2013; Coburn & Stein, 2010). However, the funding for implementation in human services is much, much lower than developing novel interventions (Fixsen et al, 2013). It's worth noting that making substantive changes can highlight gaps and problematic issues within an organization that may have been otherwise hidden (Marzano, Walters, & McNulty, 2005). The crux of the idea is to make sure that information is flowing in two directions, avoiding a traditional top-down approach (Fixsen et al, 2013). Without this information, we may be implementing under faulty assumptions or without seeing potential unintended consequences. By

providing a structure that supports a change and fostering communication flows that allow for consistent feedback, improvements can take root and improve at a more rapid pace (Fixsen et al, 2013).

Improvement Science

One approach gaining popularity in the past few years is the applicability of "Improvement Science" from the healthcare field to the educational field, most notably via the University of Chicago's Consortium on School Research. Improvement Science is a framework for implementing evidence-based practices in a sustainable way across an organization or series of organizations. It is a way of changing practices via iterative cycles of improvement, which may begin smaller in scale as the organization learns how to incorporate gradually larger changes as the learning cycles go on ("Improvement science | The Health Foundation", 2021). In education, there is substantial pressure on districts to address highly complex problems (Fay, 2021). Oftentimes, this involves districts rushing headlong into complex change initiatives in order to be seen taking action on these important matters and finding a disconnection between the stated aims and actual outcomes (Loveless, 2021). Improvement science aims to keep the ambition of major change, but takes an approach focused on starting small to achieve results with fidelity at scale. To be clear, the humble beginnings to such a process do not connote limited aspirations (Bryk, 2015). Rather, by harnessing localized successes, improvement science seeks to achieve more reliable and replicable execution of evidence-based practice by generating small

wins at the front lines of implementation that can be leveraged across the broader network (LeMahieu, Grunow, Baker, Nordstrum, & Gomez, 2017).

The purpose of any "Improvement Science" process is not terribly complicated - the purpose is to implement ideas that work for the specific environment that we are trying to see improvement in. This means that one cannot assume because research shows strategies are effective in one school district, that they can be implemented in another similar district. The core of improvement science is to figure out what is working in the local context, why it seems to be effective, and replicate through repeated cycles of inquiry (LeMahieu et al., 2017).

The specific focus of this approach is to establish a network improvement community. Network Improvement Communities, wherein schools can combine intellectual capacity to achieve improvement goals faster and more reliably, have gained traction in recent years as a way to tackle highly complex educational problems (LeMahieu et al., 2017). While this can be difficult to spontaneously organize among the member schools, the TFO's current position in the educational ecosystem can play the unique role of "network hub" to help facilitate this process for schools within the portfolio of schools (Duff, Flack, Lyle, Massell, and Wohlstetter, 2019). This framework allows us to see how the organization can create an infrastructure of improvement, whatever the change initiative, without centering in on one particular idea prior to investigating more deeply.

Mediating the pressure put on school leaders to meet the goals of district or charter leaders is crucial in scaling up without making major errors that can cause people to lose faith in their efficacy before they get off of the ground (Sutton & Rao, 2014). This progress helps

generate buy-in that serves as a catalyst to more systematic shifts (Amabile & Kramer, 2011). By allowing the ability for schools to learn on a smaller-scale quickly, the theoretical aim is to build knowledge swiftly about what is working and what is not. This knowledge, in turn, is most valuable when there is an infrastructure for collaboration between schools. Towards this end, the purpose of this whole concept in education is to foster this collaborative learning. The terms of this can be varied, but the term "Improvement Community" or "Network Improvement Community" will be used throughout this paper in reference to this concept.

Improvement Science in education aims to establish improvement networks that bring in a broad array of actors towards a common , measurable aim. Improvement communities can be differentiated from other educational networks, such as "communities of practice", by their focus on a specific and measurable improvement metric or series of metrics. In short, the goal is not simply collaboration, but rather more clear markers of progress in the data. Secondly, this approach does not seek to wedge a solution into a preexisting system (Langley, 2014). Rather, it is an approach focused on how to identify problems and refine solutions over time to better tailor to the myriad contexts of the member schools. In this sense, it is a stark contrast to piloting a large initiative in the traditional sense in that it is much more of a "bottom up" process than a "top-down" process (Langley, 2014).

Pilots are a familiar concept in education, so it merits some time to differentiate from the traditional pilot when discussing the implementation of a research-based practice via an improvement science approach. In traditional pilots, where the focus is on determining effect size and causality, there is an attempt to test a change in a subset of people or units before spreading

to other parts of the organization. This is akin to the randomized control trial (RCT), the gold standard in traditional research. In implementation, this approach has its limits as the contextual knowledge of the system is to be controlled for instead of adapted to (Lewis, 2015). For example, this could be a new reading curriculum. To assess this curriculum, a pilot would be designed for a set amount of time, across a fixed number of sites, with a definitive end date for evaluation with modest tweaks based on learnings from that evaluation (LeMahieu et al., 2017). The evaluation and subsequent tweaks to the system take time. Moreover, to establish evaluation there must be consistency in the application of the method. In an improvement science approach, the learning occurs in iterative cycles of the change that could look highly differentiated. Schools may have adjusted timelines or tweaks to their activities based on their unique contexts. As the learning goes on, this variation may increase. Implementation may change, timelines may be shifted, and contextual factors may play a bigger role (LeMahieu et al., 2017). The whole focus is shifted from top-down knowledge to one of the front-line practitioners, in which ideas spread throughout the network as efficacy is identified in the actual, practical work conditions. As such, the iterative cycles in improvement science are designed to yield "workable processes, useful tools, and more productive work environments" (Bryk et al, 2015). By focusing on the end-user of the system, improvement science hopes to harness the knowledge of the people working at the front-line of implementation. In schools, these are teachers and school leaders.

It would be rational to question what evidence an organization has for improvement if there is not a statistically significant effect size. There are widely-read metastudies of evidence-based practice across education (Hattie, 2012). These are useful. Improvement science

seeks to use the mounting evidence over time from the iterative cycles to create a base of robust evidence that can be used to determine the efficacy of evidence-based strategies across a variety of contexts(LeMahieu et al., 2017). As such, research-based practices and improvement science do not stand diametrically opposed to one another. Rather, improvement science aims to complement such practices by providing a structure to implement ideas that have worked for some people in some contexts and see how they can be adapted to unique contexts and personnel. For example, just because a study showed a measurable effect on low-income students in Milwaukee, Wisconsin, we cannot assume we will get the same result in Jacksonville, Florida. If the unique contexts of schools, districts, and communities are not attended to, implementation of any initiative is at risk of failure. Improvement science seeks to bring fidelity to implementation by "adaptively integrating" interventions into context via the iterative cycles of improvement (LeMahieu et al., 2017). The difficult aspect of this work is that it could result in diffuse knowledge, with schools cordoned off from one another. This is where the infrastructure of an improvement community is critical. Harnessing the power of the knowledge base of practitioners, researchers, and organizations who may otherwise live in their own silos is where the power in the improvement science approach lies.

Improvement Science | Network Improvement Communities

Researchers at the Carnegie Institute for the Advancement of Teaching adopted the term "Network Improvement Communities" from researcher Doug Engelbart (LeMahieu et al., 2017).

Engelbart imagined that improvement communities are organized around what he termed “A” level learning, “B” level learning, and “C” level learning. “A” level learning is the term applied to the knowledge gained by those involved in the practice at hand, teachers or school leaders for example. “B” level learning occurs across the organizational context. This could be the learning across a school or broader organization, such as a university. The power of the Networked Improvement Community is to link the “A” and “B” level learning occurring in relative isolation and coordinate in such a way as to accelerate the learning of all organizations involved (Engelbart & Connected, 2021). This concept seems straightforward, but the importance is understanding that any organization is a collective of human beings who bring their own thoughts, emotions, and experiences to any context. Thus, a NIC requires a specific architecture to be functionally useful in fostering educational improvement over time.

