Navigating Flexibility and Fidelity in Scaling Up a Statewide Initiative

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Implementation research has long noted that the key facilitators of effective implementation are the will and capacity of local actors (McLaughlin, 1990). In particular, implementation research has evolved from framing implementation as a simple response to a top-down mandate to framing it co-constructed reform actions at the local level based on messages about the reform and local actors' prior understandings (Datnow & Park, 2009). This co-construction or sensemaking of large-scale policies by individual educators shapes their willingness to takeup new initiatives and enact them with fidelity (Coburn, 2006). Educators may come to different understandings of the same initiative due to their prior knowledge and engagement in reform, values, and the context in which they work (Cohen, 1990; Spillane, Reiser, & Reimer, 2002). Examining why principals and teachers decide to take up new initiatives, then, requires examining what they understand the goals and expectations of the initiative to be and how those goals fit into their current context.

The reality that local actors will consider a policy as they have made sense of it, and not a policy as conceived by the policymaker, is particularly important in the context of scaling up educational initiatives across a large number of schools. Research on scaling up educational initiatives has evolved to focus less on the extent to which large number of schools enact a highly specified set of practices with strict fidelity, and more on demonstrating how "powerful ideas work in diverse environments" (Elmore, 2016, p. 533). This shift in the research on scaling up can be traced to a growing recognition of the importance of adapting to local context for successful implementation at scale (Bodilly, Glennan, Kerr, & Galegher, 2004; Datnow & Park,

2009). This attention to local context is particularly important for achieving scale as innovations must be able to fit with contexts that vary greatly while coping with change, promoting ownership, building capacity, and enable effective decision-making (Cohen, Peurach, Glazer, Gates, & Goldin, 2013). Indeed, providing built-in flexibility is increasingly used in some reforms as a way to build local ownership and enable alignment to local context (Bryk et al., 2013; Cohen-Vogel, Cannata, Rutledge, & Socol, 2016; Rowan, Correnti, Miller, & Camburn, 2009). At the same time, challenges exist when major decisions about the focus and content of the reform is left to local decision-makers (Cannata & Nguyen, 2015; Cohen et al., 2013; Nunnery, 1998).

This paper is a case study of how educators made sense of the core ideas of a new statewide initiative intentionally designed to foster local adaptation and flexibility. In the context of the statewide scale up of an instructional collaboration and improvement program, we trace the initiative's core elements through the 1) materials used to communicate the initiative's expectations and goals, 2) school principals' understandings of the initiative and reasons for takeup, and 3) teachers' understandings of what the initiative required of them. In tracing the core elements, we pay particular attention to educators' adaptations of the initiative to their particular contexts. Using interviews from principals and teachers in schools that participated in this initiative, as well interviews with principals that decided not to take up this initiative, this paper sheds light on the tensions between providing flexibility to allow for adaptations to local context and ensuring integrity to core initiative components.

Framework

Making Sense of Policy Messages

Policy implementation research has evolved from conceptualizing implementation as a top-down process of responding to hierarchical mandates to recognizing that implementation is a multi-directional process in which educators co-construct policy messages through their own understandings and context (Datnow & Park, 2009). Through this sensemaking process, the meanings individuals attribute to actions, messages, and their environments are negotiated according to prior experiences and knowledge, attributions of motivation, and organizational context (Coburn, 2006; Spillane et al., 2002). Principals and teachers are social actors constantly interpreting and reinterpreting their environments and what they are asked to do, in the context of what is already familiar to them and the messages they receive from others in their districts and schools (Coburn, 2001). For example, leaders in Connecticut districts interpreted a variety of messages about teacher evaluation policy and then framed a new statewide evaluation in different ways; principals within these districts, came to different understandings of what the new policy meant (Woulfin, Donaldson, & Gonzales, 2016a).

The sensemaking process is important for understanding how initiatives are scaled up because behavior that may be attributed to resistance or lack of capacity may instead be due to misunderstandings of the initiative being scaled (Spillane, 2000). Educators may focus only on certain elements of a new initiative and miss deeper relationships, thus leading to smaller changes in practice (Spillane, 2000; Spillane et al., 2002). Applying a sensemaking perspective to the process of scaling up a statewide initiative requires attending to messaging about the

initiative, how educators understand the initiative, and how educator understandings are influenced by the individual and institutional frames and expectations of local actors' contexts.

Adaptation and Scaling Up

Increasingly, scholars who study educational reform and scaling up recognize that the goal of reform is not to faithfully implement a given initiative, but to improve target educational outcomes (Sabelli & Harris, 2015). This shift stems from the realization that scaling up an initiative requires focusing less on highly specified practices, but on the powerful ideas and theory of change behind the practices (Bradach, 2003; Elmore, 2016). With this shift also comes a greater understanding of the role of local adaptation and co-construction of a program as necessary for successful scale up. For this reason, recent approaches to scaling up educational initiatives have intentionally involved local actors in developing and adapting reforms for their context (Rowan et al., 2009). Fostering local adaptation can support effective scale-up by fostering local ownership and alignment to local needs (Berends, Bodilly, & Kirby, 2002). This flexibility in program design is particularly important for achieving scale as innovations must be able to fit with contexts that vary greatly in organizational structure, buy-in, capacity, and funding while coping with change, promoting ownership, building capacity, and enable effective decision-making (Cohen et al., 2013; Peurach & Glazer, 2012). Indeed, reforms that have historically achieved the greatest scale are those that educators feel are very adaptable (Cuban, 1998).

At the same time, allowing too much local adaptation has drawbacks. First, reforms are most effectively implemented and have larger impacts on student learning when they have a well-specified design (Cohen et al., 2013; Rowan et al., 2009). That is, reforms that were more

specified by an external provider left more visible markers on teacher practice than reforms that required substantial local development (Desimone, 2002; Nunnery, 1998; Rowan et al., 2009). Second, to successfully implement a reform, educators need sufficient information on what is expected of them (Berends et al. 2002; Desimone 2002). Initiatives that encourage too much local adaptation may send ambiguous messages about what the initiative expects. This suggests there may be trade-offs between fostering local adaptation and providing enough specificity for educators to know how to engage with the initiative (Cannata & Nguyen, 2015; Fullan, 2016).

Focusing on Core Ideas of New Policies

Consideration of the aforementioned literature on sensemaking and the positive adaption in scaling up should lead researchers to explore educators' understandings of the core ideas behind a reform. Adaptations are certain and by themselves are neither good nor bad (Dede, 2006). What matters is the extent to which the initiative is designed to effectively allow for integrity to the core elements even when school conditions are not ideal (Clarke & Dede, 2009). Sabelli and Harris write, "It is the set of ideas or principles behind the intervention and the process of implementing those principles that will allow new implementers to do justice to the intentions of developers and researchers" (2015, p. 27).

As the literature on scaling up educational initiatives shifts to focus not just on whether adaptation occurs, but how to support the successful adaptive integration of effective practices into new contexts (Hannan, Russell, Takahashi, & Park, 2015), there is a greater need for improvement efforts to help practitioners understand not only the innovation itself, but the core ideas behind the innovation (Thompson & Wiliam, 2008). By combining the "know-how" with the "know-why", practitioners can adapt initiatives in ways that stay true to the underlying

theory of change. Further, providing both the innovation and the theory of change can help practitioners achieve the right balance in adaptation and integrity to core innovation practices. The combination of innovation practices and theory of change helps to provide implementers with the type of specificity that gives them clarity about what to do without being overly prescriptive (Fullan, 2016).

