Focus:

How Long-term Planning Processes Can Improve State-Led Turnaround in Connecticut

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Conducted by Dr. Jennie Weiner from the Neag School of Education and the Connecticut Council for Education Reform

CER Connecticut Council for EDUCATION REFORM

This study was commissioned by the Connecticut Council for Education Reform (CCER). It was conducted in collaboration with a research team from the Neag School of Education at the University of Connecticut, consisting of Dr. Jennie Weiner, Dr. Sarah Woulfin, Dr. Morgaen Donaldson, Daron Cyr, Sasha Davis, Shannon Holder, and Alexandra Lamb.

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Purpose

The focus of this report, commissioned by the Connecticut Council for Education Reform (CCER) and executed by a research team at the Neag School of Education of the University of Connecticut,¹ is to provide insights into how Connecticut's 30 Alliance Districts—those with the greatest need and a large external investment by the state to support improvement—articulate their yearly improvement plans. It was also to begin to ascertain how these different articulations may relate to different aspects of improved performance.

While perhaps a seemingly straightforward endeavor, the general lack of research regarding either the most effective or appropriate role of districts in school improvement processes (e.g., Honig & Hatch, 2004; Rorrer, Skrla, & Scheurich, 2008), or paradigms for how district leaders and others might engage in planning for effective outcomes, made this task difficult. In particular, as articulated later in this report, it required the research team to build much of the intellectual infrastructure to understand the importance of the plans as policy tools as well as how one might quantify their effectiveness.

A note for this study is that the analysis is purely focused on the plans. The research team tracked patterns in the structure and substance of plans across all 30 Alliance Districts over the course of four years. The research team did not assess whether and to what degree the plans were implemented with fidelity. Additionally, the team did not interview implementers. The plans and other publicly sourced data were used. Put simply, this research is not an evaluation of implementation. This is not to suggest that implementation is unimportant. Questions regarding implementation are essential in helping us to understand the true impact of the Alliance District program. However, such work requires deep understanding of the specific and many contextual factors that shape a district's work and, as such, is outside the scope of the current study.² Our purpose here is to analyze the plans as to whether they include elements of effective planning as a means of beginning to answer larger questions of impact.

Specifically, and in keeping with the work of researchers like Spillane, Reiser and Gomez (2006), Woufin (2016) and others (e.g., Coburn, 2001) who argue that artifacts like plans can inform our understanding of practice, we take the perspective that each district creates its plans in response to policies associated with its selection as an Alliance District, and, therefore, that the plans are policy tools that shape behaviors at the district and school levels. Furthermore, each district's plan incorporated multiple policy instruments. That is, as evidenced in the plans, district leaders relied upon different types of instruments to yield improvements for the system, its schools, and students (McDonnell & Elmore, 1987; Schneider & Ingram, 1990).

As described by McDonnell & Elmore (1987), a policy instrument is a strategy to effect change in a particular direction. Political scientists have attended to the characteristics of policy instruments in order to explain the affordances of tools embedded in policies. Policy instruments can include regulations with monitoring, opportunities for learning, and reformed systems with new leadership positions. More specifically, McDonnell & Elmore (1987) articulate a typology of

¹ The UConn team consisted of Dr. Jennie Weiner, Dr. Sarah Woulfin, Dr. Morgaen Donaldson, Daron Cyr, Sasha Davis, Shannon Holder, and Alexandra Lamb.

² A comprehensive evaluation plan of implementation could be conducted in a variety of ways but would need to include deep knowledge of the factors that might impact plan implementation for each district of interest. Therefore, one might imagine such a study to be both labor intensive and costly.

five types of policy instruments: mandates, inducements, capacity building, hortatory, and systems changing. Mandates are instruments that specify rules and regulations for how actors should obey policy. Inducements are instruments that capitalize upon incentives to encourage actors to follow a policy's directions. Capacity building instruments attempt to strengthen the knowledge and skills of actors so they enact a policy. Hortatory instruments rely upon motivational language and persuasive framing to shift actors' mindsets towards that of a policy (Schneider & Ingram, 1990). Finally, systems changing instruments reconfigure systems and redistribute power to advance the implementation of a policy. We consider the ways in which Alliance plans utilized various types of instruments. In this way, we analyze district leaders' preferences for particular strategies to advance reform efforts.

Put simply, these plans matter because they publicly articulate the agenda for school improvement and have the ability to impact resource allocation and implementation. Again, this public nature of the plans is one reason we focused on the plans rather than other data sources (e.g., a select group of interviews) for this analysis. Importantly, these plans take time for district actors to create, negotiate, and monitor. They also serve as the gateway to millions of taxpayer dollars and to potentially increase the capability and capacity of chronically underperforming and often under-resourced schools to better serve Connecticut's students. As such, these plans seemed worthy of our attention and hence, the current research and report.

Research Questions

This study was guided by the following research questions:

- (1) To what degree can current Alliance District plans be considered effective planning documents?
 - a. How and in what ways has this effectiveness shifted over time?
- (2) What do these plans suggest about each district's current capacity to support continuous improvement at the district and school levels?
- (3) Are there any trends or patterns in plan effectiveness among districts that showed improvements on a variety of performance measures? If so, what are they?

In response to these questions and after coding all 30 Alliance Districts' improvement plans from 2012 to 2016, the research team identified the findings in this study. As a reminder, we did not look at whether the content of one particular intervention or a group of interventions was good or best. Rather we focused on some larger elements of effective planning and change and the degree they were utilized in these plans.

Background on Alliance Districts

Understood by many as a mechanism for Governor Malloy to fulfill his promise to "deliver more resources, targeted to the districts with the greatest need" (Connecticut State Department of Education (CSDE), 2012), the Alliance District program was approved by the state legislature in May 2012 (Public Act No. 12-116). A pre-approved list of 30 districts were eligible to submit improvement proposals in the 2012-13 school year, seeking funding for "bold and innovative" reform strategies (Connecticut State Department of Education (CSDE), 2013). They were required to submit their proposals once a year for five years, signifying a "partnership between state and school district" in increasing student achievement (CSDE, 2012).

Eligibility for the Alliance District program was determined on the basis of the District Performance Index (DPI)--the sum of the subject performance indices for math, reading, writing, and science as calculated by the results of the Connecticut Mastery Test (CMT) and the Connecticut Academic Performance Test (CAPT). The 30 lowest-performing districts on the DPI represent approximately 37% of the students in Connecticut schools,³ including some of the most disadvantaged students in the state and the vast majority of the lowest-performing schools (Connecticut Council for Educational Reform). The Alliance District program is a targeted effort to "help districts raise students' performance and close the achievement gap" (CSDE, 2012). Fourteen of the Alliance Districts are also considered Priority School Districts. These districts are identified as having the most significant academic need in the state and are provided additional funds to support eight specific areas of reform as well as early reading interventions.

Once identified, the 30 Alliance Districts were required to apply for additional resources through the submission of a proposal of reform initiatives (i.e., a plan) and budgets for those programs (EdSight; Knopf, 2012). This funding was perhaps particularly important during this period of budget cuts and lay-offs that may have occurred without Alliance Program dollars. The program is funded by Education Cost Sharing (ECS) funds and has grown each year of the program. Funding started at a total of \$39.5 million in the 2012-2013 school year, and grew to \$148.7 million in the 2015-2016 school year (Thomas, 2012; Thomas, 2015). Each district received between \$300 thousand and \$21 million in 2015-2016 to fund their reform initiatives.

The program has required and suggested foci for interventions but asks districts to design the initiatives themselves using data and research to address the needs in their communities (tight on ends but loose on means). The plans look to improve student achievement through classroom interventions focused on the Common Core curriculum, strategies to raise teachers' and leaders' human capital, as well as wrap-around services that improve attendance, engagement, and family support. Each year, the Alliance Districts are mandated to re-submit improvement plans demonstrating district progress alongside detailed initiatives aligned to the overall district strategy with an accompanying budget. The applications also include school-specific interventions for focus, review, and turnaround schools in the district. In 2015-16, the Alliance District grant application and the Priority School District grant application were consolidated, allowing schools to apply for both at the same time.

While the Alliance District program has been in effect for more than four years, there has yet to be a formal evaluation of the effectiveness of the program. However, Connecticut news outlets regularly cover two indicators, test scores and district expenditures. In August of 2016, the Hartford Courant reported that graduation rates and Smarter Balanced test scores were up across the state, including the Alliance Districts. For a number of the Alliance Districts, this growth was substantial. However, negative performance discrepancies between the Alliance Districts overall and the other districts in Connecticut persists (Megan, 2016). Additionally, the gap between White and Hispanic students and White and Black students appears to be widening despite gains in scores across the board for all students (Megan, 2016).

The data highlighted above was a part of the argument the Connecticut Coalition for Justice in Education Funding used in court to prove that Connecticut's educational funding system is unconstitutional (De la Torre, 2016). Multiple Alliance District superintendents testified that despite significant financial allocations, many essential programs have gone unfunded. While the Alliance Districts receive the majority of the education funding in Connecticut, much of that funding has been used to fill deficits in the operating budgets (De la Torre, 2016). In 2015, multiple news outlets reported that some of the allocated funds were spent on deficits or not

³ This statistic was calculated with the number of students in the Alliance Districts, which the Year 3 Application cites at 200,000 divided by the total number of students in Connecticut which EdSight cites at 541,815 students.

spent at all with a plan to carry them to future fiscal years (Thomas, 2015; Megan, 2015). While test scores and budget concerns can illuminate some of the progress and challenges of the Alliance District program, further research is needed to better understand the effectiveness of the program itself. Here we take a first step towards this need by focusing on the Alliance District's plans.

Defining an "Effective" District Plan

As already discussed, though evaluating the effectiveness of a district plan seems to be a relatively straightforward task at first, it is actually quite difficult. To be precise, this study seeks to evaluate the plan separate from the outcomes it produced (e.g., it is **not** an evaluation of performance) and without taking a particular position on the state's intervention categories (e.g., extended day/year, early childhood literacy initiatives, etc.). In this way, we operate under the following assumptions: (1) improvement plans can vary along a continuum of effectiveness and utility separate from, but connected to, the particular interventions within them; and (2) plans that are more effective in terms of these elements are likely, given appropriate conditions, to produce better outcomes. These assumptions drove us to identify a framework to evaluate the plans.

There was not a lot of existing literature to address research on how an effective plan should look, in terms of formatting, structure, and conceptualization. Research on effective planning is distinguished from research on the content of such plans (e.g., the type of interventions that might be most appropriate, the goal making process etc.) One exception was the work by Lane, Bishop and Wilson-Jones (2005) that focused on how a district might create an effective strategic plan. In this piece, the authors introduce a 19 step framework to support effective planning. These steps ranged from "preparing to plan," in which the team identifies current resources and the leader assesses their sufficiency, to "Objectives are SMART," in which the team ensures that the objectives of the plan match Drucker's (1954) SMART goals. Although this framework was comprehensive in scope, it remains relatively untested, and, we argue, lacks some fundamental elements shown to positively impact district performance.

Existing research was also fairly sparse regarding what the district's role in school improvement should be. Much of the current work in this area tends to focus more on how districts can shift from a compliance orientation (Anderson et al., 2008; Hemmer, Madsen & Torres, 2013) to one focused on instructional improvement (Honig & Rainey, 2012). Therefore, in terms of thinking about planning, it becomes difficult to figure out what district leaders should include in their plans to make them more or less effective.

Given these gaps in the literature, the research team had to address both a framework for effective planning and the role of the district in improving district effectiveness. Based on our research, we identified some of the core attributes/foci of an effective plan, in order to develop a robust frame for understanding and assessing the Alliance District Plans. We recognize that there may be a number of other factors that are also important and would encourage others to continue this work.

Our framework for evaluating these plans includes the following components: coherence, maintaining an equity focus, capacity building, and logic modeling. We discuss each in turn including a short overview of the research behind it below.

<u>Coherence</u>

Institutional coherence, defined here as the degree of connectivity and alignment across the system to help facilitate collective work for improvement over time, has long been viewed as an essential element of effective school improvement (e.g., Honig & Hatch, 2004; Childress, Elmore, Grossman, & Johnson, 2007; Newmann, Smith, Allensworth, & Bryk, 2001). Recent work by Trujillo (2013), looking across the literature on district improvement, found that when reforms are situated in districts with more coherent management systems that share common goals and aligned activities, they are more likely to produce student test gains. Other activities that bring coherence to district reforms include helping teachers interpret and implement interventions and advocating on their behalf to identify interventions best aligned with local context and needs (Anderson, 2003).