Consequently, the researchers at Carnegie have developed four essential characteristics of a NIC, listed below(LeMahieu et al., 2017):

1. *Focused on a well- specified, common aim*
2. *Guided by a deep understanding of the problem, the system that produces it, and a shared working theory to improve it*
3. *Disciplined by the methods of improvement research to develop, test, and refine interventions*
4. *Organized to accelerate the diffusion of these interventions out into the field and support their effective integration into varied educational contexts*

We can be certain that educational organizations are working on similar issues, such as producing more students ready for four-year colleges. The problem NICs aim to solve is to leverage their collective knowledge and coax it out of the relative isolation of the individual organizations. NICs are designed to provide a common language to speak about common issues so that all members can learn from what has been attempted, what has been successful, and what has not been successful in a variety of contexts (LeMahieu et al., 2017). Much of this common language comes into being as the group works through the critical stages of root-cause analysis, mapping the system, and identifying potential drivers of improvement. This allows for terms used amongst institutions to be clear and operational for practitioners engaged in the ongoing work.

The NIC must be intentionally designed to foster broad participation from all members while being cognizant of the pressure of time and limited capacity of any one organization at any given time (LeMahieu et al, 2017). Key to this effort is to create a sense of communal responsibility and autonomy to experiment within an organization's given context. What unites these two is a common narrative of high aspirations and a measurable target to track (LeMahieu et al, 2017). This framing is key to making people feel inspired to work alongside one another while providing a clear area for group accountability. For individual organizations, more targeted goals can be made that suit the organizational context. The important consideration is that the wider NIC can provide a comparative data set focused on learning, not evaluation. For example, a school working to improve its graduation rate can notice they vary from similar schools and then learn what schools are or are not doing to better achieve their aim. This "C" level learning

then informs the organization and its practitioners with regard to new strategies to attempt. To better understand this concept, it is best to look at a successful example that has made substantive contributions to the field of education over the past twenty years, the Network For College Success.

High School Transitions | An Example of a NIC in Action over Time

The University of Chicago Consortium on School Research has studied how to get students, in their words, “to and through" college for twenty years. One of the key learnings from this work is identifying the role of effective transitions to high school and their long-term. Through this process, the Consortium helped establish the Network For College Success and the To & Through Institute to operationalize and organize the work as it moved forward. This process, driven at the practitioner level, led to significant learning for the researchers about what it takes to improve graduation rates, college matriculation, and college persistence - all key measures for almost any district in the nation.

Beginning in the early 2000s, the group began to identify the 9th-grade year as much more important in meeting graduation goals than previously understood due to the “social, academic, and behavioral demands” of this transitional year (Allensworth & Easton, 2005). The initial research publication from 2005 provided a concept that school level leaders could use to make this knowledge more concrete, a metric called “Freshman On-Track”, which utilized the number of expected credits expected to be earned. This metric could predict high school

graduation better than student demographic information or 8th-grade standardized test scores (Allensworth & Easton, 2005). Moreover, GPA and attendance appeared to be crucial factors not to be discounted. Both of these metrics would be highlighted as highly predictive of success in subsequent studies. In 2006, a group of principals joined together along with these researchers to form the nascent “Network for College Success”, or NCS ("History | Network for College Success | The University of Chicago", 2021). This would not be isolated to Chicago, as researchers at Johns Hopkins indicated that the 9th-grade year and its associated data points could be used to predict future student outcomes in a national context (Bruce, Bridgeland, Fox, & Balfanz, 2011). This data, in turn, could become predictive of the measures almost every urban school district hopes to improve such as graduation rate and college matriculation (Bowers, Sprott,& Taff, 2013). The upshot is that the NCS begun building the infrastructure to capture the learning of the member schools and provide support where needed.

One of the key takeaways from NCS’s work is the variation of school performance even in schools with highly similar contexts. In other words, many schools in the network tended to have a similar group of “inputs” but the outputs varied widely. This led the researchers to conclude that high school support greatly affected how students performed during their 9th-grade year. Thus, the schools who had implemented support strategies to keep students “On-Track” could then share their learning via NCS. More importantly, the studies highlight that school leaders have agency to change student trajectories. The learning allowed district leaders, researchers, and these practitioners at the school to begin to understand how to make progress in

this area and provide stronger institutional support ("History | Network for College Success | The University of Chicago", 2021).

Out of a NIC | Learning Over the Past Fifteen Years & Implications For Philadelphia

The work of this NIC has continued and much has been learned. In the subsequent years, the University has created another entity, the "To & Through" Institute. This organization seeks to nurture networks of learning, whether in Chicago or across the country. In the past four years, this organization has helped Philadelphia begin to organize their systems around what has been learned from the "On-Track" work they have been engaged in. To understand what drew policy makers to this work in Philadelphia, it is important to understand what has been gleaned over the past fifteen or so years from the University of Chicago's work in this area.

While the initial research in Chicago focused on the impact of freshman year on high school graduation, longer studies showed that the "Freshman On-Track" metric, 9th-grade GPA, and 9th-grade attendance rate would be highly predictive of college enrollment and one-year persistence rates (Seeskin, Nagaoka, & Mahaffie, 2018). One of the key data points is related to GPA. The average GPA drops by a half point in the transition from middle school to high school. Research shows that this is strongly correlated with SEL conditions more so than a dramatic increase in academic demands (Seeskin, Nagaoka, & Mahaffie, 2018). Similar to the 2005 study, schools with similar inputs of students saw vastly different outputs.

A few factors make freshman year particularly high-stakes in the long-term success of a student. One is structural. Students must make up any credits missed to meet a set number of

graduating credits. The study also revealed that early failures can present a threat to one's academic identity and sense of belonging to the school community (Seeskin, Nagaoka, & Mahaffie, 2018). A concerning outcome of this research is that even students who do well in 8th-grade are highly susceptible to drops during their 9th-grade year. One startling aspect of this data is that high achieving black and latinx students were more likely to see sharp declines in their GPA.

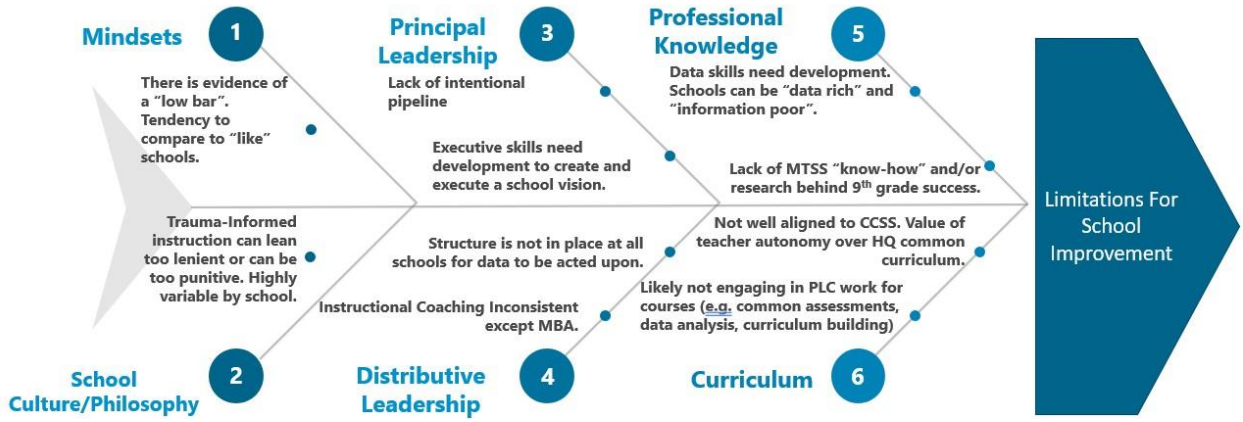
So then what is known at this point about the 9th-grade year? We know that we can control for factors traditionally seen as predictive of high school and college success to know that school leaders have a significant impact on this visa their support of the MTSS implementation at their school site. Factors such as race, gender, and socioeconomic status play a role, but we know that school structures have a world-changing impact for students. Controlling for these known factors, we can compare similar students in terms of college matriculation and persistence (Easton, Johnson, & Sartain, 2017). The difference can be seen in the 9th-grade GPA. This may be related to the quality of colleges students attend, as there is a strong relationship between 9th-grade GPA and 11th-grade GPA, the latter being most critical to college applications. In fact, 9th-grade GPA proved twice as predictive than standardized scores administered at the 9th and 10th-grade level for predicting matriculation and persistence. This is when controlling for the aforementioned demographics and 8th-grade scores. The upshot is that the 9th-grade year matters greatly and moving this metric is highly school dependent on the capacity of schools to support students in this transition (Easton, Johnson, & Sartain, 2017).