In an effort to better understand these phenomena, this paper explores interviews with principals and teachers in a state initiative that provides built-in flexibility for program implementation. The Instructional Partnership Initiative (IPI) uses teacher evaluation data to match teachers in the same school in collaborative partnerships to improve teaching practices. While the IPI material provide recommendations, the state intentionally allows for flexibility in how principals establish the initiative in their schools and how teachers engage in partnership activities. This offers fitting circumstances for exploring how educators come to understand the core ideas of a new initiative, and the ways in which these understandings are adapted in particular contexts. The next section describes the state initiative and its core features.

Context

The Instructional Partnership Initiative (IPI) uses data from the state teacher evaluation system to match teachers in partnerships for instructional improvement. In general, the initiative intends to match teachers with specific identified weaknesses to other teachers in the same school with strengths in those specifics areas to collaborate around instructional improvement. Specifically, IPI uses data from the observation component of the state teacher evaluation system (i.e., TEAM) to provide principals with building-level teacher matches. Teachers are first identified as a potential “target” teacher if the teacher has an overall observation of 3 or below

(out of a maximum of 5) on the observation rubric, and at least one of the 19 practice indicators is less than 3. An algorithm uses the individual practice indicator scores to match these target teachers to other teachers in the same school who score a 4 or 5 on the indicators where the target teachers scores a 1 or a 2. The algorithm proposes a set of matches that maximize the number of strengths-to-weaknesses match in a single school.

Principals are invited to take up the initiative through a series of communications from the state to the principal and district. In particular, principals receive the matches proposed by the algorithm through an online portal. The online portal proposes several matches for each target teacher, with the expectation that the principal can use local knowledge of the teachers and school to select the final match. Principals then introduce the partnerships to teachers and establish expectations for the partnerships in that school. Principal and teacher guidebooks are available to support principals and teachers in participating in IPI.

As established by the state, IPI has four core elements that define the initiative:

1. *Individualized instructional improvement opportunities.* IPI is designed as job-embedded professional development for teachers, providing learning opportunities to improve instruction.
2. *Teacher collaboration.* IPI is designed to facilitate collaboration among peers and leverage expertise within a school.
3. *Indicator-level focus on instruction.* IPI uses data on specific indicators on the observation rubric to match teachers, with the goal of focusing collaboration in specific practice areas on which target teachers need improvement and partner teachers have expertise.
4. *School and teacher adaptation.* IPI is designed to be individualized at the school and partnership level so that the content and type of partnership activities are most relevant for participating educators.

At the time of this study, IPI had been piloted in a small number of Tennessee schools. Results from an experimental evaluation of this pilot indicated that IPI improved teacher

performance and student achievement (Papay, Taylor, Tyler, & Laski, 2016). As a result of this pilot, the state department of education decided to scale IPI throughout the state.

Data and Methods

The present study is a part of a broader, mixed methods study that explores the first year of the statewide IPI implementation. All schools in the state with sufficient data for making the matches were randomly assigned to be in the treatment (i.e., be invited to participate in IPI) or control group. The treatment group was further randomized into three groups, so that some principals received additional levels of outreach to encourage participation in the program. There were two forms of additional outreach and a group with no additional outreach, creating three groups of treatment school conditions. Specifically, the data for this paper draws on (1) interviews and focus groups with educators in schools participating in IPI (known as takeup schools); (2) interviews with principals who were invited to participate in IPI, but decided not to participate (known as non-takeup principals); and (3) materials the state used to communicate about IPI to schools and teachers.

Data

The first set of data come from fieldwork visits to 16 of the schools that participated in the first year of statewide IPI implementation in the 2015-16 school year. As of January 2016, 50 schools had submitted matches through the state's online portal. In choosing schools for fieldwork visits, we first stratified the takeup schools by treatment outreach condition, trying to achieve an equal number of takeup schools in each condition. We then selected takeup schools for fieldwork visits in a way that attempted to both mirror the characteristics of all take-up schools and produce variation across schools in a wide range of characteristics, including school

level (elementary, middle, and high school), region, school size, percentage of student body that is economically disadvantaged, and school-wide TVAAS score. In these categories, the fieldwork schools we selected were broadly representative of the take-up schools as a whole.

Within each fieldwork school, we aimed to conduct individual interviews with 6 teachers from 3 IPI matched pairs of teachers, an individual interview with the principal, and a focus group with 6-8 non-participating teachers. In selecting IPI teacher matches for interviews, the we sought to maximize variation across grade levels and subjects. A few of these initial selections were not available for interview due to scheduling difficulties and additional participating teachers were selected based on availability. In a few cases, we interviewed an assistant principal who led IPI in the school instead of the principal. In total, we interviewed 16 administrators and 93 teachers participating in IPI. At each school, we also conducted focus groups with a total of 94 teachers who did not participate in IPI. In two schools, all teachers were participating in IPI and so the focus groups also included teachers participating in IPI. We designed takeup principal and teacher interview guides to elicit participants' understandings of IPI, its rationale, specifics of implementation in each school context, and information about professional development, teacher collaboration, and evaluation in each school. The teacher focus group guides were developed to gain further understanding of the nature of teacher evaluation, feedback and support, collaboration, and professional development in the school.

In addition to the 16 takeup schools, we sought to conduct interviews with 16 non-takeup principals in an effort to learn more about the reasons schools declined the initiative. To select non-takeup schools for further inquiry, we again stratified these schools into the takeup conditions described above and selected an even number of schools from each group. We

divided principals into those who logged on to the IPI portal but did not submit matches and those who never logged on in the first place. We then, sought to contact an even number of principals from each category. We purposefully included four additional schools whose principals contacted the state in response to initial communication about IPI in order to explicitly explicitly decline the invitation to participate. We also attempted to balance our selected non-take-up schools across region and school type. We contacted a total of 30 schools for non-takeup interviews. Of these, 20 principals either directly declined to participate in interviews or were non-responsive despite numerous attempts. One principal initially agreed to an interview but then was non-responsive to requests to schedule the interview. We completed interviews with 9 principals of non-takeup schools. Non-takeup interview protocols were designed to explore principals' understandings of IPI, experience with IPI outreach, reasons for non-participation, and elements of school culture such as professional development, teacher collaboration, and evaluation.

The third source of data included all materials used by the state to communicate about IPI to the district, schools, and teachers. These included email messages and attachments, website materials, principal and teacher guidebooks, an FAQ, and other materials used by the state. The state office responsible for communicating about IPI saved copies of all communications and shared them with the research team. A total of X communication materials were collected and analyzed.

Analysis

To analyze IPI messaging, we looked at communications from the state department of education to Superintendents/Directors, Principals, and Teachers. Initial messaging about IPI to

each of these groups came from TDOE, via email communications. These communications often linked to additional resources such as guidebooks tailored to teachers and principals, a website with additional guidance for teachers and principals including frequently asked questions (FAQs), and occasionally articles that gave more detail about IPI, particularly initial results and the rationale behind the initiative. We analyzed the content of emails and embedded communications to better understand TDOE's messaging around the program. More specifically, we assigned *a priori* developed codes aligned with the core attributes of IPI to understand which elements of the program were emphasized to various stakeholders. The five thematic codes captured: 1) Mention that pairs were matched according to specific rubric indicators from formal observations; 2) That IPI offered an opportunity for teacher collaboration; 3) That IPI offered an opportunity for individualized instructional improvement; 4) that IPI was flexible and adaptable to local school context; and 5) That IPI was a voluntary program.