When creating improvement plans, districts also need to consider the degree to which schools within the district operate with coherence. In their work on school improvement, researchers from the Strategic Education Research Project (SERP) (2014) discussed the need to pay attention to a school's internal coherence as a key mechanism for reform. Defining internal coherence as "a school's capacity to engage in deliberate improvements in instructional practice and student learning across classrooms over time, as evidenced by educator practices and organizational processes that connect and align work across the organization," (p. 3), the researchers developed an internal coherence tool. This tool includes four domains ranging from "teacher efficacy beliefs" with indicators of teachers' collective and individual efficacy, to "leadership for instructional improvement" with indicators related to the leader's ability to create a psychologically safe working environment.

Taking these points together, we might then understand the manifestation of coherence as fairly broad and wide-reaching. For the Alliance District plans then, the challenge was to identify specific elements that could give some insights into these broader concepts. Thus, we focused on (1) the degree to which the selected interventions match the identified needs; (2) whether parts of the system work together to make these interventions possible (e.g., resource alignment, structure and policy alignment, etc.); (3) whether there were signs of connectivity over time—both across and within years; (4) the extent to which districts emphasized focus by undertaking a smaller number of interventions; and (5) whether interventions were based on evidence that they would be effective in addressing the specific context of the districts and schools.

Maintaining an Equity Focus

As highlighted by Skrla et al. (2004) and Rorrer, Skrla, and Scheurich (2008), a focus on equity is instrumental in creating and sustaining meaningful change in a district and its schools. This may be particularly true in Connecticut, which persists in having one of the largest achievement gaps in the United States and a funding system that was recently ruled unconstitutional and "irrational" by a state Superior Court (Pazniokas &Phaneuf, 2016). Many of the Alliance Districts are the least resourced, serve the greatest number of at-risk students, and enroll the most minority students in the state. However, research shows both that districts have often, through their actions or inactions, served to create or reinforce inequity (Rorrer, Skrla, & Scheurich, 2008); and also that districts are capable of disrupting and displacing institutionalized structures and practices that perpetuate inequity in student achievement (p. 328). Equity should be an important focus of any effort to enhance the Connecticut education system whether in Alliance Districts or in the state overall.

There are varied conceptualizations of equity and approaches to create, cultivate and sustain it. However, in their work on using equity audits as a tool for school improvement, Skrla et al., (2004) use Scott's (2001) work to frame their definitions. In so doing, Skrla et al. (2004) focus on what they call "systemic equity," to change how systems and system actors behave to "ensure that every learner—in whatever learning environment that learner is found—has the greatest opportunity to learn enhanced by the resources and supports necessary to achieve competence, excellence, independence, responsibility, and self-sufficiency for school and for life. (p. 6). Rorrer et al. (2008) build on this conceptualization by providing two specific focal points for action: owning past inequity and foregrounding equity. While the former seems to be more situated in reflection and the latter in action, they are similar in that the focus for each is on the explicit naming of both the inequities and the efforts to address them. Citing a study by Skrla (2000), Rorrer et al, (2008) highlighted work that they believed was a paradigm of such an approach:

It is important to note that these superintendents [in the four study districts] did not choose to try to explain away the poor performance of groups of students. They did not endeavor to baffle their critics with confusing, jargon filled explanations of low achievement. They did not blame low performance on parents, social service agencies, or anyone outside the district. They did not attempt to finesse the system by finding quick-fix substitutes for real improvements in student learning. They responded both to the state accountability system and to their local constituents with a sincere commitment to improve the learning of all students (p. 20).

In terms of operationalizing this concept of equity focus in the Alliance District plans, one might expect to see explicit mention of both issues of inequity and interventions aimed directly at addressing them. This may include inequitable resource alignment and a move to ensure that school resources are adequate and fair (Rodriguez, 2004). This would include considerations of allocating or reallocating funds as well as technical expertise and human capital, where needed. Other interventions may include the introduction of explicit policies aimed at changing the district culture towards greater inclusivity, diversity and openness. As Rorrer et al., (2008) explained, this would include providing professional development on building high expectations for all students; and in regarding the professionalism of teachers as valuable. It may also contain policies toward bringing greater diversity to the district and to support teachers through professional development to embrace notions of cultural competency and sustainability. Therefore, in our coding schema, we identify any such practices as being equity focused.

Capacity Building

Firestone (1989) defined capacity as "the wherewithal to actually implement [a decision/intervention]. The capacity to use reform is the extent to which the [school] has the knowledge, skills, personnel, and other resources necessary to carry out decisions" (p. 157). Similarly, we think of capacity building as efforts taken to enhance the abilities of those within the system (e.g., district personnel, teachers, principals) to do their work effectively and efficiently in a sustainable manner to reach identified goals.

Embedded in this concept of capacity building is the degree to which districts and schools have the structures and resources to allow productive practice to occur, what Peurach and Neumerski (2015) and others (e.g., Cohen & Moffitt, 2010; Spillane & Mehta, 2010) have defined as educational infrastructure. Educational infrastructure can be understood as "the structures and resources that are mobilized by local school systems (i.e., school districts in the US) to enable (and at times constrain) school leaders' and teachers' efforts to provide, maintain, and improve instruction" (Hopkins et al., 2013, p. 422).

Given this definition, we can understand educational infrastructure to exist at multiple levels of the educational system (e.g., classroom, school, district, state, federal policy, etc.). As Peurach and Neumerski (2015) point out, educational infrastructure is also constituted by the intertwined elements of culture (i.e., professional norms and beliefs guiding practice), capacity (i.e., the

resources available at the individual and collective level to meet goals) and structure (i.e., the way work is organized to support instructional improvement). Therefore, we might understand capacity building as the active linking of these components to help facilitate larger changes in the system (e.g., professional development linked with changes to teacher schedules, linked with new curricular innovation, linked with different classroom resources, etc.).

We understand capacity building as the degree to which the interventions are focused on teachers' skills and knowledge, rather than focusing primarily on the introduction of new tools (e.g., curriculum, evaluation protocols, testing) or technologies (e.g., smart boards, laptop initiatives, new facilities) without such supports. This may also include building community relationships and resources over time.

Logic Modeling

Though not necessarily prevalent in the literature on district improvement or planning, recently logic modeling—long used in evaluation—has grown in popularity as a tool for school improvement efforts. According to a recent piece put out by the Institute of Education Sciences (IES) and the Regional Educational Laboratories (REL) on the power of logic modeling for improvement (Lawton et al., 2014), logic modeling is characterized by four components: resources (inputs), activities (aspects of implementation), outputs (observable products of the completed activities, and outcomes (short-, mid-, and long-term—effects or impacts within various timeframes). These components are then put together graphically to reveal their relationships, which provides opportunities to better understand how one element impacts the other and the intended outcomes. Indeed, in the same piece by IES, the authors (Lawton et al., 2014) point out that logic models can be helpful in three interrelated ways:

First, [logic models] guide program personnel in understanding the program's activities and intended outcomes more clearly and completely. They can also help program personnel who have experience writing program proposals or plans become more systematic in thinking through the details of the program and the relationships among its components at various stages. Second, having the program and its outcomes laid out in a logic model helps educators identify evaluation questions. With a budget for an evaluation in mind, educators can use logic models to decide which program features are most crucial and then develop evaluation questions that address the program features and their interrelationships.... Third, logic models allow for general evaluation questions to be fine-tuned into clear, specific, and actionable evaluation questions... (p. 2).

As highlighted here, there are a number of potential benefits to logic modelling, all of which are aligned with the purposes of planning for improvement. For our purposes in assessing the Alliance Districts' plans and their effectiveness, we were particularly interested in the outputs and outcomes for which they would collect information. In particular, and due to plan requirements that such data be collected, we wondered the degree to which this information or data seemed to link to a larger model of improvement. We were also interested in whether and how the data being collected connected to the interventions and their trajectories. Therefore, our codes focused on these measures and their interrelationship to one another and practice.

Methods for Qualitative Analysis

Analytic Approach

To ascertain whether and to what degree the Alliance District plans met the framework criteria we identified, we engaged in a deductive coding process. To do so, we created a codebook

that articulated the framework into specific and quantifiable components (See Appendix A). For example, we identified the specific interventions that were highlighted each year in a given district's plan and categorized them as pertaining to improvements in the instructional core, infrastructure, climate and culture, and equity—as well as their alignment with the menu of interventions designated by the CSDE. We also looked at the support structures that would be provided, who would provide them, when and how. Among a number of other elements, monitoring of the plans, including the stated outputs and outcomes, was a key focus. The full codebook is available in the Appendix of this piece.

The literature about planning processes suggests that strong plans have an early planning stage that includes "broad yet effective information gathering, development and exploration of strategic alternatives, and an emphasis on future implications of present decisions" (Bryson, 1995). We therefore structured the codebook in three segments: pre-plan, plan and cross-plan analysis. The cross-plan analysis was conducted after the other analyses occurred, and the process is discussed in greater detail below.

Sample

The sample for this analysis were all 30 Alliance District's plans, from the 2012-13 school year to the 2015-16 school year, inclusive. Although budget information was used as a means of checking which of the interventions described were, in fact, part of the Alliance efforts (and which were funded through other identified or unidentified sources), we did not conduct a formal budget analysis. Future work in this area would be useful and is recommended.

Coding Process

Once the codebook was developed, the research team, consisting of three professors and four research assistants, engaged in deductive coding. To begin, the entire team coded all four years of plans for two of the Alliance Districts, in order to support intercoder reliability and to ensure the codebook could be used effectively and consistently by all coders. Our efforts here were largely guided by Hruschka et al.'s (2004) process of building intercoder reliability that includes similar parameters regarding codebook creation, coding, assessment of reliability, codebook modification, and final coding. We continued to meet together with two team members overlapping their efforts for particular years of each plan to ensure both continued intercoder reliability and that details of each plan were appropriately identified and categorized.

Once all the plans were coded, the head researcher on the team, Dr. Jennie Weiner, created a matrix aligned with each of the categories of the framework and conducted the within and across plan analysis. This was more inductive in nature, and the researcher looked for emergent themes from the coding. The resultant analyses were then sent back to the team members who had conducted the original coding to ensure that the conclusions were appropriate and make edits, if needed. These matrices were then used to look for themes and patterns across the districts and helped to inform the findings that we describe in the next sections of this report. Finally, CCER identified a smaller group of districts with success in various academic measures on which to focus further attention. We discuss the selection process and associated findings for this research question in Section 3.

Section 1: Findings on Plan Structure

The goal of this project was to analyze the Alliance Districts' plans and how their content matched particular principles of effective planning and change processes. However, as the research team engaged with the plans, it became clear that there were structural elements of

the Alliance District program (e.g., what the state was asking for and in what format) that impacted whether and to what degree the principles (i.e., equity, coherence, capacity and logic modeling) were present. In this section, we highlight these elements and how they might support more effective plan development and implementation in the future. We find that:

- The format of the plan, as mandated by the Connecticut State Department of Education, differed year to year.
- The required scope and parameters of the plans also varied so that (1) similar or the same interventions were resubmitted year to year and/or (2) many plans included information tangential to the plan.
- There was uneven compliance regarding structural requirements (e.g., including monitoring processes for each intervention) across and within plans.

Implications:

• A guiding framework on effective planning may be needed.

Varying formats, scopes and parameters

One aspect of the plans that made longitudinal and even year to year analysis difficult was that its required format changed fairly dramatically each year. While undoubtedly intended to improve the usefulness of the plans and their quality, the changes appeared to have some unintended consequences.⁴ Below we provide some of the key attributes of the plans in terms of their required format, scope, and parameters each year, how these shifted over time, and potential impacts of these shifts.