The 9th-grade “On-Track” work is an area of high interest to the organization given the local context. The School District of Philadelphia has been working on their Freshman On-Track measure for four years and has been tracking the data on the cohort of students who have recently wrapped up their first year out of high school. The trends aligned to On-Track measures predicted what TFO is looking to promote in their portfolio, so it has caught their interest as a potential pathway to investigate further. High school GPA correlated strongly with matriculation. Specifically, 9th-grade GPA predicted 12th-grade GPA, which predicted matriculation (Tanz & Erdem-Akcay, 2020). Females performed stronger than males in the cohort and Latinx students struggled most of all. Economically disadvantaged students had lower On-Track rates and lower matriculation rates. In fact, this disparity is quite wide as the rate would be about half for these students as non-economically disadvantaged students (Tanz & Erdem-Akcay, 2020). Some schools had over 50% of students listed as “off-track” during one of the years in the study (Crofton & Neild, 2018). The takeaway is that there is much left to be studied about which schools did well in supporting these students and why. The organization is interested in pursuing an early warning indicator such as “9th-Grade On-Track”. The organization sees this as an area of work where they can align with the district, which it has frequently clashed with during the charter expansion area. TFO readily acknowledges that the connection between district initiatives and charter goals rarely intersect. Consequently, TFO hopes to be an organization that can be a bridge between the two worlds and where all types of schools can learn alongside one another.

Methods

Identifying A Theoretical Framework | Early Research

Some initial data came from TFO, who agreed to analyze the previous communities of practice via a focus group with the school investment team, a total of three people. This team agreed to several interviews to ascertain what successes and shortcomings they noticed in previous attempts at generating collective improvement. These sources, per their preference, have been anonymized. For TFO, the data came from an Ishikawa analysis that centered on identifying limitations to school improvement based on their internal information. This information would be critical to identifying that the information the organization had needed a more cohesive framework for analysis. The general ideas TFO identified are distilled below:



These ideas spanned the school operation and provided insight into what some of the members had seen and recollected from previous projects. The determination from this information would

be that more utility would come from an expansive framework. The decision to utilize the Self-Assessment of MTSS tool (Stockslager et al, 2016) is derived from the need to provide a data collection framework that highlights the continuum of school-based activities via sub-section items that allow for sufficient drilling down for more relevant information (Hoon-Choi, McCart, Hicks, 2018). In short, we needed sufficient information about what the context of school supports are before we could begin to ask questions about what should or should not be implemented. The concepts of implementation science or improvement science may prove relevant, but it is not something that can be argued a priori of the data collection. Consequently, as MTSS touches the entirety of a school's instructional program, it seemed a useful framework for seeking more knowledge for what the schools in the purview of this study do, or do not, have in place. That information can then inform what next steps, if any, should be recommended.

Sampling Strategy | Ideal vs. Practical Realities

The unit of analysis is schools. In its ideal structure, this study would select schools who voluntarily agree to be part of the study via recruitment to a focus group. The ideal sample for this will reflect the diversity of the portfolio of schools. Preferably, there would have been a stratified, systematic sample representing all three types of schools supported by the TFO (charter, traditional, parochial) in equal numbers. However, the limitations of the sampling is that we gained access to those who responded to TFO's solicitation on our behalf, as the organization asked to limit excess communication to school leaders. TFO provided a list of five

to eight schools that they felt represented their portfolio well and asked them to participate in a focus group. Early on, they cautioned that responses might be harder to come by due to the pandemic. After an initial response of five schools, two schools offered their principal for a focus group and provided relevant data. Both schools could not meet at the same time for a follow-up. Consequently, the interactions with these school leaders would occur in an additional interview for each. These two schools serve as the qualitative school leader data. In addition to these school leaders, interviews would be conducted with two leading researchers in the field in Philadelphia, who have partnered with local organizations and the School District of Philadelphia for the past four years on building the capacity of district schools for improvement of their student support systems. These researchers preferred to keep themselves and their organizations anonymous. These researchers would be presented with the similar questions as the school leaders with the explicit request to consider the breadth of schools they work with as examples in answering this question. Such systems level data helped greatly in contextualizing the school-based information from the school leaders.

Quantitative Data

Ideally, this study would solicit data to examine the relationship of selected schools structural practices and current school data, such as GPA and attendance. This data would be significantly more difficult to gain access to in the middle of the school year, specifically with regard to FERPA (Family Educational Rights and Privacy Act (FERPA), 1974). Schools did not feel comfortable sharing student data sets, even anonymized, for fear of violation of student

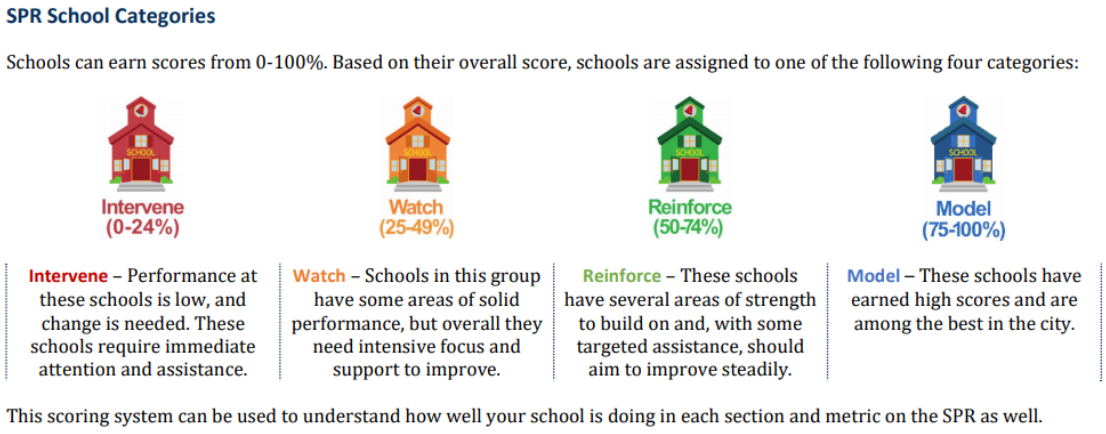
privacy. Moreover, TFO leaders indicated that they preferred to not ask school leaders for data at this time due to the ongoing stress of the pandemic. Thus, we did not have this information for the SY20 or SY21 as it went on. Consequently, the most relevant publicly available data would need to be used to better understand the schools. This data shows the School Progress Report (SPR) for the last school year of full-data (SY2018-2019) as compiled by the School District of Philadelphia (SDP). The district provides a numeric score on a series of factors within four core buckets, as seen below:

Figure 2: SPR Foci Table

Achievement	Progress	School Climate	College & Career Readiness
This section measures how well students are reading, writing, doing math, and learning science, as well as, ELL students' language proficiency.	This section shows whether students are learning as much as they should from one year to the next in reading/literature, math, and science, and if high school students are on track to graduate.	School should be a safe and inviting place where students want to be. This section measures student attendance, student engagement, and reports results from the annual survey.	This section shows whether high school students are graduating and whether they are prepared to pursue their college and career goals (for High Schools only).
What data does the SPR look at?			
✓ **PSSA/Keystone Proficiency** ✓ **ACCESS Proficiency (for ELLs)** ✓ **Reading on Grade Level**	✓ **Average Growth Index (AGI)** ✓ **ACCESS Growth (for ELLs)** ✓ **Percent of Students On-Track** ✓ **Equity**	✓ **Attendance** ✓ **School Retention** ✓ **Suspensions** ✓ **Student and Parent Surveys**	✓ **High School Graduation** ✓ **College Enrollment** ✓ **College/Career Preparation** ✓ **Student Surveys**

Depending on the score provided, the district then categorizes the school into one of the four buckets for each of the categories.