All interviews were transcribed and coded in the summer and fall of 2016. We used a grounded theory approach in an effort to move between our preconceived conjectures and emergent inclinations, looking for evidence that supported, negated, or further developed our initial understandings surrounding the IPI initiative (Glaser & Strauss, 1967; Miles & Huberman, 1994). As such, we drew on both inductive and deductive thematic coding of all transcribed interview data (Strauss & Corbin 1990). Our coding framework initially conceived only of broad categories including 1) reasons for take-up/non-takeup, 2) understanding of IPI, and 3) how the principal set expectations for teachers. Within these categories, we also sought to identify the extent to which the four core IPI elements were represented. As coding progressed, we sought to allow the data to drive the findings by narrowing categories to include subcategories of take-up

and commonalities in understandings articulated by interviewees. We compared coded interview transcripts to see if patterns emerged across contexts, individuals, and respondent groups in an effort to discern patterns of program perceptions and reasons for take-up. When we perceived patterns, we wrote memos with relevant evidence and tested these assertions against the larger body of data.

Findings

Table 1 presents a summary of how the four IPI core elements were represented across the implementation phases we examine: communication materials, principal understanding, principal reasons for takeup, expectation setting for teachers, and teacher understanding. Overall, there was evidence that most core elements were present in all phases, although some elements were given more or less prominence. Collaboration was often emphasized more than other elements and the focus on indicators was often under-emphasized, particularly when setting expectations for teachers and, subsequently, how teachers understood IPI. The following sections describe this in detail.

Communication Materials

During the 2015-16 school year, the state department of education sent 12 emails about IPI. Of these, three went to Superintendents/Directors, five to principals, and four to teachers. Table 2 shows that when only considering the text in the body of each email, and excluding any materials that were linked or attached to these emails, different elements of the initiative were emphasized according to the type of recipient. Though our focus is on messaging to teachers and principals we provide here this basic information for the three emails sent to superintendents since it is possible that they communicated directly with principals about IPI. Two of the three

emails sent to superintendents made mention that IPI was an initiative using indicator level data from observations to pair teachers for collaborative purposes to work on individualized instructional improvement, and that IPI was an initiative designed with flexibility and adaptability to local context in mind.

Interesting to note here is that messaging was different by stakeholder type in terms of what was emphasized about IPI. Superintendents received a fairly even message about IPI across the core attributes, and principals also received an even message, although their emails prioritized teacher collaboration more so than those of the superintendents. For teachers, however, direct messaging from the state about IPI was almost entirely about collaboration.

Many of the emails also provided links to websites or attachments that offered additional, often more detailed information related to IPI. We also analyzed the content of these ten additional sources of information. In the case of the guidebooks to teachers and principals, we analyzed the introductory sections. All of the emails with embedded hyperlinks led to pages on a designated IPI website maintained by the state. We analyzed the landing page for each embedded hyperlink. Below we show the breakdown of emails that contained attachments or links by stakeholder (see Table 3). Then, as we did with the emails, we show the core elements emphasized in each of these ten second order sources of information. Taken together, we again see differences in the amount of information provided by stakeholder as well differences in the messaging about the nature of the initiative.

To begin, superintendents received four second order pieces of information – three attachments and one website link. The attachments included an introductory letter from the Commissioner of the State Department of Education, a detailed two-page explanation about IPI,

an FAQ diving further into the particularities of the initiative, as well as the introductory letter and guidebook distributed to principals. The website directed superintendents to the landing page of the state-curated IPI website. The principals receive ten second order pieces of information about IPI – seven attachments and three website links. The links all directed to the same place, which was also the site to which superintendents were directed. The attachments received by principals included principal and teacher guidebooks, the same two-page detailed explanation of the initiative sent to superintendents, plus a letter of introduction to distribute to participating teachers. Finally, proportionate to the number of emails received, the teachers received less second order information than superintendents and principals. Teachers received four website links, three of which were identical from one email to the next. They did not receive the introductory letter, nor the guidebook, directly from the state; the state left it to principals to disseminate these materials.

What numbers alone cannot demonstrate is the actual content of these second order communications. We coded the contents of the ten unique sources of information about IPI according to the same four attributes used to assess the emails. As seen in Table 4, the various attributes of IPI were emphasized across the second order material distributed to superintendents and principals. Communication to teachers focused entirely on collaboration. All four of the emails to teachers included hyperlinks. Three of these were the same and provided resources such as activities teacher pairs might engage in, or guides on how to conduct peer observations, yet only made explicit mention of one core IPI attribute – its flexibility. The other site, provided in only one email to teachers, was rich with information about IPI and pointed out three of the four core elements – a focus on indicator data, the collaborative nature of the initiative, and that

it is a mechanism for individualized instructional improvement. Teachers were largely dependent on principals to distribute the two richest sources of information about the initiative that came from the state: the Teacher Guidebook and the introductory letter.

Both in how the state distributed materials (introductory letter to teachers and guidebook), as well as the content of the differences in the content of the communications between the state and various stakeholders demonstrates that the state positioned principals as the crux of getting IPI up and running in schools. Principals were provided with the richest, most comprehensive information about the initiative. This meant that in addition to delivering materials from the state to teachers, principals were also responsible for conveying what they learned from their own communications with the state to teachers. As a result, principals became pivotal sources of information about IPI, especially for teachers who did not investigate IPI web links. This made it more likely that principals' own understandings of IPI, as well as how they introduced IPI to teachers, would prove fundamental to how IPI would take shape within any given building.

Principal Understanding

By and large, principals who decided to take up the initiative understood the goals of IPI and the key components of the initiative. Among the non-takeup principals, some were completely unaware of the initiative and could not recall any communication about it. For those that were aware of IPI and made an intentional decision not to participate, they also understood the goals of IPI. This suggests that the communication materials were effective in communicating the core goals of IPI. A consistent area of principal confusion was related to

specific ways in which the algorithm either identified teachers as target teachers or proposed teacher matches.

Both takeup and non-takeup principals understood that the goal of IPI was to provide teachers with opportunities to grow by way of peers working in pairs, recognizing that the interrelated nature of the goals of individualized professional learning and teacher collaboration. For example, when asked to describe the goals of IPI, one takeup principal said,

> The goal as I see it was to bring our school together, to get teachers to talk that may not have the opportunity to talk, and the main focus would be to learn from each other. Learn specific strategies that's going to help them in their classroom" [3590].

Similarly, a non-takeup principal said, "My understanding was that it was to link up teachers with a mentor – or not even necessarily …But to basically put two teachers to work together at a yearlong process to kind of help each other and mentor each other." [5690]. While many principals described IPI goals as teacher improvement, several principals provided rather vague descriptions of this goal, such as "pair together as mentors" [1190].

Other principals, however, provided more detailed descriptions of IPI as individualized professional learning, sometimes connecting it to improving teacher effectiveness. For example, one principal said she thought the state's goal for this initiative was "to improve teacher effectiveness across the board," and that her/his own goal was

> "that some of my teachers who may need some growth in some areas that we could have that mentoring relationship and that coaching relationship where they could help – those that are stronger could help bring them to, because we are typically a high achieving school and I wanted everyone to be at that point" [8390].

Another takeup principal similarly emphasized individualized professional learning when describing the goal of IPI

> "I think the goal is to improve instruction, you know, so that it improves, you know, student learning, student achievement. And I think it's by, you know, partnering two teachers that have maybe complementary areas on the rubric to where, you know, that they could both learn or grow from the experience" [1890].

Another principal considered IPI a form of professional development, "It's a shadowing process where teachers would gain insight or professional development by watching other teachers" [4190]. Regardless of the depth of principals' statements, most principals understood that IPI was a form of individualized professional learning for teachers.