The format for first year of the plans (2012-13) was fairly open in that most of the prompts were general (e.g., "What is your district's overall approach toward improving student performance and closing the achievement gap?") and asked for narratives in response. As such, it is perhaps not a surprise that the 2012-13 plans were far longer than in later years. As an extreme example of the general pattern, in 2012-13, Hartford's plan was 103 pages long. (The approximate average length of the plans that year was 58 pages). In 2015-16, Hartford's plan was only 22 pages. Such findings bring to the foreground questions of the utility of plans that are so long as to be become potentially onerous to create or interpret. (It took the research team nearly 40 hours to evaluate Hartford's plans.) Conversely, plans that are too short can potentially lack critical information about the implementation process. To be clear, we do not mean to suggest that there is a given length that would be most appropriate for these plans. Rather, we argue that these fluctuations are important because they suggest a lack of clarity about what should be asked of districts or how the plans might be used over time to improve implementation and outcomes.

In year two, the plan format shifted to include what might be considered more direct questions. This included asking the districts to speak directly to their theory of action for improvement and to provide details of successes and continued areas for growth regarding the interventions they had proposed, and presumably implemented, the prior year. Additionally, the format for district responses was more controlled, in that the Connecticut State Department of Education (CSDE) used templates to solicit bulleted responses, rather than lengthy narratives. In some of the prompts there were also requests for specific evidence to back up districts' conclusions regarding implementation. Finally, templates were created for districts to fill in regarding the

⁴ Through feedback conversations with Superintendents after the completion of the analysis, the team was also made aware that the state contacts for Alliance Districts also frequently changed year to year. This may also explain some of the lack of uniformity in the plan structure and requirements over the course of the program.

strategies, progress metrics, and timelines for each category of intervention. Interpreting the introduction of these elements together, it suggests that the CSDE may have desired to tighten alignment of these elements, to better facilitate districts' tracking of interventions over time, and to enable districts' use of this information to inform practice.

And yet, despite what seemed to be some important moves in 2013-14 to enhance coherence in the planning process, in 2014-15 another round of changes were introduced. The biggest of these was the introduction of the CSDE Turnaround Framework as a means of guiding the planning process. Specifically, districts were asked to describe how each proposed intervention fell into one of the four areas of the framework: talent, academics, culture and climate, and operations. Simultaneously, the choice of interventions was also more explicitly controlled with templates for each part of the framework and associated interventions including forced choices. For example, the planning template for the talent section stated, "the CSDE will require all Alliance Districts to pursue strategies to strengthen district and school talent systems." Supporting teachers' transition to and use of Common Core Standards was also explicitly stated as a required focus under academics, while the framework areas of climate and culture and operations did not have mandatory interventions associated with them.

Even with the variability in requirements across the framework elements, each framework category served as template heading into which districts were to put their specific interventions. Moreover, there were no other headings under which districts could categorize interventions. In response to these new parameters, some districts reframed existing interventions into these categories—reshuffling the grouping or renaming existing approaches—but not necessarily altering their substance. Others added to or subtracted from prior interventions to move towards interventions closely aligned with the new framework. While this may have been the intended consequence (The mandatory nature of some of the interventions suggests it was.), a possible negative effect was that the shift again made it difficult to track interventions over time. Additionally, it may have also moved a district that was having success with an intervention to discontinue it or to pick up something less needed but mandated.

Finally, in 2015-16 the plan was changed once again, this time to a template that included only what were deemed the priorities (i.e., intervention) for each of the elements of the turnaround framework introduced the prior year, a SMART goal associated with that priority and a budget. While this was a streamlined approach and likely provided quick information regarding the nature of the interventions and associated finances, it was very hard to know what exactly was being implemented or how. It was also difficult to assess how such interventions built on, extended or were different from prior efforts or why.

Finally, despite the increasingly narrow scope and shortened length of the plans, the research team found that, no matter the year, there were often portions of the plans and templates that were either not filled out or done only minimally. As we will discuss later, one of the elements most often missing was a comprehensive district monitoring plan—despite explicit requests for monitoring plans in three of the four years. There was also a good degree of variability in non-mandated elements and, in particular, the details regarding the stated interventions and implementation steps. While the research team acknowledges there may have been communication between the CSDE and the districts, which was not recorded in the plans but helped to fill in gaps for districts that provided fewer details, it does suggest some looseness regarding which plan elements the district would truly be held accountable for including and implementing.

Implications

Together, the yearly changes to the format, scope, and parameters of the plans, coupled with what seemed to be somewhat loose accountability for compliance, suggest a lack of an explicit guiding framework for the management of the Alliance District process. Such a framework should be differentiated from content expectations. It was clear from the plans that the CSDE had some strong and persistent views regarding what content should be included in the plan and these may be completely appropriate and effective. But it appears that the CSDE did not have a framework for the grant application process. It also appears that many of the CSDE's efforts to change the process were designed to make it less burdensome for districts.

It was less clear which attributes of the plans (e.g., monitoring, clear outcomes, coherence, etc.) were important to the CSDE. For example, what was the underlying purpose of having the district articulate the underlying theory of action relative to having an effective plan? If it was important for planning, why have it one year and not another? Similarly, it was often unclear whether and to what degree the plans were aiming to be more than compliance documents. As already stated, the constant changes to the plan format and structure made tracking interventions over time very difficult, and the frequent lack of clear outcomes and monitoring process in the plans reinforced a sense that the plans' core function was not necessarily usability. In response to these findings, we suggest that, moving forward, the CSDE and districts consider building or adopting a planning framework to support strong planning principles and explicitly translate these principles to end users.

Section 2: Findings on Effective Planning Elements

This section shifts from the structure of the plans to whether and to what degree elements of the researcher developed framework on effective planning were incorporated into the plans. These findings are descriptive in nature. Again, they do not provide information regarding the efficacy of implementation or results. We highlight overarching themes within each plan for the four components of the framework (i.e., Coherence, Maintaining an Equity Focus, Capacity Building and Logic Modeling).

Plan Coherence

We define coherence as the degree of connectivity and alignment across the system to help facilitate collective work for improvement over time. In particular, we focus primarily on: (1) the degree to which the selected interventions match the identified needs; (2) whether parts of the system work together to make these interventions possible (e.g., resource,, structure and policy alignment, etc.); (3) whether there were signs of connectivity over time—both across and within years; and (4) the extent to which districts emphasized focus by undertaking a smaller number of interventions based on evidence that they would be effective in addressing the specific context of the districts and schools. We find that:

- For each year, the identified needs, the stated overarching goals of the interventions, and the interventions themselves were generally aligned.
- Though more so in later years, the interventions reflected the CSDE's priorities and most districts focused on a smaller number of interventions.
- It was hard to identify the source of particular interventions in terms of whether they reflected best practice.
- Year to year connections between the plans were generally loose and it was difficult to assess how one year of implementation informed the next.

Implications

 Plan coherence may require strengthening and could be achieved through the development and support of longitudinal planning. Greater focus on the source as well as substance of interventions may also be needed.

Findings

As we discussed earlier, the degree to which districts were asked, via the plan template, to articulate their needs and areas for growth varied across years. At the same time, the degree of specificity regarding these needs, and how they were identified (e.g., surveys, anecdotal data, state exams, etc.) also varied. For instance, in some districts, such as Naugatuck, the needs were quite precise and well-articulated. The authors of Naugatuck's plan stated that one of their needs was to enhance the leadership capabilities of assistant principals. The selected intervention, implementing an administrative internship program, directly addressed this need. In contrast, Bridgeport's plan stated more general needs (e.g., the achievement gap and accountability), and hence, it was slightly more difficult to draw straight lines between these needs and the proposed interventions.

While needs were articulated and evidenced with variability, the stated goals for the interventions tended to be quite similar across the plans. When asked to include goals, districts tended to provide a limited number of student performance and behavioral metrics (e.g., CMT, CAPT, DRAs, attendance, graduation rates, etc.). Most often, these goals also included what were presumed to be state-generated growth targets. Since the goals were fairly broad, they could be considered aligned to most interventions oriented towards enhancing school performance. This is not to say that the goals were inappropriate. They might be exactly what was needed to get the districts moving and were likely based on robust projections of future performance. At the same time, however, it is also possible, that these general goals may be seen as somewhat arbitrary or even unattainable by those on the ground (e.g., teachers and administrators) and hence served to diminish their motivation (Weiner, Donaldson & Dougherty, 2016).

Whether broad or specific, in general, the interventions identified by the districts aligned with the needs identified. Of course, such alignment was easier for districts with more generally stated needs. Unsurprisingly, many districts had more broadly defined interventions (e.g., restructure high schools, improve instruction for all students, develop and/or expand PreK programs, etc.). Nonetheless, in terms of coherence between needs, goals and solutions (i.e., interventions), it was rare to find a district introducing an intervention that had seemingly little or no connection to district needs or goals.

One pervasive exception to this rule occurred the 2014-15 school year in which technology interventions, and often large purchases of new technological equipment (e.g., smartboard, laptops, etc.) were introduced into many of the plans. These patterns might easily be explained by external forces (e.g., a push from the state to include technology). There was little precedent in terms of the plans themselves regarding their appearance. Very few of the districts had identified technology as a need prior to 2014-15 and those that did tended to emphasize it as a tool for data collection and management, rather than embedded in daily instruction. As such, it seems important, once again, to consider whether and to what degree state pressures may have affected the coherence and impact of the plans.

Connected to this issue of the selection of particular interventions, and again aligned with earlier findings about forced choices embedded in the plan template in later years, we find that districts tended to narrow the number and scope of their interventions over time. One might consider such narrowing to be positive; research regarding institutional improvement and

turnaround suggest that greater coherence and impact come from doing a few things well (Leithwood, Harris & Strauss, 2010). On the other hand, this research is likely based on the assumption that interventions are selected in response to identified needs. In the case of the Alliance Districts, this sometimes appeared to be the case and sometimes less so. As such, it might be worth considering whether a system in which the state increasingly controls goals and interventions is ideal for improvement efforts.

Regardless of whether the interventions, in terms of focus and scope, appeared to align with stated areas of need and goals, the plans generally lacked data on whether such interventions were research-based. Instead, it seemed that any selected intervention, if aligned with need and/or CSDE areas of focus, was appropriate.⁵ This would be in contrast to districts stating explicitly why, vis-a-vis research including results of pilot testing, the selected intervention was the most appropriate for the task at hand. It is important to note, that the plans did not necessarily ask districts to provide the criteria for how they selected the interventions that they did. However, a number of districts (e.g., Naugatuck, Norwich, Stamford, Vernon, etc.) did include such information without being asked, suggesting that data regarding the prior effectiveness of particular interventions informed decision-making at the ground level. At the same time, there were a great deal more districts that provided little information about where the interventions had come from or their prior success when using Alliance funds to extend current practices. While such decision-making is not in and of itself flawed (e.g., current interventions may indeed be working to enhance practice and performance), it does seem reasonable that it would ideally be coupled with evidence that the district is doubling down on practices that work.

Finally, though as discrete documents, the Alliance Districts' plans were, in a given year, often fairly coherent regarding needs, goals and focus of interventions, the same was not true across years. It was unclear how one year of implementation impacted the next or how those creating the plans saw their work as situated across the five years of the program. When the research team looked at the plans, we found that, despite rhetoric of incrementalism and taking a stepwise approach to implementation, the actual plans suggested a floodgate approach in which districts would, as stated, implement all aspects of an intervention in a given year. As we discuss relative to the logic modeling, one issue with such an approach is that it makes it difficult to know how or when to intervene in the system when things go awry or when one wishes to replicate success. In terms of coherence, it also makes it hard to ensure that there is consistency over time or that when changes are made, they are connected to current and pressing needs.

Implications

Together, these findings suggest that district plans could benefit from greater coherence. In particular, it seems there is a need to support districts in considering how interventions in a specific year might be connected over time to build momentum and address ongoing needs or roadblocks to enhanced performance. One possible support would be to use the same planning document for all years of an intervention and build on/modify it over time. This may include, as the CSDE did in 2013-14 and 2014-15, explicit questions meant to solicit information from the districts about what parts of implementation are working well and where needs persist. Indeed, if designed appropriately, such a document could be used at different points across a year for monitoring purposes. Finally, it may also be useful to include questions about the source of the proposed interventions and their grounding in evidence.

⁵ We make the determination of appropriateness based on the assumption that those at the CSDE approved the plan with the intervention as stated.