Figure 3: SPR School Categorization Model



To provide additional context, the data table below highlights the attendance breakdown of various priority groups in the building as well.

Metric	School #1 Info & Tier	School #2 Info & Tier
District Scores		
Enrollment	487	999
Students with IEP	18.8%	25%
Overall SPR Score	58% | **REINFORCE**	43% | **WATCH**
Achievement Score	13% | **INTERVENE**	12% | **INTERVENE**
Progress Score	91% | **MODEL**	53% | **REINFORCE**
School Climate Score	69% | **REINFORCE**	67% | **REINFORCE**
College & Career	49% | **WATCH**	Insufficient Data
Attendance Measures | Regular Attendance[1]		

[1] The Future Ready PA Index display represents the percentage of students who were enrolled for 90 or more school days and present 90 percent or more of enrolled school days, thus not chronically absent.

All Students	76.1%	74.8%
Black	80.4% *(17.4% of student population)*	74.1% *(96% of student population)*
Hispanic	76% *(76.7% of student population)*	87.5% *(3% of student population)*
Economically Disadvantaged	76.1% *(100% of student population)*	74.8% *(89.1% of student population)*
English Learner	68.8% *(9.8% of student population)*	NA | Insufficient Data
Student with IEP	69.6% *(18.8% of student population)*	78.5% *(25%% of student population)*

One critical piece of information that is missing from this report is the 9th-grade On-Track data. The district had intended it to be a part of the 2019-2020 SPR, but it was not included due to a lack of data resulting from the pandemic.

Qualitative Data

Qualitative interviewing is flexible and allows the interviewer to probe more deeply into an interviewee's knowledge and beliefs, so relying solely on pre-formed questions is not helpful. The sets of questions used here align with a tool designed to examine a school's MTSS, however, the interviews serve a much more strategic purpose than this. The interviews allow for an understanding of the perception of the interviewee into the phenomena they experience daily, understandings of power dynamics in place accelerating or hindering progress, and understanding the underlying humanity and emotion underlying the processes that the interviewee experiences as someone directly affected by the systems in place (McGrath,

Palmgren, & Liljedahl, 2018). It is important to recognize that strategic planning of the initial questions allows for a line of inquiry that is more closely aligned to the research question (Babbie, 2011). Svend Brinkmann and Steinar Kvale stress the importance of thematizing and designing the interview process prior to beginning. Thematizing, to Brinkmann and Kvale, is creating clarity on what the interview intention is and the ideas to be investigated (Brinkmann & Kvale, 2014). Designing the interviews is structural. This requires laying out what the method will be through which the research aims will be met (Brinkmann & Kvale, 2014). To provide the structure and aim to the interviews, it became apparent that finding an instrument aligned to the research questions would be a necessary starting point as part of the thematizing and designing process.

For collection of data, a well-vetted instrument would be necessary for creating questions for semi-structured interviews. The instrument to be used for this data collection will be the self-assessment of MTSS (SAM), a tool developed by researchers at the Florida Department of Education and the University of South Florida (Stockslager, Castillo, Brundage, Childs, & Romer, 2016). This instrument has been validated, tested and refined. Since its development, the instrument has been used by a number of state departments of education and districts throughout the country. The full 2015 pilot included 8 states, 15 districts, 436 schools (Stockslager et al, 2016). It is critical to note that the term MTSS (Multi-Tiered Student Supports) is not used as an isolated concept, but rather is a term used to describe the capacity of the entire school system to support students to the level required to see academic success (Stockslager et al, 2016). Thus, the capacity of a school's MTSS is closely related to the type of early warning indicators discussed

in the review of the literature. Moreover, whatever the early indicator TFO chooses to focus on with future schools under its purview, the review of systems and structures for student support will be a key indicator towards this end (Allensworth, 2014). The creators of the instrument by describing what they hope to uncover via this tool (Stockslager et al, 2016):

> *"Complex educational systems require that key stakeholders take a systems view of facilitating change and develop plans to address variables likely to relate to successful implementation. Educators' knowledge and skills; school, district, and state policies and procedures; funding streams; and myriad other factors likely will impact whether educators will adopt practices within an MTSS framework. Questions about what issues to focus on and how often to collect data, among others, can be difficult to address. The purpose of the instrument is to assess current implementation levels of an MTSS model to inform schools and districts regarding which areas require action planning."*

This system view of student support is critical to being able to identify where TFO can focus their energies for partner schools. The goal of the SAM instrument is to provide a data-driven tool to improve the capacity of schools and districts to support students and, by extension, improve their academic program's overall efficacy. To be able to do this effectively, it is necessary to provide a robust analysis of where a school is excelling or lagging behind across a host of indicators.

As the researchers who constructed the instrument note,

> *"Thus, it is important for schools to monitor not only student outcomes, but also how assessments, instruction, interventions, and data-based problem-solving are put into place (i.e., the fidelity with which these elements are implemented). Successful implementation is influenced by many factors within and around the school system (e.g., professional development, administrative support, data systems, staff member perceptions, successful adaptation)." (Stockslager et al, 2016)*

The instrument as designed is extensive. In discussions with the TFO team, it became clear that semi-structured interviews might yield better results than a long survey provided to school leaders at this stage of data collection. Consequently, the TFO team worked to identify the areas most critical to the research questions at hand. From this, we generated a much more succinct, focused line of questioning using indicators from the SAM. This would result in four broader categories, which condensed areas across the tool into a simplified rubric with four driving questions. The four areas would be: Data Infrastructure & Capacity Building, Shared Leadership, Family & Community Engagement, and Curriculum & Instruction. These focus questions utilized the framework of the SAM Assessment along with the descriptive elements to closely align with the research question at hand: *What are the conditions for TFO portfolio schools with regard to their capacity for schoolwide student support using early warning indicators such as 9th-grade On-Track?* As the opportunity arose to interview those in the field who were not school leaders, but working in the educational improvement space, the questions would be modified to fit their role in the larger system (e.g. “In your experience, how do schools…”) in order to make more sense in their context.

The Modified SAM | Tool for Semi-Structured Interviews

Through conversations with the partner organization, we were able to break the primary research question into several sub-questions that align to the measures presented in the SAM tool. Initial data were collected through these semi-structured interviews. The initial goal would be to take this information and compare it to a full deployment of the Self-Assessment of MTSS tool. However, the access needed for such in-depth study could not be facilitated by TFO prior to the deadline of this paper. Two interviews initially were conducted with each school leader. The questions are listed below:

1. *How does the leadership team structure schoolwide student supports? Who are the key players and why are they in that role?*
2. *Where are current student support resources most heavily allocated? Where is this most aligned with current needs? Where does it vary?*
3. *What data drives the student supports in place? What are key indicators of improvement that the team uses? How has the team's use of data changed over time?*
4. *What is data use like at the administrative level compared to the teacher level? Does the data use align to the schoolwide goals at both levels? Where is there variation?*
5. *What is the connection between classroom instructional practice and the broader schoolwide climate and culture?*
6. *When a student is struggling, what are the primary supports they can expect to receive? What systems ensure that students receive these services?*

Moreover, this is not an evaluative tool in any regard. Rather, this information is to be used as key data to inform TFO about the systems and structures within their schools. This information is to be used to inform a more robust analysis of what works, for whom, and under what conditions (Bryk, et al). It is critical to note that a scaled rubric is used in the semi-structured interview based on the primary Self-Assessment of MTSS tool for the use of identifying topics of follow-up to the initial questions. The goal had been to link these interview responses to an analysis conducted by a broader team at each school-site, which is the purpose of retaining the scale with the evaluative continuum. For the interviewer, this serves as a useful tool to establish follow-up questions. For example, an interviewer may press the interviewee on the cross-disciplinary representation on the student support team by using the scale to see if all areas have been addressed. This tool proved critical in having interviews that pushed deeper into the school program than the general focus question might have. In addition to this, the interviews focused on the "why" of the answer in addition to the answer itself. Pushing in this direction helped yield much stronger information than if given the survey as a standalone without probing questions.