Principals also understood that IPI was intended to foster teacher collaboration. One principal described the goals by saying,

> What fundamentally it's about is just to give teachers each other support, kind of peer partners. I don't think that we approached it as anybody being in charge of anybody. It's just people that I thought that would work together. [3990].

Some of the principals recognized a distinction between administrator and peer feedback on teaching and viewed IPI as an opportunity to promote peer feedback on teaching. For example, one principal contrasted IPI with coaches who provide feedback to teachers: "We have a building level coach and then we have a district coach who comes in and works with staff, but this is more peer to peer" [6790]. Another principal similarly cited the collaborative element of IPI and emphasized that teacher collaboration was separate from evaluation and coaching:

> To separate the two, and they're just like, 'I don't want to evaluate anyone and I don't want a teacher evaluating me.' I'm like, an observation is just strictly for collaboration and learning. It's not even coaching. It's collaboration. So we're working, as I said, slowly to that. That's my vision, to see us work collaboratively [1390].

Thus, many principals described related goals of individualized instructional improvement and, specifically, using peers to facilitate that improvement.

Most principals also understood that IPI paired teachers using teacher scores on specific indicators related to their evaluation. For example, one non-takeup principal said,

> "My understanding is …you look at the different indicators on the rubric and how teachers do and then they're basically can be paired to put a – somebody that's weak in one category, in one indicator with somebody who's a little stronger and let them collaborate and just bounce ideas off each other and try to improve their – their instruction" [1690].

A takeup principal described the matching process similarly, "To match teachers who have low scoring areas on the team rubrics with teachers who had excellent scores in those particular areas" [6790]. Another takeup principal contrasted IPI from a district mentoring program through its use of specific indicators:

> You know, the mentoring program that we've got that's supervised out of the board office deals more with school system specifics, along with some of the aspects of the TEAM rubric. This is solely focused on classroom practice. …Don't get me wrong, you need to know how to turn in reports on time, you need to know how to turn in your absentees, you need to know how to request a field trip and – you know, and all of that. … But you know, that's not necessarily an aspect of the TEAM rubric. [7590]

Although few principals specifically referenced that the communication materials emphasized the ability to customize IPI for their school's context, most acknowledged that they valued the freedom to customize the initiative. One principal described working with her/his curriculum director when implementing IPI:

> By feeling like I had the freedom to customize it for my school, I feel like in the end, it'll make an improvement. So I think that's really important too because most principals are going to know the cultures of their school [3990].

While principals' descriptions of IPI and its goals suggested they had an understanding of the core elements of IPI, this does not mean principals were satisfied with the communication about the initiative. Several principals felt they lacked a clear understanding of IPI. For example, when asked if they had enough information about IPI, a principal responded,

> Not really. Matter of fact, I had one of the teachers…they got an email that had I think maybe the links to that website that you were talking about and the instructional book and I didn't get that. …I had them to forward that email to me so I could look at what it was because I told them, I said I'm not real sure what we're supposed to be doing [6590].

Other principals described understanding important parts of IPI only after examining the materials in depth, suggesting the materials could have more clear or easier to understand. Principals also wanted more opportunities to learn about IPI than just printed or online materials:

> Maybe someone to actually talk with me about it, rather than just getting the email, you're invited to participate. And maybe have a meeting where you're inviting all the schools that are going to participate, and then you can have a question and answer, rather than having to dig. … I got two other people [here] to help me…and so we printed it all out and talked about it. [4190]

Reasons for Principal Takeup

Principals' reasons for taking up IPI were multifaceted. Across both takeup and non-takeup principals, there were two dominant themes that shaped their decisions about whether to participate. One, many principals were unsure if participation was voluntary or were influenced by encouragement by their district. For example, one takeup principal said, "I thought it was because we had had a dip in the value added, that we were being told to do this program." [8590]. Another takeup principal described the influence of the district over his decision, "Our director said, basically, I want you to do this …I seen this come across. It was voluntary and I didn't volunteer us for it. But then when he said would you do this, I said we're going to do it because he asked us to do it." [6590]. Conversely, a non-takeup principal noted that the absence of district encouragement contributed to his decision not to participate. This principal said, "I called central office, and I asked [person] up there -- You know, what is this? She's like, I don't have any idea. … and I said well, then I'm not going to mess with it, and okay, and that was the end of it." [9890].

The other major theme concerning principals' takeup decisions was that IPI offered something their school needed or that it was aligned with their particular goals and context. This was particularly true for principals who described their takeup decision in light of IPI's individualized improvement opportunities or teacher collaboration. The school-specific goals broadly reflected the goals of instructional improvement and teacher collaboration described above. For example, one principal said she had been trying to encourage teachers to observe each other as a way to improve scores:

> I know that shadowing teachers is a research-based strategy to improve scores, so I knew that that was something I wanted to do. And I've mentioned it many times, but not very many teachers would take me up on it just from, you know, casual mentioning it in faculty meetings. …So I know it is a research-based strategy, and it is something I'd been wanting to do, so when I saw it… I was excited about the possibility of doing this in an organized manor, instead of just haphazard [4190].

For many principals, the ability to offer individualized professional learning opportunities to teachers was an important reason for participating. For example, one principal called the invitation to participate in IPI "fortuitous" because it provided her with an opportunity to improve teachers that were struggling:

> There was an opportunity and it picked up some people that I really wanted to get assistance that wouldn't have gotten assistance otherwise. … I couldn't get them the help that they needed. So when this came along and I saw those names were part of it, I thought okay, okay, this is going to fill a hole in a niche and help these teachers and it's not really coming from me. You know, they were identified by the state as at risk. So it was very fortuitous that you guys were -- that this fell into my lap like this. [6790]

Another principal, when asked why he decided to participate in IPI, began by explaining how his school needed improvement and he saw IPI as a way to help teachers improve,

> When I first got here had a grand total of, you know, seven teachers that scored a three or above on their TVAAS, okay? … Anything I can do to bring about improvement at [School] I'm going to jump on it, okay? Which means that sometimes I spread myself a

> little thin but you know, I mean, that's – that's okay. If we can get – if we can bring about some improvement by bringing some of our demonstrated high achieving teachers together with some of our struggling teachers, then I'm all over it" [7590].

Principals who decided not to participate in IPI also noticed the individual professional learning component of IPI. For example, one non-takeup principal said IPI sounded too similar to a mentoring program they already have, "I didn't pay much attention to it. I get lots of emails, and you know, the reason I didn't pay attention to it is because we have a mentoring program here in [County]" [3390]. For these non-takeup principals, they recognized IPI's goal of individualized improvement, but determined that they already had sufficient structures to meet that goal.

Another reason cited by most principals who took up IPI was the desire to foster more teacher collaboration. That is, principals wanted to facilitate teacher collaboration at their school and saw IPI as a path toward that goal. For example, one principal said, "I was really excited about that because it's really something that I've been trying to get started here at the school before I even found out about this. I want the teachers to talk more to each other." [3190]. Similarly, another principal said IPI was consistent with her goal to help teachers make their teaching public:

> I talk to them about, you know, the need to break that mentality of when you're given a classroom that you go into that classroom and close the door and that is, you know, your domain, and that what you do in the classroom sort of stays in the classroom and you're on your own, sink or swim, and how we need to reach out and support each other. And I've talked to them a lot about peer observations and the importance of peer observations and working as teammates and the collaborative planning and those kind of things. [1390]

Like this principal, several principals spoke of their goal to encourage teachers to observe each other, as a way to foster both teacher collaboration and improvement. For some principals, peer

observation was a way to provide teachers with more feedback on their instruction in a way that is not evaluative:

> One of the key things that make it a good idea in my eyes is that it takes me out of the equation, it takes the intimidation of dealing with your superior out of the equation, more so than anything else…that was the whole thing about...having instructional facilitators in the building and instructional coaches in the building. They are still seen as a member of the administrative team, but your colleague is not.