Maintaining Equity Focus

As a reminder, research suggests that districts can act as powerful forces in disrupting inequity, even as, historically, many district activities and structures served to institutionalize it within schools (Rorrer et al., 2008). Moreover, they can achieve this disruption through policies aimed at naming and explicitly addressing issues of equity (i.e., putting it front and center). We find that:

- Issues of equity were generally subsumed in larger and important questions regarding students' access to high-quality schools and resources as well as the opportunities and achievement they had within such schools.
- When issues of equity were called out more explicitly, they tended to be in reference to talent pipelines and recruiting more minority teachers, improving instructional rigor, better engaging community and student engagement, and/or targeting the academic and social needs of traditionally underserved groups (ELL students, students designated as needing special education services).
- A smaller group of districts included further interventions aimed at addressing issues of institutional racism or bias to support larger equity goals including student access, opportunity, and achievement.

Implications

• Equity may need to be more explicitly put "front and center" in planning processes. One tool to facilitate this process may be Equity Audits (Skrla et al., 2004).

Findings

It is important to note that neither the identification nor articulation of equity issues was explicitly called for in any of the planning documents required by the state. Similarly, the menu of interventions from which districts were meant to choose, or those mandated in later years, were often not explicitly framed in terms of equity. At the same time, a number of the Alliance Districts face an ongoing struggle to provide students with an adequate educational experience in terms of resources and opportunity to learn. Indeed, a number of districts (e.g., Bridgeport, Hartford, New Haven, etc.) spoke to these needs directly in their plans. For example, in reviewing district needs, the Hartford plan stated that a lack of resources kept them from properly maintaining school buildings, leading to their decline and a lack of safety for students. In the context of limited resources and great student needs, one might consider any focus on improving educational access, opportunity, and outcomes as equity work. As such, in this section we focus less on whether specific interventions themselves promote equity and more on the degree to which equity was an explicit focus of these interventions.

On this note, for most of the districts, whether they be large and urban or smaller and/or more rural (e.g., Bridgeport, East Hartford, Hamden, Meriden, Naugatuck, New Haven, Windsor, etc.), issues of inequity were more implicit than explicit. These plans did often, but not always, highlight disparities in student achievement by race, language status, special education, and/or socio-economic status. Additionally, when they did so, they tended to use general language (e.g., "We have a persistent achievement gap"). When it came to interventions, these districts often focused on the need for "higher expectations" or more "rigorous classes," the suggestion being that current offerings lacked or could be improved in these arenas. For instance, Killingly highlighted a need to increase student access to rigorous courses in middle and high school. East Haven emphasized high school redesign, including the introduction of an International Baccalaureate program and a STEM school. These were generalized approaches to raising achievement across all groups, rather than identifying specific groups of students needing particular assistance or dismantling institutionalized inequity.

For another and smaller group of districts, the plans were more explicit regarding equity as a driver for interventions. Many of these districts (e.g., Manchester, New London, Norwich, Waterbury, etc.) stated a need to diversify their teaching force, with efforts being directed towards the recruitment of more minority teacher candidates. There were also often interventions aimed to better serve traditionally underserved students through interventions like enhanced SRBI processes as well as an emphasis on enhancing family and community engagement. While all of these interventions can be considered to be explicit regarding equity, most of the interventions for this group of districts focused on building new systems to enhance practice, rather than deconstructing systems that may have produced such inequity in the first place.

In contrast, the final and smallest group of districts (e.g., Hartford, Norwalk, Norwich, Stamford, etc.) were explicit about issues of equity, both as they pertained to motivation for particular interventions and explicitly referenced how such interventions were aimed at addressing institutionalized inequity. For example, Norwich's plan spoke explicitly about the need to infuse culturally relevant literacy materials into literacy initiatives to "support all students to high academic achievement." In response, the plan included ongoing trainings over the course of five years, with the aid of a professor from the University of Connecticut to help enhance teachers' cultural competency. This is not to suggest that Norwich is somehow more oriented towards equity than other districts or that they necessarily implemented these interventions effectively. However, if Skrla et al. (2004) and others are correct in identifying explicitness as being linked to more effective outcomes, then perhaps greater emphasis on explicitness is needed.

Implications

If it is agreed that equity is a key motivator of the Alliance District program, it may need to be more explicitly put "front and center" in planning processes. This may include everything from reconsidering how the program is framed to what information is asked of districts in their plans. Of course, increasing the focus on equity may also require supporting districts in developing greater knowledge of the inequity within their own district and how current practices and structures may serve to reinforce inequity. One tool to facilitate such a process may be Equity Audits (Skrla et al., 2004), which provide users with a set of key indicators to audit equity at the school and potentially district levels.

Capacity Building

As we define it here, capacity building can be understood as the efforts taken to enhance the abilities of those within the system (e.g., district personnel, teachers, principals) to do their work effectively and efficiently in a sustainable manner to reach identified goals. Specifically, we focus on whether and to what degree: (1) school-level interventions that are focused on changing teacher practice are coupled with growth in infrastructure to support implementation (e.g., enhanced math instruction coupled with the hiring and training of district math coaches); (2) professional development was oriented towards ongoing, sustainable changes in practices; and (3) the monitoring process (when included) was used to engage those implementing the interventions in reflecting critically on their effectiveness. In analyzing capacity building within the Alliance District plans, we find that:

- Many Alliance District plans included interventions to build additional infrastructures and enhance instructional practices and outcomes.
- Fewer plans matched instructional changes with aligned infrastructures (the exception being professional development).
- Most interventions included professional development, and the approach was often to provide it on-site and embedded in teachers' practice.

• Monitoring processes seemed more oriented towards compliance than assisting those implementing the reforms with reflecting on current practice or enhancing future practice.

Implications

 Continue to engage districts in considering how they can build educational infrastructure to support larger performance objectives. This may include revisiting the number and scope of interventions districts are asked or choose to implement as well as reframing the monitoring process from compliance to development and growth.

Findings

In keeping with some of the CSDE priority areas for Alliance District reform (e.g., enhancing human capital and district talent pipelines), most district plans included improvements to educational infrastructure⁶. For a number of districts, this meant building up and/or out the district's human resources department and overhauling the hiring and induction process for new teachers. As already mentioned in the context of equity, these human resources efforts often included aggressive recruitment of minority teachers and administrators. Other popular reforms aimed at enhancing educational infrastructure included extended learning opportunities (also a state priority), data management systems to support formative assessment and analysis, Common Core-aligned curriculum, and other resources and structures to enhance teacher and community decision-making (e.g., instructional leadership teams and leadership councils). These findings suggest that plan creators understood capacity building as a necessary component of reform.

While investing in educational infrastructure is undoubtedly beneficial to districts and schools, particularly those most strapped for resources, our findings raised questions about whether the infrastructure would maximize the impact of the interventions. Indeed, though virtually all of the plans included infrastructure initiatives that would support implementation (e.g., new data systems, curricular materials, extended day/year, etc.), few put many or most of these elements in conversation with each other. The exceptions were districts like East Hartford, where the district's work to increase "highly effective instructional practices aligned to the CCSS that support and challenge all learners" were tightly coupled with a newly designed curriculum review process, time for curriculum mapping, and the hiring of instructional coaches. Another example of tighter connections between interventions was when, in addition to introducing new curriculum, districts hired new personnel (e.g., literacy coaches, additional ELL teachers, etc.) and provided trainings for such personnel. Such coupling occurred more often in plans with fewer interventions and more coherence overall.

As hinted to above, while high-level coordination of multiple educational infrastructure supports was not in all of the plans, districts did frequently include professional development as a mechanism to support school-level interventions and particularly those aimed at instructional practice (e.g., implementation of Common Core standards). These efforts were said to be regularly occurring and embedded in the school day and/or existing teacher collaborative structures (e.g., PLCs, data teams, common planning time, etc.). The professional development models identified in the plans might be understood as more aligned with best practice than workshops or pull out sessions. However, it was sometimes unclear how these multiple professional development efforts would be integrated with current prerogatives and/or daily needs.

⁶ As a reminder we are using the definition of educational infrastructure as presented by Hopkins et al. (2013), "the structures and resources that are mobilized by local school systems (i.e., school districts in the US) to enable (and at times constrain) school leaders' and teachers' efforts to provide, maintain, and improve instruction" (p. 422).

Finally, with some exceptions, the district monitoring plans for interventions, when present, generally appeared to be oriented towards compliance rather than capacity building. First, in many of the plans, the monitoring process often focused solely on the collection and review of data. Specifically, districts said they would monitor schools' implementation of their plans by collecting data associated with the state-approved growth goals. While it is, of course, appropriate for districts to monitor school data, most of the student achievement measures were summative in nature and occurred only once a year. Additionally, as discussed in the context of coherence, these goals were also quite broad and therefore may fail to provide clear information regarding daily practice. Second, the collection of data is a unidirectional means of monitoring. It does not, for example, provide opportunities for personnel to better understand how their actions impact the associated outcomes. This is in contrast to a process that includes data associated with specific interventions and personnel discussing implementation and engaging in inquiry about how best to proceed as a result.

Implications

The findings suggest that districts are incorporating educational infrastructure and capacity building into their planning processes. They also suggest that understandings regarding the importance of effective professional development (i.e., embedded, ongoing, and applied) are well developed. At the same time, there are opportunities for growth in terms of helping districts more tightly connect their various efforts together. This implies a need for fewer interventions with a more holistic approach towards building capacity. On this note, reframing the planning process may also be an opportunity to emphasize the purpose and function of monitoring these plans, shifting from compliance to learning. Rhode Island went through a process similar to this a few years ago to positive result and may serve as a model moving forward.⁷

Logic Modeling

As a reminder, logic modeling is a tool for program evaluation and planning and is characterized by four components: resources (inputs), activities (aspects of implementation), outputs (observable products of the completed activities) and outcomes (short-, mid-, and long-term effects or impacts within various timeframes) (Lawton et al., 2014). These components are graphically organized to reveal their relationship and thus, provide opportunities for individuals to better understand how the elements impact each other and the intended outcomes. This hypothesized causal chain then allows individuals to collect data across the implementation trajectory and intervene where needed. As the plans' inputs and activities were adequately addressed by the other framework elements, the logic modeling analysis focused on the types of outputs and outcomes districts identified in their plans and how they were associated with particular interventions. We also looked at whether there seemed to be a progression of outcomes (short-, mid- and long-term) and, if so, whether the order was logical. In analyzing logic modeling within the Alliance District plans, we find that:

- Approximately $\frac{2}{3}$ of the Alliance District plans included both outputs and outcomes, often explicitly aligned with the specific intervention of interest. Another $\frac{1}{3}$ focused primarily on outputs with generic outcomes.
- When present, outcomes often existed at multiple levels (e.g., changes to adult behaviors and student learning).
- There was little evidence that the connection between these different types of outcomes was considered nor was there a clear temporal quality to these outcomes (e.g., what came first, second etc.).

⁷ For more information on Rhode Island's approach, see: <u>http://sites.ed.gov/progress/2015/03/rhode-island-partners-with-low-performing-schools-to-help-them-improve/</u>

Implications

• Districts may need additional support in disentangling the difference between outputs and outcomes. Additionally, the findings suggest that districts might benefit from support in articulating the underlying hypotheses of the interventions and specifically what changes they expect to see as a result across time.

Findings

As districts articulated the substance of their plans, virtually all included outputs regarding their proposed interventions and aligned activities. Outputs are the observable products of the completed activities and would include things like hiring a new coach, approving a new teacher evaluation rubric, buying new textbooks or providing professional development for a particular group of teachers. Outputs can help us to understand whether the intervention has been delivered. They allow you to answer questions like "Did teachers receive the professional development associated with the intervention?" and "Did the policy on school discipline get created and approved?" What outputs cannot answer is the impact or effectiveness of these interventions. Put simply, they can tell us if teachers received a training but not if they learned anything or if they transferred that knowledge to their classroom (e.g., fidelity of implementation).