Table 2: Shared Leadership Infrastructure

The table below highlights areas from the SAM focused on leadership capacity. This is not focused on the individual school leader, but rather the full capacity of the leadership team to develop a coherent student support framework. Language is pulled from key areas of the "Leadership" strand within the SAM framework.

Shared Leadership & Capacity of Leadership:				
Focus Question	Not Implementing 1 pt	Emerging/Inconsistent Use 2 pts	Developing/Consistent Use 3 pts	Fully Embedded 4 pts
How does the leadership team structure schoolwide student supports? Who are the key players and why are they in that role?	No Student Support core team exists with explicit responsibility for leading Student Support framework development and implementation.	A core team exists that includes cross-disciplinary representation,	and the core team has explicit expectations for facilitating Student Support framework development and implementation,	and the core team members have the beliefs, knowledge, and skills to lead their school's Student Support framework development and implementation efforts
Where are current student support resources most heavily allocated? Where is this most aligned with current needs? Where does it vary?	No process exists for mapping and allocating resources available to support Student Support implementation	Leadership team members are gathering information on the personnel, funding, materials, and other resources available to support Student Support implementation	and Resource inventories are established using the gathered information on the personnel, funding, materials, and other resources available to support Student Support implementation and plans for allocating the resources are established	and Existing resource maps and resource allocations are updated at least annually based on student need, available personnel, funding, materials, and other resources

Table 3: Data Infrastructure

Data Infrastructure				
Focus Question	Not Implementing 1 pt	Emerging/Inconsistent Use 2 pts	Developing/Consistent Use 3 pts	Fully Embedded 4 pts
What data drives the student supports in place? What are key indicators of improvement that the team uses? How has the team's use of data changed over time?	Professional development does not focus on data--based problem--solving	Initial professional development on data--based problem--solving is provided that includes the following elements: • Rationale for use of data--based problem--solving • Problem--solving steps to address school--wide, classroom, small--group, and individual student needs • Roles and responsibilities for team members engaging in data--based problem--solving	and Ongoing professional development and coaching on data-- based problem--solving is delivered that includes the following elements: • Differentiation of professional development based on staff roles/responsibilities • Coaching • Modeling, practice, and collaborative feedback on problem--solving steps • Support for collaboration and teaming skills	and Data on use of problem--solving skills and application are used to inform continuous improvement of professional development and coaching efforts
What is data use like at the administrative level compared to the teacher level? Does the data use align to the schoolwide goals at both levels? Where is there variation?	The gap between expected and current student outcomes is not identified	The gap between expected and current outcomes is identified,	and The gap between expected and current outcomes is identified, and is associated with academic, behavior and social--emotional goals	and The gap between expected and current outcomes is identified relative to academic, behavior and social--emotional goals and is used to identify the appropriate level (tier) of instruction/intervention

Table 4: Curriculum & Instruction Infrastructure

Curriculum & Instruction: Effective core instruction (Tier 1) that is designed and delivered to reach all students. Based upon the analysis of multiple data sources, targeted and intensive instruction/intervention (Tiers 2 & 3) is provided to meet specific student needs and accelerate the learning of others.				
Focus Question	Not Implementing 1 pt	Emerging/Inconsistent Use 2 pts	Developing/Consistent Use 3 pts	Fully Embedded 4 pts
What is the connection between classroom instructional practice and the broader schoolwide climate and culture?	Tier 1 elements are not developed and/or clearly defined	Tier 1 elements incorporate **1 of the following 4**: • clearly defined learning standards • school-wide expectations for instruction and engagement • school-wide expectations for behavior and social-emotional content/instruction • aligned assessments data from a variety of sources	Tier 1 elements incorporate **2 or 3 of the following 4:** • clearly defined learning standards • school-wide expectations for instruction and engagement • school-wide expectations for behavior and social-emotional content/instruction • aligned assessments data from a variety of sources	Tier 1 elements incorporate **all of the following:** • clearly defined learning standards • school-wide expectations for instruction and engagement • school-wide expectations for behavior and social-emotional content/instruction • aligned assessments data from a variety of sources
Focus Question				
When a student is struggling, what are the primary supports they can expect to receive? What systems ensure that students receive these services?	A clear Menu of Tier 2 and/or Tier 3 supports both Academic & Behavioral (SEL) are not developed and/or clearly defined	A shared menu of Tier 2 and Tier 3 supoorts exisits that meets **1 of the following 4 criteria:** • interventions for targeted skills/behaviors • aligned to Tier 1 (if Tier 2) and both 1 and 2 (if Tier 3) instruction • aligned to behavior and social-emotional content/instruction and school-wide expectations • accessible and easily implemented for all intervention providers	A shared menu of Tier 2 and Tier 3 supoorts exisits that incorporates meets **2 of the following 4 criteria:** • interventions for targeted skills/behaviors • aligned to Tier 1 (if Tier 2) and both 1 and 2 (if Tier 3) instruction • aligned to behavior and social-emotional content/instruction and school-wide expectations • accessible and easily iplemented implemented for all intervention providers	A shared menu of Tier 2 and Tier 3 supoorts exisits that incorporates meets **ALL of the following 4 criteria**: • interventions for targeted skills/behaviors • aligned to Tier 1 (if Tier 2) and both 1 and 2 (if Tier 3) instruction • aligned to behavior and social-emotional content/instruction and school-wide expectations • accessible and easily iplemented implemented for all intervention providers

Table 5: Family & Community Engagement

Family & Community Engagement:				
Focus Question	Not Implementing 1 pt	Emerging/Inconsistent Use 2 pts	Developing/Consistent Use 3 pts	Fully Embedded 4 pts
How does the school establish regular communication with families to build their understanding of Student Support, purpose of interventions and tiered support systems, and how it will support their child?	Staff do none of the following: • actively engage families that represent the diverse population of the school • engage families in problem solving when their children need additional supports • provide intensive outreach to unresponsive families • increase the skills of families to support their children's education	Staff do 1 of the following 4: • actively engage families that represent the diverse population of the school • engage families in problem solving when their children need additional supports • provide intensive outreach to unresponsive families • increase the skills of families to support their children's education	Staff do 2 or 3 of the following 4: • actively engage families that represent the diverse population of the school • engage families in problem solving when their children need additional supports • provide intensive outreach to unresponsive families • increase the skills of families to support their children's education	Staff do all of the following: • actively engage families that represent the diverse population of the school • engage families in problem solving when their children need additional supports • provide intensive outreach to unresponsive families • increase the skills of families to support their children's education

Advantages, Limitations, and Further Implications

One advantage of this approach is that it allows for flexibility to truly understand what is happening at the school leader level in a more intimate way than surveys while also providing a comparative set of data with TFO's perception of schools' capacity for improvement. It is much more than the rote report back of a survey's perceptions. In these interviews, school leaders provided the "what" of a school's capacity for MTSS but also the critical "why". The interviews allowed for the interviewer to understand the perception of the interviewee on many of these critical components. A drawback to this approach is a potential limited reliability compared to other research methods, given that any information is filtered through the perspective of the researcher and the limited sample size (Marshall, Cardon, Poddar, & Fontenot,2013). The incorporation of the SAM instrument and creation of a rubric serves the purpose of attempting to ameliorate these concerns in some capacity by limiting the influence of the researcher's personal language in the formation of the questions. The ethical concerns should be limited through a strict anonymization of individuals, their statements, and their schools. Researchers who were interviewed have also been anonymized along with the specific city initiatives they worked on to avoid identification. One potential bias in this process is that of the reliance on available subjects. TFO has a set number of schools they recommended as potentially interested in being interviewed, which is the perspective they have derived from working with these schools previously. Other limitations present in this study relate to the Covid-19 pandemic. School leaders and teachers are under unique and immense amounts of stress (Singer, 2020). This could affect the answers of the respondents by providing an insight into their world during Covid, but

may be harder to generalize outside of this extraordinary time. From a quantitative perspective, the amount of publicly available data for schools is missing and policymakers continue to debate what, if any, information is usable from the 2020-2021 school year (Strauss, 2021). Even then, the data will be informed through the proximity to the return to school from the Covid-19 pandemic. In sum, this analysis provides a snapshot into the world of one city, several school leaders, and an organization attempting to make sense of it all.