The collaborative element of IPI was also a factor for those who chose not to participate. In these cases, non-takeup principals said they did not participate in IPI because their school already had a sufficient collaborative culture or had such initiatives in place. One non-takeup principal explained:

> All of my teachers visit each other's classrooms … We also in [County] are extremely fortunate that we have the early out Wednesdays to do PLCs together, so all of my little teachers are together every Wednesday to share teaching strategies and ideas and then we take part of the rubric and we have teachers come in and be the teacher leader about how to implement those things. [1190]

In contrast to the many principals who decided to participate in IPI because of its focus on individualized professional learning or teacher collaboration, no principals cited the focus on specific instructional indicators from the evaluation rubric as a reason for participation. In fact, some non-takeup principals described the evaluation indicator focus as a reason to decline participation:

> I did not think that would work probably for my school. When I came into this school … there was a lot of negatives about evaluation and how it was perceived and how it affected them. … So last year, when this came about, and reading about that, I really think that would have had a negative impact on my teachers, if I had just that information and started pairing people up. We chose a little bit of a different approach. So what I did was I kind of did peer evaluations, but I did it more randomly. [5690]

Thus, while some non-takeup principals attributed their non-participation to IPI's focus on professional learning and teacher collaboration, they did so because they thought their school

already had programs that fostered those activities and IPI was not necessary. But when non-participation was due to IPI's focus on evaluation indicators, some principals saw that feature as being at cross-purposes to their school goals.

In terms of IPI's flexibility for schools and teachers, only a few principals mentioned this element as a reason to participate, although most said they appreciated the lack of paperwork and monitoring. For example, one principal said,

> "I think that it being loose was a good thing.…When I say loose, I mean teachers don't need one more thing to do, and it doesn't matter what it is. They view it as one more thing to do. And this program is loose because they don't have to do paperwork" [4490].

While only a few principals specifically mentioned IPI's adaptability as factoring into their takeup decision, principals did in fact adapt the program in specific ways for their school. The next section describes how principals launched IPI in their schools and set expectations for teachers.

As far as teacher take-up of IPI, few teachers described a reason for takeup associated with one of the four core components of IPI. Most instead indicated that they participated because their principals asked them to do so. They also suggested that at the time of takeup they had little information about IPI by which to make an informed decision. The next section describes how IPI was introduced to teachers and the expectations teachers gathered from their principal's portrayal of the initiative.

Introduction and Expectations for Teachers

How IPI was introduced. Principals described many different strategies used to introduce IPI to teachers and set expectations for what teachers in IPI partnerships should do. Some principals met with each participant separately, some introduced IPI to all teachers at a faculty

meeting, and some did a little of both. Teacher descriptions of how the principal established IPI in the school mostly mirrored their principal's description. For example, teacher descriptions reflected the variation in whether IPI was introduced to teachers individually or in a faculty meeting. Teachers also described variation in the types of expectations principals set for teachers. Reflecting the variation in principals' descriptions, some teachers explained that their principals told them exactly what to do in their IPI partnerships, while other were less clear. For example:

> He just said, you know, basically, during your planning time, go observe each other twice, meet and talk about it, and then we had a Google Form where we listed like her areas for me for reinforcement and refinement and then [inaudible 8:24] reflection about the observation. [1405].

In another school, teachers reported being similarly told "you needed to [observe] once a month, and we were told …you need to have at least three done…by … the end of April" [3502].

Clear expectations for how to participate in IPI, however, were not the norm. Many teachers explained that their principals gave limited direction and asked them to figure out IPI on their own. Some teachers described principals handing them a guidebook with few additional instructions. For example, when one teacher was asked how she learned about IPI, she responded that the principal asked her to read the manual:

> P: Well, everything I got was from – pretty much from the manual.
>
> I: Okay. So the principal didn't make a suggestion like you should do X and Y?
>
> P: No, you know, other than just giving you the basic guidelines, she said, you know, here, it's in the manual. It tells you kind of what you need to be doing, and use these to create this opportunity to assist one another. [6101]

Expectations about the nature of the partnership. Even among teachers who described explicit guidance about IPI activities, these teachers reported varying degrees of clarity

concerning the nature of the partnership work. Principals and teachers reported that principals provided a range of explanations about the goals of the partnerships and what should be the focus of their partnership work. Principals did try to emphasize that that IPI was a partnership to improve both teachers, and not a coaching or mentoring relationship. One principal said, "I said, 'this has nothing to do with one being better than the other. This is helping learning from each other.' That's pretty much how I put it. We're learning from each other. Everyone in this room needs to improve" [3190]. As shown below in what teachers understood about IPI, teachers knew that IPI was intended to help teachers improve but few relayed expectations the principal provided that helped them make sense of how IPI could drive individualized instructional improvement.

In contrast, most principals and teachers said that principals emphasized IPI as a form of teacher collaboration when setting expectations for teachers. For example, one principal said, "So I presented it to the whole faculty: this is an opportunity to help us all build on our strengths" [6190]. Another principal similarly described the launch:

> I said that we had been…invited to participate in an Instructional Partnership Initiative where teachers were paired with other teachers and that they would be working together, you know, throughout the year …I really, really enforce with the whole grade level regardless if they're in the initiative or not, is do that collaborative planning so that one person – you know, that no one person is feeling overwhelmed with all the amount of planning that needs to be done for good instruction…So we talked about that, that it would help with collaborative planning. [1390]

Many principals emphasized that partners should engage in peer observation, "I said observe in each other's classes. And I said it at least a couple of times…I offered some release time, you know, and I covered some classes when I needed to" [4490].

Teachers also recognized the expectation that IPI should be a collaborative endeavor, in the sense that they knew they were supposed to talking about teaching with their partner. For many participating teachers, however, the expectation that IPI could fill a void in teachers' collaborative and professional learning experiences never resonated. Teachers were often confused about what they were expected to do in IPI in comparison to what they already did in subject or grade level learning communities. Teachers matched across subject or grade levels frequently wondered aloud about how the collaboration was expected to help them, given that their partner did not teach similar content. Despite some misgivings, however, almost all teachers echoed principals' expectation that collaboration with other teachers is likely to help teachers improve.

Expectations around what and how to engage in IPI collaboration were most clear when teachers described clear expectations concerning and indicator-focus of the partnership. In one school where teachers understood IPI as indicator-focused, the principal gave partners a chart that showed complementary strengths and weaknesses from the evaluation indicators:

> She just told us to get together and look at this little chart that y'all – that they had given us and kind of see as far as like when *questioning*, you know, she told us to maybe do a lesson on questioning and watch each other, evaluate each other and then you know, give specific feedbacks, different things like that (4402.

Yet, a minority of principals gave teachers the specific indicators on which they were matched, and even fewer explicitly linked IPI to the evaluation. Most principals did not tell teachers what indicator they were matched on or give them an indicator on which to focus their partnership. For example, one principal said,

> I didn't give them a specific indicator. I – of course, in the guidebook, it does say, you know, share your evaluations with each other. I said – and I did mention that. I said, you

> can share your evaluations with each other and look to see what you want to work on, but I didn't – I didn't require it. Some of them don't feel comfortable doing that yet [7390].