In contrast, outcome measures provide information regarding learning and growth (i.e., change). They allow us to consider what type of changes we might expect from whom and when. For example, a short term outcome associated with the output of receiving training on Common Core might be that teachers learn about and better understand a given standard. A mid-term outcome might be that teachers incorporate this understanding into their classrooms and instructional practice, with a long-term outcome focusing on changes to students' learning as a result of these efforts. The combination of outputs and outcomes helps us understand whether an intervention was delivered as intended, is being implemented with fidelity and is working. That said, only about $\frac{2}{3}$ of the plans included both of these elements (i.e., outputs and outcomes) in relation to specific interventions. The group that did include outcomes used generic outcomes associated with every intervention. As such, much of the nuance of the interventions, including shifts in adults' perceptions and behaviors, were hidden from view.

Even among the districts that included outputs and outcomes specific to each intervention, each outcome sometimes felt more like a discrete means of considering the intervention's effectiveness rather than part of an integrated whole. In such cases, an intervention might have various outcomes but not necessarily in a way that suggested a causal and temporal chain. For example, a number of the plans listed interventions that were oriented towards enhancing school climate and culture. Many included improved student and parent climate surveys as outcome data as well as decreased absenteeism and referrals. At the same time, they excluded what might be considered the shorter-term but necessary outcome of teachers learning about how to more effectively interact with students and parents and the application of this knowledge to their work in classroom and with families. Such information can be extremely useful in determining why an intervention is or is not working in a particular context. Equally importantly, when the temporal aspect of the outcomes is considered, it also allows for investigation regarding the underlying theory or hypothesis of why the intervention will work. Therefore, the lack of such elements in the plans may suggest larger gaps in reasoning around why and how particular interventions may work.

Implications

Though a powerful tool in program evaluation, logic modeling is not often used in district and school planning process. Given that some of its key concepts regarding outputs and outcomes and improvement over time could be extremely beneficial in planning but are not naturally occurring, it may be worthwhile for the CSDE to consider how logic modeling might be explicitly built into the planning process. This may include direct support for district leaders in articulating the underlying hypotheses of the interventions and specifically what changes they expect to see as a result across time. Using logic modeling is likely to not only improve the plan and implementation, but also the district's ability to communicate the plan to the larger community.

Section 3: Findings on Common Themes in the Plans of Districts Showing Improvement

This section shifts from a discussion of the general trends across all of the Alliance District plans to focus more specifically on those districts showing improvement on different academic performance measures. As such, this section reveals our findings in response to our third research question:

• Are there any trends or patterns in plan effectiveness among districts that showed improvements on a variety of performance measures? If so, what are they?

To answer this question, we first identified a number of publicly-available, academic, and assessment-based⁸ performance indicators based on components of the state of Connecticut's Next Generation Accountability system. These measures included:

- Change in district-wide SBAC math and ELA scale scores from school year (SY) 2015 to SY 2016.
- Change in districtwide Math and ELA T-scores⁹ from SY 2012 to SY 2016.
- District level SBAC Math and ELA growth scores for the 2016¹⁰ school year to capture academic growth.

⁸ In earlier versions of this report, assessment and non-assessment based indicators of performance (e.g., in school suspension rates, chronic absenteeism, etc.) were utilized to describe performance. Additionally, rather than simply select all districts that had performed in the top three for each indicator, as we do now, we made determinations for inclusion based on performance across indicators. However, in discussions with various stakeholder groups, it became clear that doing so sent confusing messages regarding the nature of improvement and the relative weight of different indicators. As such, the research team chose to focus attention solely on the assessment measures as they were deemed most straightforward. We acknowledge that this decision also has limitations, but, as our aim was to be as clear and transparent as possible, we felt such trade-offs were warranted.

⁹ T-scores, or transformed scores, were computed by converting the Smarter Balanced Assessment (SBAC) ELA and Math scale scores to a common scale with the Connecticut Mastery Test Math and Writing/Reading scores.

¹⁰ 2016 is the first year in which the Connecticut State Department of Education (CSDE) made growth scores available.

In most cases, the magnitude of change in each district for a given metric was calculated using data from the 2012 school year¹¹ and the most recent SY in which data was made available.

Once the indicators were identified and calculations made, we focused our attention on the top three performances in each category¹². This gave us a list of eight Alliance Districts (some were in the top three in multiple performance categories). These Alliance Districts are (listed alphabetically): East Haven, Killingly, Meriden, New Britain, Putnam, West Haven, Windham and Windsor Locks.

Once the eight districts were identified, we used the same coding process as for the previous section to conduct a deeper dive into whether patterns existed across these districts in terms of the elements of our framework for effective planning.

Note on the Quantitative Data

While we wish to remind readers that this data is solely descriptive in nature (i.e., we make no claims regarding effectiveness of implementation re: Alliance District interventions), we also acknowledge that there are a number of limitations utilizing them even for this purpose. In particular, we used only publicly available data and hence were limited by what was currently accessible. In particular, we had limited access to data on high school outcomes spanning multiple years. For this reason, this analysis is necessarily limited in scope, focusing primarily on elementary grades. We acknowledge this limitation regarding the pool of districts on which we focus. The choice to focus on assessment-based indicators and to calculate them as we did also has limitations (e.g., there are undoubtedly Alliance Districts improving in a variety of non-assessment measures that justify acknowledgement and celebration). However, as our main focus is to use this descriptive data to help to better understand the power of an effective planning framework, we felt this data was sufficient as a first step. This data cannot and should not be used to draw conclusions regarding the effectiveness of Alliance District interventions. Such conclusions would require data regarding implementation as well as far more sophisticated analytical techniques.

With the recognition that we can neither say with certainty that these plans were implemented with fidelity, nor assert that there is a causal relationship between these plans and their performance outcomes, we find that:

- Districts showing improvements in the identified metrics mirrored the general trends across all Alliance Districts with regard to **Maintaining an Equity Focus**. Plans included generalized statements regarding interventions meant to increase access to rigor, programming and quality instruction to raise achievement across all groups. There was an explicit discussion neither of inequity nor interventions aimed at the dismantling of institutionalized inequity.
- All eight districts had a high level of **Plan Coherence**. In contrast to general trends among the other Alliance Districts, these districts' plans seemed to build over time, with a small and consistent group of core interventions being implemented each year. While the sources of the interventions were not always explicitly stated, it was also clear (not so for the general

¹¹ The 2012 school year is used as a base year because it is the last year prior to the disbursement of Alliance District grants. Calculations based only on SBAC scores, are calculated using changes in values from SY2015 to SY2016.

¹² Graphical representations of the data can be found in "Appendix B—Tables for Quantitative Descriptive Metrics." Appendix B also contains a description of the "Assessment Metrics" addressing the specific indicators explored and the sources for those data points.

trends) that current practice and the associated results were informing plan choices and modifications over time.

- **Capacity Building** components were also quite strong in these eight districts' plans, with emphasis on coupling professional development and structures at the school and district levels to enhance effectiveness (e.g., data teams, new coaches, lesson study, instructional rounds, etc.). Moreover, interventions tended to touch multiple parts of the learning process, such that efforts were holistic and each part of the intervention was tightly coupled with the next. Monitoring processes, though not necessarily always linked to specific interventions, were comprehensive, focused on building deep knowledge of implementation and assisting those implementing the reforms with reflecting on current practices or enhancing future practice.
- Logic Modeling components were more fully articulated in the plans of these identified districts than in the other Alliance District plans, on average. Most of these districts' plans included both outputs and outcomes, and these were often explicitly aligned with the specific intervention of interest. Additionally, in some cases there were outcome measures that addressed both changes to adult behavior and student results in ways that suggested a strong, underlying theory of action that drove decision-making.

Again, the emphasis on these eight districts' plans is not meant to imply that other plans were missing these particular components. What it does reveal is the patterns among the plans of districts that showed growth in the specific academic indicators of interest. These insights suggest potential areas of importance in developing district plans. They also provide a firm foundation from which to conduct further investigations into the fidelity of implementation and/or other factors that contributed to these districts' success in given areas.

As already stated, the strengths of the plans from the identified districts lay in their coherence and focus on capacity building. As such, rather than focusing on the areas in which they were similar to the plans in general (e.g., in maintaining an equity focus), we instead highlight differences. Specifically, we look at the ways in which these plans were particularly strong in their coherence and capacity building.

Plan Coherence

To begin, utilizing the research team's coding process and evaluative plan framework, the plans from the identified districts can be considered more coherent than those representing the average trend. First, each plan focused on a small number of interventions that were often tightly connected to one another and consistently implemented (with modifications) over time (e.g., Windsor Locks' tight focus on going to scale with extended day and year). Additionally, though some of the interventions were district-wide, many were specific to a small number of particular schools or school (e.g., Windham and Killingly's focus on the high school and student access to AP courses). This finding brings up questions regarding the role of district size in improvement efforts including whether the number of underperforming schools in the district may play a role (among other things) in the likely degree of success.

Second, these narrowly constructed interventions were also tightly aligned with the needs articulated by the districts in their plans. According to the plans, these needs were informed by multiple data sources, coming often from the prior year's interventions.

For example, in both East and West Haven, one of the key interventions associated with enhancing teachers' instruction and student learning around the Common Core State Standards (CCSS) was the institution of a curriculum review process. The decision for implementing these reviews was due to evidence regarding a lack of curriculum aligned to CCSS in particular grades/subjects as well as uneven implementation of this curriculum (i.e., the need informed the intervention). As written in the plans, these review processes involved district personnel, administrators and teachers across the system. Additionally, they were to be ongoing and serve to continually inform curriculum alignment and teacher needs. Information gleaned from this curriculum review process was then folded into each district's progress review to directly impact the following year's plans. A similar process occurred in Windham with the advent of a new literacy program for which the district was selected for pilot testing. As part of its participation, the district would go through an "extensive data review process" to ensure the program's effectiveness. Looking across this group of plans, it seems that the districts worked to build structures to facilitate informed decision-making regarding their interventions over time.

It is noteworthy that these district plans were similar to the average trends among Alliance Districts, in terms of explicitly mentioning where they had derived their interventions (e.g., whether they were research-based, pilot-tested, etc.). That said, these districts seemed to show a heavier emphasis on information from the prior year as a means to inform current implementation. Most of these districts used at least some of the Alliance funds to extend current reform efforts they deemed successful. This evidence suggests that these districts were engaging in pilot-testing and using data to enhance implementation, even if they did not explicitly refer to these actions in these exact terms.

Another mechanism that supported coherence in these plans was the emphasis on teacher voice, particularly as it pertained to professional development needs. As we discuss next via capacity building, professional development was a centerpiece in each of these plans. The plans were also written in such a way as to suggest that teachers played a role in identifying their professional needs and, thus, the interventions themselves. For example, Putnam's plan included a leadership academy aiming to bring 10-15 teachers nominated by their principals to meet and discuss district initiatives, effective teaching, review data, etc. This was meant, as written, to encourage teachers to lead district initiatives. In the other districts, teachers' role in identifying needs was less structured, though equally emphasized in the plans. The plans often alluded to information gleaned from site visits, walk-throughs, teacher surveys, etc. that was then used each year to monitor and enhance performance.

Capacity Building

The second area in which these eight districts' plans were strong was in their focus on capacity building. First, as already mentioned in terms of coherence, all five of these districts' plans heavily emphasized professional development. All included professional development as a key initiative, often listed as distinct from other interventions—rather than serving as pieces of other interventions. This was true in New Britain's plans, which focused a great deal on literacy instruction and enabling teachers to improve through mechanisms such as PD workshops, data teaming, and analyzing results in PowerSchool (a new K-12 technology platform adopted by the district). Other interventions associated with literacy instruction included increasing administrators' ability to support teachers in these areas and the hiring and deployment of curriculum information teachers to, "support the interoperability of the data systems and provide professional development to ensure teachers are using the new tools to implement the curriculum and improve instruction."

Similarly, Windham introduced a means of developing teacher leaders to serve as coaches and mentors to new and novice teachers via the "Windham Transformative Teachers Talent Academy". Additionally, through its implementation of a new reading program, the district also highlighted that each school would have on-site mentors to coach and support ongoing implementation of the program. East Haven's plan also made clear that the district saw professional development as the key mechanism for enhancing student achievement. It said that the main goal of their efforts was to help, "teachers become instructional leaders and

decision makers in order to best support the youngsters within their school building and for our leaders to be better able to support them in this effort, rather than relying on outside experts to control classroom performance."