Data Analysis

Coding & Data Analysis Processes

The data analysis process includes transcribing and listening to all interviews to identify codes. The initial, or open, coding section of the analysis simply bucketed the data into four buckets based on the SAM instrument utilized for the interviews. The initial codes would be the four buckets from the MTSS-based interview tool. These four open codes are curriculum & instruction, data infrastructure & utilization, family & community engagement, and shared leadership & capacity building. A brief quantitative look at this information helped inform a deeper qualitative look at the data. The co-occurrence table below highlights the frequency of certain codes and where they occur with others. This is of limited utility, but it does inform the analysis as to where themes may be emerging (Armborst, 2017). This table contains a color scale for quick analysis - blue cells indicate a lack of occurrence and red indicate high occurrence. What one notices is a high number of common statements attributed to shared leadership and data infrastructure. This information is useful insomuch as it allowed for a deeper, more granular analysis which resulted in axial coding to identify the emerging themes and patterns (Armborst, 2017).

Figure 4: Co-Occurrence Table of Open Codes

	Curriculum & Instruction	Data Infrastructure & Utilization	Family & Community Engagement	Shared Leadership & Capacity Building	Totals
Curriculum & Instruction	0	4	0	2	6
Data Infrastructure & Utilization	4	0	0	8	12
Family & Community Engagement	0	0	0	2	2
Shared Leadership & Capacity Building	2	8	2	0	12
Totals	6	12	2	12	0

Within these buckets, new themes emerged throughout the interviews which necessitated a more expansive coding system to better situate the data within the MTSS conceptual framework. Most every comment directly landed within the Shared Leadership or Data Infrastructure bucket, with little commentary on curriculum or family engagement. Within the conversations, several more themes began to emerge. These themes included feelings of anxiety or pressure to perform, thin resources, and creative responses to the stated limitations. Below is a brief table identifying the emergent themes with example quotes.

Emergent Themes:

Theme/ Axial Code	Example Quotes
Anxiety & Pressure to Perform	*"I'm feeling sometimes unfocused. There's just like a million things all the time and it's like what is the most important thing to focus on?"* *"Meeting all of our goals currently feels very ambitious."* *"You know I felt like when I was in that role, I was sort of like. I don't want to say, cutting edge, but like really thinking through some some of the creative solutions, and I want to kind of get back to thinking about that. At this higher level and supporting those teachers and leadership and making sure that we remember what it felt like. I don't want to say, we lost sight of, like the importance of that transition, but you know selflessly like that's I put a lot of time into that and then, when I got this role I maybe leaned on other people to do it and maybe didn't keep my foot on the gas like as much as I might have because I'm dealing with like other grade levels, too."*
Stretched Resources	*"In a perfect world, I think we'd have a ninth grade counselor. Just a ninth grade counselor that is kind of focused on all this, looking at what the priority is at that moment, but that's not the case. I think there's probably some work to do, like the grade team level."* *"Grades aren't always the most reliable or are no is updated so you know I think we have some challenges there"*
Creative Responses To Limitations	*"I think a lot of it just takes time, you know takes time to acclimate you know I thought about like a buddy system, perhaps, and we get back just to have somebody checking on those kids"* *"We tried sort of like a almost affinity group for like new ninth graders and things like that to kind of focus on them a little bit more."* *"We do have like 90 minute blocks, which I think was like an adjustment that we made on what kids are getting English and math like every day for 90 minutes. I think this has really helped you know, anything that personalizes the instruction for the kids and the different subject matters has been effective so looking at that data and saying okay we're going to spend 30 minutes like flex time kind of giving kids what it is that they need."*

Finding 1: *School leadership capacity has room for improvement to address the myriad priorities facing school leaders, which is resulting in stretched resources and anxiety.*

School leaders feel immense pressure to produce results across the spectrum of the school. Prioritization is difficult given the demands placed on assistant principals and principals to make progress on key metrics related to SPR. Oftentimes, administrators feel that they can provide information to teachers but it is hard to take action without more personnel working on common problems. One school leader highlighted his focus at the time, stating that his team was working on a litany of items such as postsecondary success, 9th-grade success, mental health supports, literacy across the social sciences, and standardized testing. There is a desire for more help, but a recognition that it is unlikely. The school leader went on to note how he'd like to improve his 9th-grade supports,

> *"In a perfect world, I think we'd have a ninth grade counselor. Just a ninth grade counselor that is kind of focused on all this, looking at what the priority is at that moment, but that's not the case. I think there's probably some work to do, like the grade team level."*

This notion came through in a variety of interactions with school leaders. The most precious resource of all would be time. The leaders felt that they had reached a capacity limit and that any new initiative would mean a current one would have to go. As one leader put it,

"I'm feeling sometimes unfocused. There's just like a million things all the time and it's like what is the most important thing to focus on?".

School leaders spoke often about their competing priorities and how they needed more time and that leadership has struggled to make inroads in changing teacher practices. The school leader interviews did refer to the role of teacher-leaders in the building, but the sense was that the leaders felt that the teacher-leaders needed more capacity to improve. One school leader remarked when speaking specifically about his former role leading a 9th-grade team-

"You know I felt like when I was in that role, I was sort of like. I don't want to say, cutting edge, but like really thinking through some some of the creative solutions, and I want to kind of get back to thinking about that. At this higher level and supporting those teachers and leadership and making sure that we remember what it felt like. I don't want to say, we lost sight of, like the importance of that transition, but you know selflessly like that's I put a lot of time into that and then, when I got this role I maybe leaned on other people to do it and maybe didn't keep my foot on the gas like as much as I might have because I'm dealing with like other grade levels, too."

Comments such as these continued to surface throughout conversations. There would be a core team in place across the school for initiatives, usually administrators, deans, or counselors. However, there would be clear frustration that teachers did not see the vision for initiatives in

place. In reflecting on this, one school leader attributed this disconnect to a lack of teacher buy-in, stating,

> *"I want to make sure that I'm communicating with the teachers and being clear on what the goals are".*

Finding 2 | Data Infrastructure Lacks Coherence

Data infrastructure is focused on more lagging indicators (e.g. standardized test scores) than leading indicators such as attendance or grades. For TFO, this would lead to a limited ability to track what has worked and when during a previous curriculum rollout.

At the school level, it seems hard to discern what metrics are being most followed. The data systems are built around the Keystone standardized test assessments and discipline. Grade data is disseminated to teachers, but the results seem mixed. Some teachers are using these to prioritize conferences, but there does not appear to be a systemic way to identify what the outcomes of these conferences would be. School leaders described themselves as "data-driven", but rarely could articulate how teachers used data on a daily or weekly basis to address student issues.

> *"We are very data driven. I think we're looking at keystone PSA data like achievement wise and then like we have a dashboard for behavior stuff that like we kind of built in house. I would say we're a pretty data driven school but there's sort of like a variety of*

> *different things that we're looking at like depending on who is meeting. We talked last time about how grades aren't always the most reliable or are not updated so you know I think we have some challenges there."*

This quote highlighted a frustration of school leaders, which is the problem of teacher gradebook variation. Grades often are subjective and lack universal meaning for teachers and students to discern what to take action on. A lack of universal meaning can be attributed, in part, to the incorporation of subjective measures of grading. Research shows that high school teachers are given ample discretion in constructing their grading systems and that can lead to wide variation in what a grade means (Rauschenberg, 2014). That is a nationwide issue, but it did show up in multiple conversations with school leaders.