Another principal recognized she/he did not set it up with teachers as the program was intended, saying,

> I think in the way it was originally set up, maybe not so much in how I wound up implementing it, but I think in the original setup, it was more – it – it tended to be more focused on specific indicators. I just chose not to do it that way [3090].

Another principal, when asked if she/he gave each pair a specific indicator to focus on, responded, "I did not …ideally, I would have sat down with each pair and said, you know, this is some things we might ought to look at and help each other with" [8390]. Another principal said, "They knew that they were partnered up to find strengths in each other, that's it…But they don't know why they were matched necessarily [6190].

Principals were hesitant to explicitly provide indicators on which pairs should focus because they worried how teachers would react. One principal explained,

> I think it's just kind of a worry of culture-wise, you know, that I would be identifying, you know, a certain teacher as a weak teacher instead of, you know – I know that it should be more about, you know, we all have areas to strengthen, areas that that – but I don't know, I just had the worry that they would feel like I was singling them out or picking on them or evaluating them by saying, you know – you know, you have been identified due to lower evaluation scores in certain indicators. [1890]

Similarly, another principal explained that she/he wanted teachers to think they were randomly selected, so they would not feel targeted: "So that was with everybody so that they would realize that it was going to be random selection. I didn't want them thinking that we were targeting, you know, just picking out a few people and calling them in" [6190]. Some principals were also worried about the confidentiality issues and said things like: "Everything is so confidential with teacher evaluations and scores … but I was a little hesitant to say, okay, you

were low in questioning and you were high in questioning, so I'm going to pair y'all together." [3090].

The lack of clarity around the indicator-focus on IPI was also present in teacher descriptions of how the principal set expectations for IPI partnerships. While some teachers understood that their partnership work was supposed to focus on improvement in a particular indicator from the observation rubric, the others said that they were not given any instructions about a focus. For example, in one school where the principal gave explicit guidance about IPI activities, he reportedly left open whether the partnership should focus on a specific indicator:

> In the meeting, he had mentioned that a lot of – that the teachers had been paired together based off of their – I think it was their areas of refinement from their actual observations with administrators. But then – I don't know about other teachers, but I – [name] and I, my partner and I, were not told exactly what those were….I think we kind of mentioned to one another, just asking one another, oh, hey, do you know what exactly it is that we're supposed to be looking for? And then we – I think we came to the consensus that no, we didn't know. So we just kind of did our own thing. [1401]

Where focus of the partnership was left open to teacher interpretation, teachers were typically unclear about the rationale for the teacher matches. Some were told that IPI matched teachers to others who excel in a certain indicator:

> They tried their best to pair us with someone that – okay, this teacher excelled in this area, we'll try to put you with that one because that may be the area you're not as strong in…I was not actually told the specific area, which I already had a general idea of which areas I needed …just from looking at my own scores. I just assumed that was the reason I was paired with this teacher, she was paired with me (4102).

The majority of teachers, however, were either not sure or were entirely in the dark about why they were matched with a particular partner. For example, when one teacher was asked why he was partnered with his IPI peer, he said, "It wasn't really communicated. I just think just

experience level was one thing. I know the principal said that, you know, you haven't done anything wrong or anything like that, you know" [1403].

Finally, in contrast to ambiguity around the indicator-focused element of IPI, most principals expressly emphasized that IPI should be flexible to the needs of participants. As one principal described, "I gave them the packet and I said, there's lots of ideas in here. I said, what I need is for this to be a partnership. I need for you guys to decide how best you could learn and work together." [1890]. One way that principals reported making IPI flexibile was in limiting the accountability requirements of IPI participation. Several principals emphasized to their teachers that there was minimal or no paperwork required. A few principals, however, did convey more detailed requirements for teachers. One principal, for example, created a Google Form for teachers to submit after they observed each other. Another principal asked pairs to help each other plan a lesson and then observe each other. Another principal said she did not give teachers all the IPI materials in an effort to convey the flexibility of the initiative. She explained,

> With all the changes the state's made this year in everything, that if we gave them, you know, this 50 to 100 pages worth of material to read, they just wouldn't do it. They would be too overwhelmed. It's just too much. But – so what we did is we picked maybe six pages out of the teacher manual to share with them, and we made our own little packets, and we presented it that way. This is all you have to do. You are going to go into your partner's classroom, I want mandatory one 30 minute observation a piece, so two observations per team, and this is the form that I need back, and this is the form" [4190].

For most teachers, the expectation that IPI could be adapted to the needs of the partnership came through loud and clear. Most interviewees explained that outside minimal expectations for specific activities–whether observing, meeting, or logging partnership time–they felt entirely free to participate as they saw fit. As described in the next section, however, that freedom came at a potential cost of clarity around what they should be doing.

Teacher Understanding

Most teachers ascribed their understandings of IPI to principal descriptions of the initiative. A few teachers also pointed to the guidebook either given them by the principal or identified on their own. In most cases, the degree to which they understood IPI as an improvement initiative, an evaluation-related initiative, collaboration initiative, or flexible initiative was mediated by the principal's descriptions at the outset.

Most teachers understood IPI as an initiative intended to improve teaching in a general sense. The means by which IPI was supposed to foster improvement, however, was often unclear in teachers explanations. For example, a typical participating IPI teacher described the purpose as "something that is used to help and guide areas of weakness that we can improve upon individually" (6502). Another teacher explained the goal of IPI

> …is to help one another get better, and by getting better, that means showing more improvement …just collaborate, talk about strategies, you know … give them feedback, give them different strategies that we can use to improve ourselves. [7305]

Many seemed unsure of exactly how improvement was supposed to happen:

> Most initiatives we do are to raise scores and to, you know, do better… we're always supposed to be improving and learning and honing our craft… I know that I'm getting good things out of it, but some of the [interview] questions make me think that I haven't been focusing on the right things… since we haven't been talking about the – the evaluation rubric and stuff. [7301]

Teachers rarely described specific ways that the initiative was designed to facilitate improvement or what counted as improvement.

As far as teacher collaboration, most teachers understood IPI as a teacher collaboration initiative in the sense that teachers were supposed to work together. Many teachers, however, expressed confusion about the nature of the collaborative relationship and about the focus of the

collaborative work. Almost all teacher pairs recognized that they were supposed to work together in some capacity and generally were in favor of collaboration as an improvement mechanism. The following teacher expressed a widely held sentiment:

> We all have agreed that collaboration's the best key. That's the key to a successful school. If you can collaborate, if you can, you know, build each other up and help each other – Then you're going to be successful, period. [6106]

Many teachers, however, expressed confusion about the nature of collaboration within an IPI partnership. In some cases, teachers were either told or inferred that the relationship was hierarchical. For example, one teacher explained that her partner "is up here and I am down here" [3902]. Another teacher explained "I have always liked to help new teachers and was honored…to mentor" [4405]. Even as one teacher explained that she gained value from participating, she described it as a mentorship:

> So it is a positive for all of us, whether it's the struggling teacher or the mentor teacher…it's a pretty clear cut thing when you say this is a mentoring program to try to support and reinforce teachers who maybe have an area of weakness that they need to improve [6506].

In one interview, the teacher was confused by the questions that focused on collaboration saying, "I mean I feel like it was just a mentoring thing. I don't really feel like it was a partnership" [3004].