In what seemed to be a strong effort to make good on these statements, the plans included infrastructure at the district and school levels to enhance professional development and ensure teachers had the resources (time, human capital, physical space, etc.) necessary to engage in these activities. Such efforts included a heavy emphasis on district administrators actively engaging in inquiry regarding schools', administrators', teachers', students' and community members' needs. It also included the introduction of district-level data teams and structures for teachers and district administrators to meet and share decision-making. An emphasis on hiring and cultivating strong administrators, teachers, and instructional coaches (e.g., Windham hired a full-time talent coordinator) to support current initiatives as well as resources for teachers and administrators to extend leadership functions and capabilities were also often present. Moreover, in Killingly, these efforts were combined with the less glamorous, but equally essential, review of current busing plans and whether it was feasible and/or preferable to relocate the high school.

These more holistic efforts around simultaneously building human capital and educational infrastructure for the purpose of capacity building were also apparent in the multifaceted approach these districts took to meeting school-level goals. For example, in Windsor Locks, efforts towards district-wide extended day and school year were coupled with infrastructure supports like co-teaching and more time for differentiation as well as human capital interventions. In contrast to the average trend among the Alliance Districts, the eight identified districts' plans included a multipronged approach to identified problems such that the building of infrastructure, human capital, and climate were planned to work in concert toward addressing a specific need. This is somewhat different from many of the other district plans, in which the interventions touched multiple aspects of educational infrastructure (e.g., human resources, extended day/time, technology), but the ways in which these efforts would work together to enhance a shared outcome or goal were not necessarily explicitly stated.

An example of the more synergistic nature of these districts' plans can be found in Killingly, where the focus of the district plan was largely on enhancing student achievement at the high school. While the plan heavily emphasized what might be considered the more direct influencers of student achievement (e.g., instructional techniques, curriculum), it also included interventions around school climate, access to coursework, new afterschool and summer initiatives and the introduction of district-level content coaches. Similarly, in Putnam, the early literacy efforts were coupled with parent engagement initiatives to, "provide parents training on behavioral management, early literacy and child development." These efforts were further bolstered by the hiring of a social worker for PreK/Kindergarten dedicated to these efforts. New Britain also highlighted the comprehensive nature and intent of their initiatives stating, that despite previously, "attempting to reform our district for many years without the foundational tools necessary for success," they were now shifting to "implement the foundation... by first reducing elementary class sizes to a reasonable level, then we will provide a CCSS aligned core program, a systematic approach to interventions, and an assessment system that enables us to identify and direct us to intervene early and provide research based interventions." While these are only a few examples, all eight districts showed multi-faceted approaches to reform.

Finally, as hinted to in terms of coherence, the monitoring processes for these districts were quite robust. They all took what might be considered a "heavy touch" approach in which district personnel were scheduled to visit schools frequently, collect various forms of data and engage

with those on the ground in observation and reflection about the results. This included Meriden, in which instructional rounds were introduced as a monitoring and improvement mechanism. Additionally, in describing their monitoring process, the East Haven plan talked about having a district data team that would collect evidence of effective practice, including conducting walkthroughs and providing schools' feedback. Their proposed processes also included a midyear review conference with all administrators and teachers who were to provide evidence related to the outcomes metrics identified for each stated Alliance priority. Similarly, in New Britain and Killingly, the plans referenced a number of tools to monitor implementation fidelity. In New Britain, the main tools were Powerschool and the introduction of a variety of formative assessments that would facilitate real-time school and district access to student data that could be coupled with administrator reports to ensure school progress. In Killingly, the approach was less technology-oriented but equally robust. As they described in the plan, "All teachers participate in data teams and are required to submit minutes to their administrator. Teachers and administrators are expected to align new evaluation goals to our district improvement plan, which reflects our Alliance District grant focus areas. Each school continues to utilize classroom walk-throughs, instructional rounds, and school data teams to monitor teacher practice and student achievement."

While these robust monitoring systems were not often tied to a particular intervention, it does seem clear that if these plans were carried out with fidelity, these and the other districts in this sample would have a strong and authentic view of school-based implementation and needs. As discussed earlier, there is some sense that the year-to-year plans appeared to be informed by the data collected via these monitoring processes and other structures built into the plan (e.g., the curriculum review process). It also suggests that there may have been smaller, frequent and context-specific revisions to the interventions based on each site's evolving needs that were not necessarily captured in the plan but undoubtedly contributed to the relative success of their reform efforts.

<u>Discussion</u>

Looking across the plans from the districts that showed particular improvement in various academic measures, we find that, in regards to the effective plan framework, they were fairly similar to the average trends in Maintaining an Equity Focus, slightly stronger in Logic Modeling, and much stronger in both Coherence and Capacity Building. Such findings suggest that the combined effect of these two interconnected elements (i.e., Coherence and Capacity Building) may be important in the creation of effective plans and transference to quality implementation. At the same time, it is important to note that the more average adherence to Logic Modeling and Equity Focus does not necessarily suggest that these components are unimportant to effective planning or implementation. Rather, it may be that these districts could be far more effective by enhancing these aspects of their plans. More research would be needed to make either claim.

Another takeaway from these findings is the districts showing various academic improvements, through different data collection mechanisms and infrastructures (e.g., teacher leadership initiatives, administrator training, district data teams, etc.), clearly created a number of opportunities to engage in conversations about reform efforts with those responsible for implementing them (e.g., administrators, teachers, parents, community etc.). Relatedly, the interventions were often multi-pronged and holistic in approach. As such, the interventions were more likely to directly meet school and district needs and were linked together in ways that could create the greatest and deepest impact. Finally, the monitoring systems these districts used served to reinforce the above activities and, if implemented as stated, served to provide information to support continuous, improvement of current interventions and to fill in gaps where needed. As a result, there were strong connections in the plan across interventions and time-

connections that may have been a determinant in their ongoing success. Together, these findings may also have some implications for district-level functioning. In particular, it is clear that for a district to implement its plans with fidelity would require a high degree of thoughtfulness and understanding of the continuous improvement cycle, data use, collaborative decisionmaking, and perhaps a number of other elements of change and effective management. Implementation of these plans would also require a great deal of time, person power, and energy.

As such, it is unsurprising that most of these districts had, on average, smaller numbers of schools that needed interventions. These findings might also provide an opportunity to reflect on whether and to what degree some of these conditions are transferable to other Alliance Districts and likely require further study. For example, could other districts benefit from support around how to use data to support continuous improvements to interventions? Or to think differently and perhaps more holistically about linking interventions together to build steam? Indeed, these findings bring up a number of important questions worthy of future study and discussion.

Study Discussion and Implications

This report reveals patterns across Alliance Districts' plans from 2012 to 2016. In particular, the study provides insights into how Connecticut's 30 Alliance District articulated their yearly improvement plans and how these different articulations may relate to performance. Over this time period, the study finds that the CT State Department of Education changed the format and substantive requirements for these plans. These changes meant that districts shifted the design and focus of plans several times--with implications for the depth and continuity of reforms. On this note, plan coherence, particularly as it pertained to the development and monitoring of improvement efforts over time, was frequently underdeveloped. Capacity building too, despite emphasis on professional development and new district-level supports, needed strengthening, including additional focus on the relationship between and utilization of different parts of the educational infrastructure to support improvement. And, although most districts incorporated reform strategies with the objective of addressing pernicious opportunity gaps, the study finds that few plans explicitly centered upon deliberately equity-oriented principles and activities. Finally, the report finds that district plans tend to indicate gaps in logic modeling, especially with regard to identifying and tracking outputs and outcomes in ways that drive continuous improvement.

Yet the report also reveals that, among the higher performing districts, coherence and capacity building were strong features of their plans and potentially important factors in their success. Therefore, one may conclude that, though currently under-, or perhaps ineffectually, utilized, Alliance Districts plans (and perhaps district improvement plans more generally) could serve as a useful and important tool in improvement efforts—with support and reinvention. In the following, we provide some suggestions regarding how this outcome might be achieved.

Implications for Policy and Practice

This study's findings have implications for policymakers, reformers, and educational leaders across Connecticut. In addition, our findings reveal areas for further inquiry to better support leaders' work to drive systemic improvements in a research-aligned manner.

Implications for policy. Our findings on the structure of plans and the organization of the planning process point to implications for state policymakers related to the design and implementation of improvement plans as an element of state education policy. Our major implication is that policymakers should thoughtfully and creatively consider the resources

needed for complex, ambitious reforms to improve outcomes in underperforming districts. This means grappling with the fiscal and human capital needed to advance reforms and programs over time.

We also assert that state policymakers should analyze the capacity and resources of CSDE administrators. It is possible that CSDE needs additional resources, including technical support, on how to facilitate and monitor plans. It is also possible that facilitators with experience in other states could engage with CSDE administrators to design the planning process (Coburn, 2005). On a similar note, policymakers should attend to the timeline for, and number of, reforms expected for schools and districts to implement, since providing time for decision-making, planning, and thoughtful ongoing evaluation of current practice can promote learning and better outcomes. Furthermore, we note that vital collaboration between state administrators, district leaders, and other educational actors to assess needs, and select and enhance interventions requires time.

Last, state policymakers should realize the power inherent in the planning structures and requirements. Changes in Alliance District application forms and plan requirements changed districts' submissions, sometimes substantially. CSDE administrators should debate the pros and cons of changing requirements over time and, if they choose to alter requirements, put in place processes to ensure that districts build on prior work while meeting new prescriptions. Such a commitment may also mean the development of a guiding framework for planning to which the CSDE would consistently adhere.

Implications for Connecticut State Department of Education (CSDE) administrators. Findings on districts' plans also have implications for CSDE administrators. In particular, state administrators should bolster systems for the improvement planning process and should engage in further capacity building for district leaders. Retooling state systems for improvement planning to clarify and strengthen the Alliance District process will be an important first step. The CSDE should develop systems for improvement planning that are clear, consistent, and stable over time to encourage efficient planning processes and learning. This could include menus of options with evidence supporting various strategies or programs. The state could also leverage technology (e.g., data bases, online programs, apps) to guide district leaders' planning routines, streamline plans themselves, and enable feedback cycles between the state and districts (Pentland & Feldman, 2008). These shifts could simultaneously reduce the burden on district administrators and increase the nature/quality of district plans.

Moreover, the CSDE should realize the power inherent in the Alliance District planning structures and requirements. Changes in Alliance District application forms and requirements changed districts' submissions, sometimes substantially. CSDE administrators should debate the pros and cons of changing requirements over time and, if they choose to alter requirements, put in place processes to ensure that districts build on prior work while meeting new prescriptions.

Second, the CSDE should devote time and resources towards developing district leaders' knowledge and skills in planning, including attention to formulating logic models, in order to raise the capacity of district leaders to design and implement Alliance District plans. The state's efforts could play a role in developing the capacity of district leaders to approach improvement planning in an adaptive, rather than compliance-oriented, manner. We propose adopting a coaching model to deliver targeted, contextualized feedback to district leaders on their Alliance District plans. The coaching of district leaders should aim to develop the capacity of district leaders to maintain an equity focus and use multiple forms of evidence throughout the stages of improvement planning. We also suggest that the CSDE continue to promote inter-district collaboration throughout plan development and implementation so that district leaders

can access and disseminate ideas about programs and practices. Such conversations should keenly focus on creating opportunities for inter-visitation and joint problem-solving around <u>specific</u> challenges of implementation and improvement. It is plausible that the CSDE's support for district leadership teams could mitigate the negative effects of turnover in district leadership on Alliance District plan implementation (e.g., district leaders could continue to support implementation even as district leadership transitions), with benefits for district and schools.

Last, we recommend that the CSDE require that teams of district administrators participate in Alliance District planning. Turnover in district administrators seemed to change the focus and nature of plans, sometimes leading to a lack of coherence in plans across time in the same district. The CSDE should expect turnover among district leaders in Alliance Districts and plan to support the implementation of Alliance plans to ensure coherence and continuity over time.

Implications for District Administrators. Though much of our investigation sought to answer questions about state education policy, structures, and activities, we also learned about district planning processes. As a result, this report has several implications for how district leaders undergo Alliance planning. First, district leaders should use evidence of successes and challenges in their context. They should remain cognizant of existing strengths/resources in the district to build upon, as opposed to layering new, additional practices without regard to the district's current assets. Related to this point, district leaders should strategically consider how various elements of an improvement plan fit together as well as how to leverage one area in the service of other areas. For example, a district leader could advance an equity-oriented (Rigby, 2014) frame while reforming approaches to talent management, instruction, and family-community engagement.