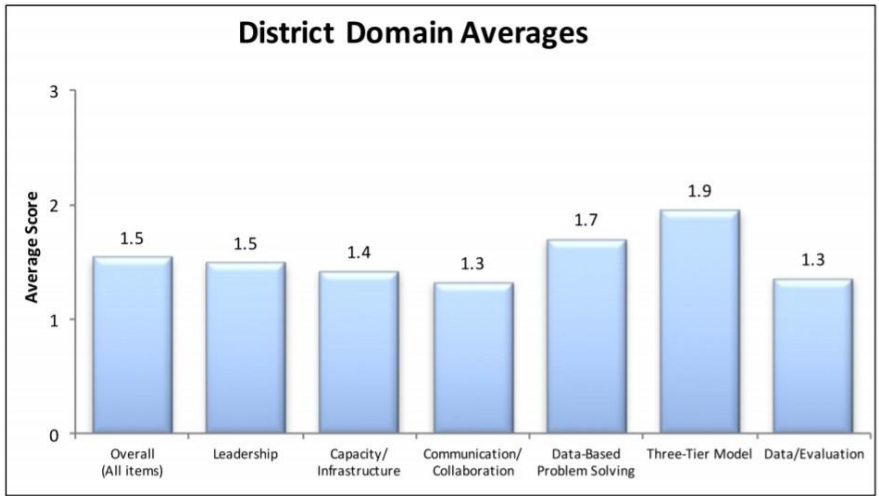
Recommendations:

Recommendation 1: Assess Socio-Emotional Health of Leaders To Prevent Burnout

In a survey conducted by the National Association of Secondary School Principals, 45% of principals indicated that the Covid-19 pandemic had accelerated their plans to leave the principalship (NASSP, 2021). Given how the pandemic has shifted attention from instruction to a myriad of issues principals have little to no training for, this is no surprise. Principals are already at higher risk of turnover since the advent of the "accountability era", ushered in with the No Child Left Behind Act (Mitani, 2018). It is apparent from the data that school leaders feel pressure to perform. Moreover, the primary reason given to TFO for not participating in the data collection for this study by school leaders is that they did not have time to spare. The leaders are stretched thin. This may add to the already concerning trend that public school principals, especially those in high-needs schools, are at increased risk of burnout and turnover (Grissom, Bartanen, and Mitani 2019). Worse yet, there is substantial research indicating that losing a principal increases teacher turnover and negatively impacts student outcomes, sometimes for years afterwards (Grissom, Egalite, & Lindsey, 2021). All of this is not to be a doomsayer, but rather to state that it is time to examine the socio-emotional health of school leaders and help ameliorate burnout to the best of the organization's ability. The contexts may differ, but the study of this is necessary based on the data. One suggestion is borne out in the next recommendation - build greater leadership capacity across the school.

Recommendation 2: Analyze School-Level Capacity For Improvement

The data presented show two views of school leadership. From TFO's viewpoint, there is a need for stronger development of school executive leadership. From the school leader's perspective, there are too many priorities and not enough time to work towards all of their individual success. This needs to be reconciled and a clearer picture of where capacity is strong and where it needs buttressing should be considered. Towards that end, it is highly recommended that TFO gather a group of schools for a collective analysis. While the SAM (Self-Assessment of MTSS) is an inventory of the full capacity of a school to implement their academic program, there are many tools developed which may be more appropriate for the schools that TFO is most concerned with (Schiller et al, 2021). The argument is that a vetted, fully deployable instrument such as this would yield data highlighting areas of focus for the organization to center their work on. Below is an example of the aggregated data, which was used by a district to identify their initial focus area of improvement using the SAM (Stockslager et al, 2016).



The purpose of a data set like this is to gain a bird's eye view of the instructional program across the portfolio. It is formative data and can be reassessed in a way that is more agile than the traditional lagging indicators of city and statewide accountability models. This data would allow the organization to set a goal, rooted in data, that is relevant to the maximum number of schools. Once this data is collected, the organization can begin to identify where to approach improvement. However, much of this work requires some groundwork on distributive leadership at the school level, which this proposed data analysis should begin to uncover.

Recommendation 3: Facilitate Development of Distributive Leadership Models

The concept of collective efficacy is loosely defined as when teams feel they are making an impact, their performance increases (Donohoo & Katz, 2020). Distributive leadership models are purposefully designed to boost collective efficacy by being more collaborative and decentralizing power from the top of the proverbial pyrami, leaving space for agility and adjustment as needed (Ancona & Backman, 2017). Advantages of this type of approach is that is can allow for transfers of knowledge from the front line workers to other areas of the organization. This reimagining of organizations is a consideration of leadership as a collective, not individual, characteristic (Ancona & Backman, 2017). The unique position of TFO means that it can help identify where schools are on the spectrum from fully distributive to fully top-down, then help facilitate any organizational learning that needs to occur. They have this

position because of their close proximity to principals and charter network leaders, who are the key levers in this work.

We know that principals have significant sway over how their school operates (Grissom et al, 2021)). The primary influence is exerted through the instructional engagement with teachers, setting conditions for school climate, facilitating collaboration, and being an effective steward of the resources of the school (Grissom et al, 2021). However, the crux of their impact is when they can focus on the bread and butter of a school's operation: the instruction (Grissom et al, 2021). In fact, while the principal can drive much at the school level, reliance on one dynamic leader often leaves schools falling far short of their potential (Bierly et al., 2016). In short, teaming structures work and make the school more effective. The organization can help schools by analyzing current structures, studying best practices, and providing workable structures to schools in need.

One caveat is that this approach requires a clear understanding of how systems coalesce and integrate. This includes understanding the particular contexts of organizations. It is tempting to create a system that could be replicated by each school, but that implies there is a single independent variable driving collective efficacy at each school, which would be fallacy (Uhl-Bien, Marion, & McKelvey, 2007). There is a tendency to "add more roles, but not more leaders" (Bierly et al., 2016). Strategically considering how teams and leaders integrate and coalesce around key initiatives is important, including how information is communicated both vertically and horizontally across the organization (Ancona & Caldwell, 1992). An example of this is the rise of PLCs (Professional Learning Communities). PLCs are a way to organize

teachers into collaborative teams to solve problems and have been a popular trend over the past twenty years in education. However, the implementation has been uneven (Mattos, DuFour, DuFour, Eaker, & Many, 2016). Teacher teams must be aligned to specific outcomes and organize their work accordingly (Bierly et al., 2016). The purpose of this is to help schools develop collective efficacy, so that the organization can help schools work towards their common direction. This type of change can be quite difficult for strong leaders (Bierly et al., 2016). As a coordinating entity, the organization serves a unique role in helping schools manage and balance their day to day responsibilities providing opportunities to "Get on the balcony" to reflect and see the broader perspective (Heifetz & Linsky, 2002).

Recommendation 4: Set A Clear Strategic Direction With Clear Outcome Goals

The goal is strategic direction for any improvement efforts, unified in a way that allows autonomy but still provides direction to schools the organization is looking to improve (Ancona & Bresman, 2007). What a strategic direction does is help teams identify where to prioritize energy and manage overload (Ancona & Bresman, 2007). The school leaders we spoke with are high-capacity individuals, but the notion that they can handle an increasing number of complex projects is, as Deborah Ancona from the MIT Leadership Institute puts it, "dangerous" (Ancona & Bresman, 2007). TFO is situated in a position and is well-equipped to provide the support needed as a funder. Providing leadership teams with leadership development, coaching support, data support, and systems analysis support - all of these ideas are something that could be in their

purview. All of this sets a strong base for developing the nebulous groups of schools, with their disparate efforts, into a more manageable and efficient network (Ancona & Bresman, 2007). By serving as an organizing structure, the organization can provide what Deborah Ancona calls, "Temporal Leadership" (Ancona & Bresman, 2007). The concept is relatively simple. Leaders can use time to facilitate strong team-driven behavior. Schools are on all sorts of different timelines both internally and comparatively to other schools, but there is power in bringing all of the disparate groups together at frequent intervals to assess where they are and adjust course as needed (Ancona & Bresman, 2007). By putting schools on a similar timeline, the organization can serve as a coordinating entity to set the rhythms by which improvement processes can begin (Ancona & Bresman, 2007). By using a data tool such as SAM to analyze the broader system, the organization will be able to clarify the direction of schools receiving funding and direct resources that build capacity towards that end (Ancona & Bresman, 2007). This will provide an infrastructure that will augment the final two recommendations.