Regardless of whether teachers viewed the relationship as hierarchical or not, many expressed confusion about the nature of IPI work, a sentiment cogently expressed by the teacher who asked, "what the heck are we supposed to be doing?" [7502]. A teacher in another school explained in more detail how the expectations of the collaboration were not clear:

> We just kind of struggled I think in like the purpose of it. Why were we together? What were we supposed to get out of it? That type of thing…I'm like, I don't know why… were we paired up because one teacher needed help and one teacher was really good? Were we

> paired up because we both had a struggle that was similar? … I think the buy in would have been more if we would have had that information, this is why we're doing it, this is what we want in the end. We want you to be a better teacher. [8306]

A lack of clarity on the purpose of collaboration was especially prevalent for teacher partnerships without a common grade level or subject area. For example, one social studies teacher explained that she had little to offer after watching a calculus lesson:

> [We] discuss strengths, discuss weaknesses, what we can do to make ourselves better, what we can do to be a better teacher…the only problem is that we were at completely opposite ends of the subject spectrum…I could not grasp her lesson [6106].

Although many teachers described "collaborating" in positive and equitable ways through IPI, just as many viewed the relationship as hierarchical or expressed confusion about the purpose of the partnership.

Perhaps adding to the confusion about the nature of collaboration in IPI was that only a minority of teachers understood that IPI was intended to focus on particular observation indicators from the evaluation rubric. For those teachers who were given a specific indicator, the focus of the partnership was typically clear. For example, one teacher pointed to a specific indicator from the rubric, explaining that the partners were supposed "to work on ways to improve questioning with the students and student involvement and how to raise their level of questioning" [4406].

In many schools, however, teachers had no target indicator or they were expected to choose one on their own. For example, one teacher explained that she and her partner knew they were supposed to work on "a specific area of teaching" but they did not know what it was:

> …we were paired up because some teachers had strengths in areas that others had weaknesses in… and we weren't told what those were. So we just once we got in our pairs, we had to sort of decide what we wanted to work on. [6504]

Confusion about the indicator-focus of IPI often came out as teachers discussed the partnership matching. Many teachers, like the one above, believed that they were matched based on strengths and weaknesses but were not provided a target indicator from the rubric. Some were completely at a loss:

> I have no idea [how matches were made]…I don't know if they pulled names out of a hat …And matched us or I don't know who matched us even. I don't know if our principal matched us, if the state matched us…. I honestly do not have any idea. I wondered about that myself. I have been teaching longer than she has, so I don't know if that has anything to do with it or not [8306].

As for whether teachers understood their ability to adapt IPI to meet their needs, most teachers described IPI as flexible within the parameters their principal set for the partnership. That is, teachers felt they could implement IPI in ways that fit their needs within the confines of the requirements the principal clarified about partnership focus or specific activities. In schools where principals provided clear expectations for the activities they should do together and/or the indicators on which they should focus, flexibility typically meant engaging in IPI at a time of their choosing and in ways that felt productive. In the other schools, however, the expectations were so flexible that teachers felt little direction at all. For example, one teacher explained, "I feel like it was very kind of vague for us. … like we probably could have done a better job with it, but we just weren't clear as to what we were supposed to be doing with it" [8303].

Conclusion

Overall, this analysis has several conclusions and implications for getting principals and teachers to engage in a statewide initiative. First, both principal and teacher understanding of the initiative was shaped by how the initiative was described to them. Principals generally understood the core elements of the program, which were also reflected in the communication

materials about IPI that they received. For principals, their understanding and willingness to engage was also shaped by their district. For teachers, their understanding of the initiative was highly influenced by how the principal introduced it to them and the expectations established by the principal. When the principal set clear expectations for what they should do in partnerships and on what their collaborative work should focus, teachers understood the initiative's core elements. In other schools, where the principal either was less clear on the initiative's focus on evaluation indicators or emphasized how adaptable the partnership could be, teachers were more confused about the initiative's purpose and what they should be doing. This finding is consistent with substantial prior research on how sensemaking processes are influenced by organizational environments (Coburn, 2005; Datnow & Park, 2009; Spillane & Burch, 2006; Supovitz, 2008).

Second, principals were uncomfortable with a core element of the program, its focus on specific indicators from the evaluation rubric. While principals wanted teachers to receive support in these areas, they worried about betraying confidentiality or upsetting the culture among teachers by being explicit about the indicators in which teachers needed support. This is also consistent with prior research on how values and emotions shape how individuals make sense of new initiatives (Spillane et al., 2002). This is particularly true in policies about teacher evaluation, where organizational culture can shape how new initiatives are understood (Woulfin, Donaldson, & Gonzales, 2016b).

Third, the flexibility in the program, while not a major theme for why principals took up the initiative, had large implications for what teachers understood about the initiative. In short, many principals adapted the initiative in a way that left teachers confused about what to do. By not specifying the indicator-focus of the partnerships, teachers were unsure how this

collaboration was different from other forms of collaboration in which they engage and, more generally, what they should be doing as partners. This finding is particularly important to consider when scaling up educational initiatives. While initiatives need to be designed in ways that allow success in a variety of school and classroom conditions at scale (Clarke & Dede, 2009), they still need to provide clarity about the core elements that define integrity to the initiative. When initiatives do not provide sufficient specificity in the expectations of the reform, stakeholders struggle to struggle to understand what is expected of them and thus little change in practice occurs (Rowan et al., 2009; Sanders, 2014). While educators want flexibility in how to enact some components, they don't want ambiguity about what they are doing (Cannata & Nguyen, 2015). While providing specificity is sometimes thought of as being prescriptive, what is needed for achieving scale is "specificity that furnishes clarity but does not assume prescription" (Fullan, 2016, p. 540).

References

Berends, M., Bodilly, S., & Kirby, S. N. (2002). *Facing the challenges of whole-school reform: New American Schools after a decade*. Santa Monica, CA: RAND. Retrieved from http://www.rand.org/pubs/research_briefs/RB8019/index1.html

Bodilly, S., Glennan, T. K., Kerr, K. A., & Galegher, J. R. (2004). Framing the problem. *Expanding the Reach of Education Reforms: Perspectives from Leaders in the Scale-up of Educational Interventions. Santa Monica, CA: Rand Corporation*.

Bradach, J. (2003). *Going to Scale: The Challenge of Replicating Social Programs* (Stanford Social Innovation Review). Stanford, CA: Stanford University. Retrieved from https://ssir.org/images/articles/2003SP_feature_bradach.pdf

Bryk, A. S., Yeager, D. S., Hausman, H., Muhich, J., Dolle, J. R., Grunow, A., … Gomez, L. (2013). *Improvement Research Carried Out Through Networked Communities: Accelerating Learning about Practices that Support More Productive Student Mindsets* (pp. 1–32). Carnegie Foundation for the Advancement of Teaching.

Cannata, M., & Nguyen, T. (2015). Consensus versus Clarity: Tensions in Designing for Scale. Presented at the American Educational Research Association, Chicago, IL.

Clarke, J., & Dede, C. (2009). Design for Scalability: A Case Study of the River City Curriculum. *Journal of Science Education and Technology*, *18*(4), 353–365.

Coburn, C. E. (2001). Collective Sensemaking about Reading: How Teachers Mediate Reading Policy in Their Professional Communities. *Educational Evaluation and Policy Analysis*, *23*(2), 145–170. https://doi.org/10.3102/01623737023002145

Coburn, C. E. (2005). Shaping teacher sensemaking: School leaders and the enactment of reading policy. *Education Policy*, *19*(3), 476–509.

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), 343–349.

Cohen, D. K. (1990). A revolution in one classroom: The case of Mrs. Oublier. *Educational Evaluation and Policy Analysis*, *12*(3), 327–345.