District leaders should map improvement efforts in a longitudinal manner and should articulate, for educators at various levels, the ways in which the work of one year will build or shift in subsequent years. In effect, district leaders can check whether and how the puzzle pieces of interventions fit together to form a coherent whole. In addition, district leaders should engage in framing of the big picture objectives and central interventions of the Alliance District effort (Coburn, 2006; Woulfin, Donaldson, & Gonzales, 2016). This is likely to be especially critical in districts that experience a high degree of educator turnover, regardless of the specific level. Finally, we suggest that districts should expand their evaluations of programs/initiatives in order to determine which interventions are working in what contexts. This organizational learning would benefit the enactment of various interventions in addition to the planning/design process (Cook & Yanow, 1993).

Implications for research. This study yielded findings on Alliance District plans over a four-year period, but, as acknowledged above, many questions remain about the planning process, substance of plans, and the enactment of these plans, including their impact on adult practices and student outcomes. In particular, our inquiry suggests the need for further research on the strategies and leadership practices of state and district administrators. The study raises questions regarding state administrators' roles and responsibilities in plan development and monitoring.

Additionally, questions were raised about district leaders' activities/routines to develop improvement plans, such as: Who works on drafting improvement plans? What types of expertise do they bring/provide? What examples and evidence do they draw upon when creating their plan? How are different forms of research/evidence used while creating these plans? Who or what do district leaders turn to for advice on improvement planning? To what extent do leaders focus on topics, interventions, or initiatives recommended by different state role-players? These types of questions about district leaders' routine and repeated work could shed light on

precisely how planning and, even more importantly, the enactment of plans occurs (Pentland, et al., 2012; Spillane, et al., 2011).

A separate branch of policy research should compare the types of strategies/programs adopted by different types of districts (urban, rural) and could analyze the costs of various strategies in plans. A cost-benefit analysis could reveal efficient options for improving educational outcomes in Alliance districts. It would also be important to study the subsequent steps in Alliance Districts after the plan gets created, in order to more concretely address how the plan gets translated into implemented initiatives. What are the conditions and resources enabling or constraining the efficient and efficacious enactment of interventions as stipulated in Alliance Plans? Finally, an important area for further study is the trends in the selection/adoption of specific interventions. This research would deepen our understanding of the structure and substance of plans across contexts. It would generate applicable findings for educational leaders at the state, district, and school levels so that resources expended benefit students in low-performing districts.

References

Alliance District Applications - 2012-2013, 2013-2014, 2014-2015.

- Anderson, S. E. (2003). The school district role in educational change: A review of the literature. International Centre for Educational Change.
- Anderson, S.E., Louis, K.S., Rodway, J. and Thomas, E. (2008), "How do states influence district leadership?" Paper presented at the *International Congress for School Effectiveness and School Improvement*, Auckland.
- Childress, S., Elmore, R. F., Grossman, A., & Johnson, S. M. (2007). Managing school districts for high performance: Cases in public education leadership (Vol. 88, No. 06-004, pp. 314-064). Cambridge, MA: Harvard Education Press.
- Coburn, C. E. (2001), Collective sensemaking about reading: How teachers mediate reading policy in their professional communities, *Educational Evaluation and Policy Analysis*, 23 (2), pp. 145-170.
- Coburn, C. E. (2005). The role of nonsystem actors in the relationship between policy and practice: The case of reading instruction in california. *Educational Evaluation and Policy Analysis, 27*(1), 23-52.
- Coburn, C. E. (2006). Framing the problem of reading instruction: Using frame analysis to uncover the microprocesses of policy implementation. *American Educational Research Journal*, 43(3), 343-79; 343.
- Cohen, D. K., & Moffitt, S. L. (2010). The ordeal of equality: Did federal regulation fix the schools?. Harvard University Press.
- Connecticut Council on Educational Reform. (n.d.). Who we are. Retrieved October 22, 2016 from <u>http://ctedreform.org/who-we-are/</u>
- Connecticut State Department of Education. (n.d). Connecticut district performance report for school year 2012-13 Manchester school district. Retrieved from: http://www.csde.state.ct.us/public/performancereports/Reports/Dist_077.pdf
- Connecticut State Department of Education. (2012, June 6). State Board of Education Approves New London schools resolution, adopts guidelines for Alliance Districts and Commissioner's Network Schools. Retrieved from <u>http://www.sde.ct.gov/sde/lib/sde/pdf/pressroom/stateboardofedapprovesnewlondon</u> <u>alliance.pdf</u>
- Connecticut State Department of Education. (2016, September 27). Alliance Districts. Retrieved from <u>http://www.sde.ct.gov/sde/cwp/view.asp?a=2683&Q=334226</u>

- Cook, S.D., & Yanow, D. (1993). Culture and organizational learning. Journal of Management Inquiry, 2(4), 373-390.
- De la Torre, V. (2016, August 10) In final arguments, state acknowledges challenges but defends school financing system. *Hartford Courant*. Retrieved from <u>http://www.courant.com/news/connecticut/hc-ccjef-state-closing-argument-0810-</u> <u>20160809-story.html</u>
- Drucker, P. F. (1954). The Practice of Management: A Study of the Most Important Function in America Society. Harper & Brothers.
- Elmore, R. F., Forman, M. L., Stosich, E. L., & Bocala, C. (2014). The Internal Coherence Assessment Protocol & Developmental Framework: Building the Organizational Capacity for Instructional Improvement in Schools. Research Paper. *Strategic Education Research Partnership*.
- EdSight. (n.d.) Connecticut education at a glance. Retrieved December 12, 2016 from <u>http://edsight.ct.gov/SASPortal/main.do</u>
- Firestone, W. A. (1989). Using reform: Conceptualizing district initiative. Educational Evaluation and Policy Analysis, 11(2), 151-164.
- Hemmer, L. M., Madsen, J., & Torres, M. S. (2013). Critical analysis of accountability policy in alternative schools: implications for school leaders. *Journal of Educational Administration*, 51(5), 655-679.
- Honig, M.I., & Hatch, T.C. (2004). Policy coherence: How schools strategically manage multiple, external demands. *Educational Researcher*, 33(8), 16-30.
- Honig, M. I. and Rainey, L. R. (2012), "Autonomy and school improvement: What do we know and where do we go from here?", *Educational Policy*, Vol. 26 No. 3, pp. 465-495.
- Hopkins, M., Spillane, J. P., Jakopovic, P., & Heaton, R. M. (2013). Infrastructure redesign and instructional reform in mathematics. *The elementary school journal*, 114(2), 200-224.
- Hruschka, D. J., Schwartz, D., John, D. C. S., Picone-Decaro, E., Jenkins, R. A., & Carey, J. W. (2004). Reliability in coding open-ended data: Lessons learned from HIV behavioral research. *Field Methods*, 16(3), 307-331.
- Knopf, R.A. (2012, June 18). Alliance Districts: A Powerful Improvement Strategy for Connecticut Schools. Retrieved from <u>http://ctedreform.org/2012/06/alliance-districts-a-powerful-improvement-strategy-for-connecticut-schools/</u>
- Lane, R. J., Bishop, H. L., & Wilson-Jones, L. (2005). Creating an effective strategic plan for the school district. *Journal of Instructional Psychology*, 32(3), 197.
- Lawton, B., Brandon, P. R., Cicchinelli, L., & Kekahio, W. (2014). Logic models: A tool for designing and monitoring program evaluations. REL 2014-007. *Regional Educational Laboratory Pacific*.
- Leithwood, K., Harris, A., & Strauss, T. (2010). Leading school turnaround: How successful leaders transform low-performing schools. John Wiley & Sons.
- Megan, K. (2015, October 7). Some struggling districts using state grant for unintended purposes. Hartford Courant. Retreived from

http://www.courant.com/news/connecticut/hc-alliance-district-1008-20151007-story.html

- Megan, K. (2016, August 19). Gov. Malloy touts Smarter Balanced scores. Hartford Courant. Retreived from <u>http://www.courant.com/education/hc-smarter-balanced-governor-0820-20160819-story.html</u>
- Megan, K. (2016, August 19) Student scores improve on Smarter Balance test. Hartford Courant. Retrevied from <u>http://www.courant.com/education/hc-smarter-balanced-test-</u> <u>scores-0818-20160818-story.html</u>
- McDonnell, L. M., & Elmore, R. F. (1987). Getting the job done: Alternative policy instruments. Educational evaluation and policy analysis, 9(2), 133-152.
- Mehta, J., & Spillane, J. (2010). Unbundling promises and problems: Deconstructing schools and the education system as we know it may offer some enormous challenges and great pitfalls. *Phi Delta Kappan*, 92(3), 48.

- Newmann, F. M., Smith, B., Allensworth, E., & Bryk, A. S. (2001). Instructional program coherence: What it is and why it should guide school improvement policy. *Educational evaluation and policy analysis*, 23(4), 297-321.
- Panzniokas, M. (2014, August 21). Malloy celebrates Pryor, but makes gesture to union critics. The Connecticut Mirror. Retrieved from <u>http://ctmirror.org/2014/08/21/malloy-celebrates-reforms-as-his-reformer-prepares-to-exit/</u>
- Pazniokas M. and Phaneuf, K.M. (2016, September 7). Judge strikes down state education aid choices as 'irrational'. *The CT Mirror*. Retrieved from <u>http://ctmirror.org/2016/09/07/judge-strikes-down-state-education-aid-choices-as-irrational/</u>
- Pentland, B. T., & Feldman, M. S. (2008). Designing routines: On the folly of designing artifacts, while hoping for patterns of action. *Information and Organization*, 18(4), 235-250. doi:http://dx.doi.org.ezproxy.lib.uconn.edu/10.1016/j.infoandorg.2008.08.001
- Pentland, B. T., Feldman, M. S., Becker, M. C., & Liu, P. (2012). Dynamics of organizational routines: A generative model. *Journal of Management Studies*, 49(8), 1484-1508. doi:10.1111/j.1467-6486.2012.01064.x
- Peurach, D. J., & Neumerski, C. M. (2015). Mixing metaphors: Building infrastructure for large scale school turnaround. *Journal of Educational Change*, 16(4), 379-420.
- Rigby, J. G. (2014). Three logics of instructional leadership. Educational Administration Quarterly, 50(4), 610-644. doi:10.1177/0013161X13509379
- Rorrer, A. K., Skrla, L., & Scheurich, J. (2008). A theory of districts: The districts' role as an institutional actor in improving achievement and advancing equity. *Educational Administration Quarterly*, 44(3), 307-358.
- Schneider, A., & Ingram, H. (1990). Behavioral assumptions of policy tools. The Journal of Politics, 52(02), 510-529.
- Skrla, L. (2000). The social construction of gender in the superintendency. *Journal of Education Policy*, 15(3), 293-316.
- Skrla, L., Scheurich, J. J., Garcia, J., & Nolly, G. (2004). Equity audits: A practical leadership tool for developing equitable and excellent schools. Educational Administration Quarterly, 40(1), 133-161.
- Spillane, J. P., Parise, L. M., & Sherer, J. Z. (2011). Organizational routines as coupling mechanisms: Policy, school administration, and the technical core. *American Educational Research Journal, 48*(3), 586-619. doi:10.3102/0002831210385102
- Spillane, J. P., Reiser, B. J., & Gomez, L. M. (2006). Policy implementation and cognition: The role of human, social, and distributed cognition in framing policy implementation. In M. I. Honig (Ed.), New directions in education policy implementation: Confronting complexity (pp. 47–64). Albany: State University of New York Press.
- State of Connecticut. (2012, May 14). Senate Bill No. 458, Public Act No. 12-116, An Act concerning educational reform [Government publication]. Retreived from: https://www.cga.ct.gov/2012/act/pa/pdf/2012PA-00116-R00SB-00458-PA.pdf
- Thomas, J.R. (2012, June 6). Commissioner, I'll take 'substantial majority' for \$39.5 million. The Connecticut Mirror. Retrieved from
 - http://ctmirror.org/2012/06/06/commissioner-ill-take-substantial-majority-395-million/
- Thomas, J.R. (2015, October 7). Schools redirecting money intended for reforms, officials say. The Connecticut Mirror. Retrieved from <u>http://ctmirror.org/2015/10/07/schools-</u> <u>redirecting-money-intended-for-reforms-officials-say/</u>
- Trujillo, T. (2013), The reincarnation of the effective schools research: rethinking the literature on district effectiveness, *Journal of Educational Administration*, 50(3), pp. 264-286.
- Weiner, J., Donaldson, M., & Dougherty, S. M. (2016). Missing the boat–Impact of just missing identification as a high-performing school. *Leadership and Policy in Schools*, 1-26.
- Woulfin, S. L. (2016). Vehicles of Logics: The role of policy documents and instructional materials in reform. *Educational Research for Policy and Practice*, 1-14.