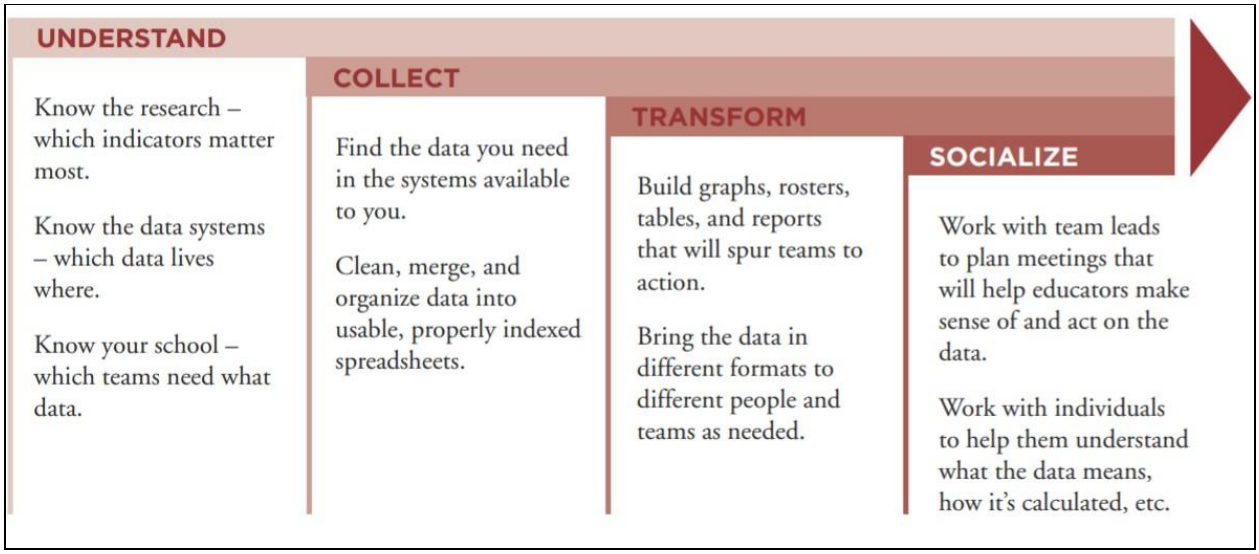
Recommendation 5: Build Capacity & Infrastructure For School Data Use

The team organization and structure listed in the previous recommendations is a key prerequisite for expanding data literacy and utility in schools (Boudet, City, & Murnane, 2013). This includes tight coordination and awareness of all of the school initiatives (Boudet et al, 2013). Moreover, it is important to take deliberate time to build the capacity of people to analyze data. People need to feel like they are succeeding and achieving mastery, so giving infinite and untargeted data is likely to drive people away from using the data if they do not feel able to be

successful in using it (Pink, 2009). TFO can play a unique role in fostering these conditions as a coordinating entity (Sherer, Norman, Bryk, Peurach, Vasudeva, & McMahon, 2020). The energy can be spent focusing on developing school leadership capacity to develop data literacy across their respective schools (Boudet, 2013).

This recommendation comes with a major shift in approach, which is to move away from accountability indicators and towards research-based indicators that feel relevant to school-based educators and avoid "reform fatigue" (Moeller, Seeskin, & Nagaoka, 2018). By preventing a sheer focus on the lastest accountability measures, the school leaders and their teams can begin to develop self-efficacy around achieving their own goals (DeWitt, 2019). This also serves the purpose of clarifying purpose and utilization of time, as using research-based indicators can and should inform where teams spend their energy at the school level (Moeller et al, 2018). At the school level, the organization can provide ongoing training and collaboration between those who lead the data work at their specific school to grow their own understanding of data use and to provide training on effective, practical data use to the teams at their school (Moeller et al, 2018). The Network of College Success has been working with teacher-leaders for years towards that end, including a four-step process of taking the data from theoretical to practical as seen below (Moeller et al, 2018):

Figure 5: From The Network For College Success



To get educators to this point, there has to be some collective work done by the organization as a coordinating entity to set the stage for such training to begin.

Different schools have different systems and timelines for analyzing their progress and this needs to be reconciled in some way if we are to organize for collective improvement (Ancona & Bresman, 2007). There is a two-pronged approach to tackling this. First, provide people tools to engage in data analysis at whatever time benefits them. As the anonymized researchers in Philadelphia explained, "We created a series of Excel files that would map to existing exports from the student information system for a 'data drop'. This allowed schools to drop in their data and check on their status for the indicator whenever they would be meeting internally". Secondly, help collect and analyze data across the cohort of schools at regular

intervals. This includes end of year reflection, ongoing trends, and frequent shorter cycles of data analysis to build collective learning (Moeller et al, 2018). Such action allows the schools to see where bright spots, or "positive deviance" are occurring (Bryk et al, 2015). Framing the conversation around sharing those actions as opposed to improving the lagging schools is important to invest leaders in a process that requires vulnerability (Moeller et al, 2018). Thus, whatever the early warning indicator the organization hopes to move forward with in schools, the infrastructure of data analysis will be there to tackle the complexity of the issue.

Discussion | Limitations and Further Implications

These recommendations are a starting point only, there would likely have to be significant reallocation of resources to pursue this work with sufficient vigor. This means time and money that is being spent elsewhere would need to be directed to this effort. One potential pathway that might be available is understanding how other research-practice partnerships are working in Philadelphia. As they have not been studied as part of this paper, that would likely be an extension of this study if it were to continue. Organizations in this field, such as the Philadelphia Educational Research Consortium (PERC), have worked alongside the district in their early warning indicator work and have built collaborative networks to address the needs of the ongoing work. While the recommendations listed in this paper are borne out of the data presented, it is worth exploring the work of these organizations and their associated schools to see what information such an investigation might yield.

This activity also provides another line of inquiry for TFO to pursue. Is there a need to create an improvement community or provide support for schools as they join one already in progress, such as the one focused on 9th-grade On-Track work? This is perhaps a more efficient way for the organization to learn, as the burgeoning improvement community worked closely with the "To & Through" institute for support in getting it off of the ground. This could also provide a pathway for the organization to serve as a nexus between the district and charter schools, fostering collaboration where it is often missing. Towards that end, that provides a research area which is fertile for more discovery - how can improvement communities serve as a tool to break through the walls created by decades of political antipathy between districts, teachers' unions, charter operators, and their wealthy backers? Perhaps it is too optimistic, but by rooting into the work of improving educational outcomes for children, we could find a pathway of greater and sustained collaboration.

Conclusion

TFO is at a turning point in its service to schools. Their hope of providing a more collaborative structure for their schools to work on improvement initiatives is not without precedent and there are workable models both around the country and the City of Philadelphia to emulate. What the data in this study highlights is that the organization can, and should, spend more time diving into the capacity of their schools. This knowledge, in turn, will propel them to provide the right support, at the right time, in the right ways. Moreover, by beginning to build an infrastructure for an improvement community, the organization can leverage the collective

knowledge of their member schools. This way, no school improvement idea will need to be an island, but rather a key learning opportunity for all schools associated with this organization. The pathway forward is not easy. It will take significant time and resource allocation to put into place. Furthermore, the Covid-19 pandemic will provide uncertainty as we return to some measure of normalcy in schools and we learn what lies ahead of us as we support students to achieve their dreams. That is the promise of the work ahead of the organization and all of us looking to bring greater equity to the nation's educational system. As Dr. Martin Luther King Jr. stated in his famous, "I Have A Dream" speech, "This is no time for apathy or complacency. This is a time for vigorous and positive action" (King, 1963). The students will be coming back into the classrooms in the fall of 2021 no matter what we do, so it is with this spirit that we jump into the work of providing the schools our students and families deserve.

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