Cohen, D. K., Peurach, D. J., Glazer, J. L., Gates, K. E., & Goldin, S. (2013). *Improvement by Design: The Promise of Better Schools*. Chicago ; London: University Of Chicago Press.

Cohen-Vogel, L., Cannata, M., Rutledge, S., & Socol, A. R. (2016). A Model of Continuous Improvement in High Schools: A Process for Research, Innovation Design, Implementation, and Scale. *Teachers College Record*, *116*(13), 1–26.

Cuban, L. (1998). How Schools Change Reforms: Redefining Reform Success and Failure. *Teachers College Record*, *99*(3), 453–77.

Datnow, A., & Park, V. (2009). Conceptualizing policy implementation: Large-scale reform in an era of complexity. In G. Sykes, B. Schneider, & D. N. Plank (Eds.), *Handbook of Education Policy Research* (1 edition, pp. 348–361). New York : Washington, D.C.: Routledge.

Dede, C. (2006). Scaling up: Evolving innovations beyond ideal settings to challenging contexts of practice. In R. K. Sawyer (Ed.), *Cambridge Handbook of the Learning Sciences* (pp. 551–566). Cambridge, UK: Cambridge University Press.

Dede, C., & Honan, J. P. (2005). Scaling up success: A synthesis of themes and insights. In C. Dede, J. P. Honan, & L. C. Peters (Eds.), *Scaling Up Success : Lessons Learned from Technology-Based Educational Improvement* (1st ed.). Jossey-Bass.

Desimone, L. (2002). How Can Comprehensive School Reform Models Be Successfully Implemented? *Review of Educational Research*, *72*(3), 433–479. https://doi.org/10.3102/00346543072003433

Elmore, R. F. (2016). "Getting to scale…" it seemed like a good idea at the time. *Journal of Educational Change*, *17*(4), 529–537. https://doi.org/10.1007/s10833-016-9290-8

Fullan, M. (2016). The elusive nature of whole system improvement in education. *Journal of Educational Change*, *17*(4), 539–544. https://doi.org/10.1007/s10833-016-9289-1

Hannan, M., Russell, J. L., Takahashi, S., & Park, S. (2015). Using Improvement Science to Better Support Beginning Teachers: The Case of the Building a Teaching Effectiveness Network. *Journal of Teacher Education*, *66*(5), 494–508. https://doi.org/10.1177/0022487115602126

McLaughlin, M. W. (1990). The Rand Change Agent Study Revisited: Macro Perspectives and Micro Realities. *Educational Researcher*, *19*, 11–16.

Nunnery, J. A. (1998). Reform Ideology and the Locus of Development Problem in Educational Restructuring: Enduring Lessons from Studies of Educational Innovation. *Education and Urban Society*, *30*(3), 277–295.

Papay, J. P., Taylor, E. S., Tyler, J. H., & Laski, M. (2016). *Learning Job Skills from Colleagues at Work: Evidence from a Field Experiment Using Teacher Performance Data* (Working

Paper No. 21986). National Bureau of Economic Research. https://doi.org/10.3386/w21986

Peurach, D. J., & Glazer, J. L. (2012). Reconsidering replication: New perspectives on large-scale school improvement. *Journal of Educational Change*, *13*(2), 155–190.

Rowan, B., Correnti, R. J., Miller, R. J., & Camburn, E. M. (2009). School improvement by design: Lessons from a study of comprehensive school reform programs. In *AERA handbook on education policy research* (pp. 637–651). New York, NY: Routledge.

Sabelli, N., & Harris, C. J. (2015). The Role of Innovation in Scaling Up Educational Innovations. In C.-K. Looi & L. W. Teh (Eds.), *Scaling Educational Innovations*. Singapore: Springer.

Sanders, M. G. (2014). Principal leadership for school, family, and community partnerships: The role of a systems approach to reform implemetnation. *American Journal of Education*, *120*(2), 233–255.

Spillane, J. P. (2000). Cognition and Policy Implementation: District Policymakers and the Reform of Mathematics Education. *Cognition and Instruction*, *18*(2), 141–179.

Spillane, J. P., & Burch, P. (2006). The Institutional Environment and Instructional Practice: Changing Patterns of Guidance and Control in Public Education. In H.-D. Meyer & B. Rowan (Eds.), *The New Institutionalism in Education* (pp. 87–102). Albany, NY: SUNY Press.

Spillane, J. P., Reiser, B. J., & Reimer, T. (2002). Policy Implementation and Cognition: Reframing and Refocusing Implementation Research. *Review of Educational Research*, *72*(3), 387–431. https://doi.org/10.3102/00346543072003387

Supovitz, J. A. (2008). Implementation as iterative refraction. In J. A. Supovitz & E. H. Weinbaum (Eds.), *Implementation Gap: Understanding Reform in High Schools* (pp. 151–172). New York, NY: Teachers College Press.

Thompson, M., & Wiliam, D. (2008). Tight but loose: A conceptual framework for scaling up reforms. In E. C. Wylie (Ed.), *Tight but loose: Scaling up teacher professional development in diverse contexts* (pp. 1–44). Princeton, NJ: ETS.

Woulfin, S. L., Donaldson, M. L., & Gonzales, R. (2016a). District Leaders' Framing of Educator Evaluation Policy. *Educational Administration Quarterly*, *52*(1), 110–143. https://doi.org/10.1177/0013161X15616661

Woulfin, S. L., Donaldson, M. L., & Gonzales, R. (2016b). District Leaders' Framing of Educator Evaluation Policy. *Educational Administration Quarterly*, *52*(1), 110–143. https://doi.org/10.1177/0013161X15616661

Tables and Figures

Table 1. Summary of how IPI core elements were emphasized across phases of implementation

	Communication materials	Principal understanding	Principal takeup	Expectations for teachers	Teacher understanding
Individualized improvement	Major theme for superintendents and principals, minor theme for teachers	Mostly understood	Major reason for takeup	Mostly clear	Somewhat understood
Teacher collaboration	Major theme for all stakeholders	Mostly understood	Major reason for takeup	Mostly clear	Somewhat understood, but unsure of nature of collaboration
Focus on indicators of instruction	Major theme for superintendents and principals, minor theme for teachers	Mostly understood	Reason for non-takeup	Less clear	Mostly unclear
School and teacher adaptation	Major theme for superintendents, minor theme for principals and teachers	Some understanding	Minor reason for takeup	Mixed	Mixed; some teachers felt there was too much flexibility

Table 2. Instances core IPI attributes emphasized in email communication by stakeholder type (percentages)

	Indicator focus	Collaboration	Individualized instructional improvement	Adaptable to local context
Superintendent (N=3)	0.67	0.67	0.67	0.67
Principal (N=5)	0.60	1.00	0.40	0.60
Teacher (N=4)	0.00	1.00	0.00	0.00

Table 3. Number of second order communications by stakeholder type

	IPI Websites	FAQ	IPI Description	Principal Guidebook	Teacher Guidebook	Other	Total
Superintendent	1	1	1	1	0	1	5
Principal	3	0	1	2	1	1	8
Teacher	4	0	0	0	0	0	4

Note: Totals exceed number of items as some were provided more than once.

Table 4. Instances core IPI attributes emphasized in second order information by stakeholder type (percentages)

	Indicator focus	Collaboration	Individualized instructional improvement	Adaptable to local context
Superintendent	0.60	0.80	0.20	0.80
Principal	0.83	1.00	0.33	1.00
Teacher	0.50	0.50	0.50	0.50