Woulfin, S. L., Donaldson, M. L., & Gonzales, R. (2016). District leaders' framing of educator evaluation policy. *Educational Administration Quarterly*, 52(1), 110-143. doi:10.1177/0013161X15616661

Appendix A – Codebook for Plan Section

Plan Section	Торіс	Code	Example
Plan: Segments of plans associated with the identification of interventions, monitoring and support of those interventions.	Intervention identification _substance: substance and focus of each intervention as defined by the plan writers.	Instructional Core: the intervention is related to and/or articulated as associated with (a) instructional content, (b) instructional delivery, (c) the student's interaction with the material/instructional or (d) any combination of the above (sub code for Instructional core) Discipline focus : the intervention has a specific discipline area	Building teacher knowledge on literacy instruction Introduction of new curriculum New means of students' interacting with the content (i.e., computer based differentiated instruction) ELA, math, science
		(sub code for instructional core) Iter rocus: The level of need (Tier 1, Tier 2, etc.) is specified Human Capital: intervention to address current ability to attract, retain or develop effective teachers/ administrators etc.	New induction program for new teachers Changes to how district recruits new teachers/administrators Programs to enhance principal pipeline or leadership skills
		Infrastructure: interventions related to access to technical resources, physical resources or time. May include data use including storage and analysis.	New data teams or means of district storing disseminating and analyzing data (new assessments) Extended day / block schedule etc. iPad programs or 1 to 1 laptops New facilities for students
		Culture/climate: interventions related to school climate culture at student and/or adult level including connections with community.	Wraparound services for students New behavior management approaches Cultural competency focus
		Equity: interventions explicitly oriented towards enhancing access of all students to quality and rigorous opportunities and/or redistribution of resources where needed	Desegregation efforts Rescheduling course trajectories to ensure all students granted access
		Alignment to defined choices: identification of specific state mandated intervention associated with Alliance District designation	 Ways to strengthen the foundational programs in reading to ensure reading mastery in K-3 with a focus

			 Provisions for the cooperation and coordination with governmental and community programs to ensure that students receive adequate support and wraparound servies, including community school models; Any other programs of reform, subject to approval by the Commissioner.
Interv comn	r ention target group: ment on the location or	Students: the target is a specific group or groups of students (without identifying specific schools).	7 th graders Special education students
unit o proble	unit of analysis of the problem	Administrators: the target is administrators – again not necessarily affiliated with a particular school.	Principals
		Teachers: the target is teachers – again not necessarily affiliated with a particular school.	Prospective teachers Middle school teachers
		School or Schools: the target is a specific school or schools	Elementary schools Lincoln middle
	-	District wide: the target is the district	HR system
Interv reaso select interv	rention precedent: the pning behind the tion of the particular rention is given.	Research-based : there is clear reference to research that suggests the effectiveness of the intervention in other contexts.	We plan to deploy Reading Is Great based on the work of (Smart & Sense, 2016)
		Pilot tested: there is reference to the intervention being or previously having been tested with similar or the same students	Last year we used this intervention in 2 classrooms in the same school such that students all gained 2 reading levels over the semester.
		Anecdotal: the intervention lacks a specific source to verify its appropriateness beyond what appears to be word of mouth.	Axiom learning has worked with us in prior interventions We identified two CCSS curriculum and selected the second
Interv	ention length	Years for intervention process: the timeframe the plan includes regarding intervention implementation	We plan to implement this intervention over x years
Interv	ention progression	Incremental: the process suggests different stages to the intervention (building over time)	The first year we will build teacher expertise. The second year we will coach

		them to deploy their new knowledge in the classroom.
	Flood (all at once): The process suggested is not differentiated over time and is full implementation right away.	Data teams were implemented.
Support_provider	External organization/partner	UConn/ Khan Academy / YMCA
	District	District instructional coaches will lead PLCs focused on X
	Internally oriented: the school is responsible for its own support features with existing or new resources like teacher leaders or principal led pd.	Teachers will implement PLCs Teachers will engage in book study and institute instructional rounds
Support_mechanism	On-site_embedded : support exists as part of the daily practice of the school on an ongoing basis. (only)	Coaches regularly visit teachers' classrooms and provide feedback Data team meetings are facilitated by coach
	On-site_added: support occurs at school site but is pull out and limited in scope. (only)	Teachers spend PD time in workshop on x
	Off-site_repeated: support occurs off site and occurs more than once (only)	Every Thursday teachers attend district level PD on X
	Off-site_singular : support occurred once at an off- site location (only)	All teachers attended a workshop on de- escalation techniques
Monitoring Data sources_outputs	System/provider outputs: the data focuses on what is being provided to schools	New curriculum was delivered Coaches spent X hours at the schools
	Adult level outputs: the focus is on whether there was "take-up" of the support service provided. Such measures are easily quantifiable and/or answered with yes/no or percentages.	X% of teachers attended the workshop. 20 more parents came to parent night. All teachers were trained.
	Student level outputs: (see above for students)	Students received workshop on restorative justice practices Students received new manuals on course options
Monitoring Data sources_outcomes	District_affective : measures capturing changes to how those at the district view the schools or district operations.	District employees report higher levels of capacity and efficacy to support schools.
	District_behavioral: measures capturing changes to how those working in the district behave	District provides ongoing data support to all schools

		School Admin_affective: These measures look to assess change and quality in administrator beliefs, knowledge and attitudes. They are less easily	Administrators enhanced coaching skills as evidenced by teacher interviews
		quantifiable and often include complex questions and answers. Should be coupled with data.	
		School Admin_behavorial : These measures look to assess change and quality in admin behaviors aligned with intervention implementation fidelity.	Principal instructional coaching enhanced
		Teacher_affective : These measures look to assess change and quality in teacher beliefs, knowledge and attitudes. They are less easily quantifiable and often include complex questions and answers. Should be coupled with data.	Teachers have enhanced understanding of advanced math standards as observed through data team discourse and self-reports
		Teacher_behavorial : These measures look to assess change and quality in teacher behaviors aligned with intervention implementation fidelity.	Teachers instructional improvement via evaluation rubric
		Community_affective : Changes in larger community perceptions of the school and its work.	Parents report greater satisfaction with school and report it is more welcoming and able to meet their child's needs.
		Community_behavioral: Changes in larger community behaviors related to the school	Greater funding of school initiatives PTO developed and engaged in X
		Student_affective : changes in students' views, beliefs and knowledge relative to interventions	Student climate survey shows students report more positive connections and efficacy
		Student_behavioral: These measures assess change and quality in students' behaviors aligned with intervention implementation fidelity.	Enhanced student attendance/ performance/ etc.
		Economic/Budgetary: measures related to fiscal changes in the school or district's status.	Greater return on investment Solvency
		Infrastructure/systems operation_school: measures related to school systems functioning	The school day has been extended There is a X% increase in AP course offerings
		Infrastructure/systems operation_district: measures related to school systems functioning	Transportation systems are improved HR policies were revised.
	Monitoring_process_	Documentation only	Report to district / test scores reported
	mechanisms	Documentation and site-visit	Report to district with visit by district representatives

	Collaborative meeting : School team and district team share in the monitoring process	Data meetings in which district and school team go over findings to commonly make sense of outcomes.
Monitoring_revision process	Identified process of making appropriate changes to plan in process and/or as a result of monitoring	Each year data will inform adjusts and plan will be changed accordingly.

Appendix B – Tables for Quantitative Metrics

Definitions and Sourcing:

<u>Changes on the Smarter Balanced Assessment.</u> The Smarter Balanced Assessments (SBAC) are summative assessments administered to Grades 3-10 that are "used to describe student achievement and growth of student learning" in the content areas of Math and Language Arts/Literacy (CSDE).¹³ For a given year, the district level SBAC math and ELA scores were calculated by multiplying the number of students with scored tests in a given grade by the average vertical scale score for that grade. The multiplied amounts for each grade were then added together and divided by the total number of test takers across all grades. The resulting figure is the district-level Smarter Balanced vertical scale score. For consistent comparisons, the 2014-15 calculations did not incorporate tenth grade SBAC results, since the 2015-16 iteration of the Smarter Balance discontinued tenth grade testing. Any districts with a suppressed value in any grade were not included. The change in score is a district's 2015-16 district score minus its 2014-15 district score.

<u>Growth Scores.</u> District-level growth rates show the percentage of students who met their respective growth target on the Smarter Balanced Assessment in 2016. They are calculated by the CSDE using matched student cohort scores, where the "achievement of the same student from one grade in year one" is compared "to the next higher grade in year two" (CSDE). The growth targets are determined by the CSDE and are based on ranges of different scores. That is, the growth target for a given student is determined by which achievement level range that student fell into in the prior year.¹⁴

Long-term Assessment Data. We also looked at test scores over time—for the life of the program—by converting CMT and SBAC scores to a common scale. The district-level SBAC scores were converted to the scale used for the CMT.

First, the CMT Writing and Critical Reading scores were combined into a single ELA score. In a given year, the district average CMT scores in writing and reading were multiplied by the respective number of test takers in those content areas. These products were then summed and divided by the combined number of test takers. This produced a weighted average of the CMT writing and reading scores for each district and for each year that were used as ELA scores. For each year with testing data, a z-score is calculated for each district's math and ELA scores. First, a weighted mean score is calculated for a given content area and year by multiplying the average score of each district by the number of test takers, summing those products, and dividing by the total number of test takers across all districts. For a given year, the variance of each district score is then calculated by squaring the difference between a district's actual score and the calculated weighted mean score for all districts.

Next, a weighted standard deviation for a given content area and year is calculated. To do this, first, the number of test takers in a district is multiplied by the variance in that district's test score. Second, the resulting products are summed across all districts, and divided by the sum of the test takers in all districts minus one. Finally, the square root of the resulting number is taken. For a given year, a z-score is then calculated for each district by dividing the difference between a district's score and the weighted mean score for all districts by the weighted standard deviation for all districts.

¹³ <u>http://www.sde.ct.gov/sde/cwp/view.asp?a=2748&Q=334488</u>

¹⁴<u>http://edsight.ct.gov/relatedreports/CT%20Growth%20Model%20Technical%20Paper%20FINAL.pdf</u>

Finally, the transformation scores (T-Scores) are computed by scaling the Smarter Balanced zscores to their respective content area scores on the CMT. This is done by multiplying a given district's 2014-15 Smarter Balance z-score by the weighted standard deviation of all districts on the 2013 CMT and then adding the weighted mean CMT score for all districts from 2013. The 2015-16 T-scores are calculated in the same way, except the weighted mean and standard deviation from the 2013 CMT are adjusted by the percent change in the mean score and standard deviation of the Smarter Balanced results between 2014-15 to 2015-16.

Changes in Smarter Balanced Results

We looked at changes in SBAC scores over time in order to get a sense of whether districts are seeing long-term, academic improvement as measured by test results. The tables below list—from most improved to least improved—the SBAC Score Changes in both Math and ELA.





Growth on the Smarter Balanced Assessment

We looked at SBAC growth scores (2016) to get a sense of whether individual students were making progress in ELA and Math. The SBAC Growth data uses matched student cohort scores where on student's achievement in Year 1 is compared to achievement in the next higher grade in Year 2.





Changes in Assessments Over the Long-Term

We converted CMT and SBAC scores to a common scale to get a sense of whether districts are seeing long-term improvement on academic assessments over the life of the Alliance District program. The table below lists—from most improved to least improved—the changes in Transformed Scores for both Math and ELA in each of the Alliance Districts.



