



CONSORTIUM FOR POLICY RESEARCH IN EDUCATION

Slowing Entropy: Instructional Policy Design in New York City, 2011-12

RESEARCH REPORT

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Introduction

District policy makers never have more potential influence than when they are crafting a policy. They hold an abundance of choices about the ways they might frame the policy; the language they could use to communicate the policy; the resources they could expend to support the policy; and how they choose to situate the policy within other existing and planned policies and initiatives. Yet, once they introduce the policy into the world, its entropy begins, as the objects of the policy interpret, reframe, and situate it within their own priorities, contexts, and interests.

In this paper I argue that the success of an instructional policy – its resistance to rapid decay as it careens across the landscape, sometimes gouged and sometimes burnished by an array of forces – depends to some extent on the choices made in its crafting before it is let loose upon the world. The way a policy is framed and designed has important implications for the way people receive and understand it, and the extent to which they respond to it. The choices embedded within its design are essentially a set of signals that interact with a variety of influences, both real and perceptual, as it is received, interpreted, and enacted upon by its intended audience.

To illustrate this idea, I focus this paper on the design of a 2011 New York City Department of Education policy intended to engage teachers across the City during the 2011-12 school year with the Common Core State Standards, called the Common Core Learning Standards (CCLS) in New York City. The district policy was called the Citywide Instructional Expectations, or CIEs, which was the central direction to teachers and schools about the activities that teachers were expected to engage in during that school year to implement the CCLS.¹ A close analysis of the language of the CIEs, with companion explanations from interviews with the architects of the policy about their thoughts and decisions during its construction, show a set of careful choices and knowledge-informed decisions about what they thought were the best ways to encourage teachers, school leaders, and school support providers to learn about the expectations of the CCLS and their implications in order to bring about real changes in school and teacher practices.

The ways that schools reacted to the policy are reported in a companion CPRE paper, *The Lived Experience of Standards Implementation in New York City* (Goldsworthy, Supovitz & Riggan, 2013). In that analysis, we examined the engagement of a diverse sample of 16 elementary and middle schools to the CIEs. We found that 15 of the 16 schools completed the Expectations, although the depth at which schools engaged with them was the product of

1 There were additional sets of asks for principals and other school leaders that focused on conducting classroom observations and providing feedback to support instruction and for networks and clusters to provide support for schools, but these are not the foci of this paper.

a complex combination of their own capacity, culture and leadership. We found that schools' responses to the CIEs loosely organized along a continuum from conservation to adaptation. Conservation-oriented schools tended to fit new concepts within existing routines to minimize upsetting the status quo. They interpreted the challenge of CCLS implementation as finding ways to reduce teacher anxiety by adapting the instructional expectations to fit their current practices. Consequently, their levels of engagement with the CCLS, and the scope of change they undertook during implementation, were less substantial. It should be noted that conservation may be a rational response to the turbulent environment of school reform, in which changes are continuously introduced (Fullan, 1982; Evans, 1996). Conservation may also be appropriate in schools where current practices are already Common Core-aligned. By contrast, transformation-oriented schools interpreted the scope of change differently; they tended to believe that the best way to meet future expectation was to make more significant changes sooner rather than later, even if it involved more immediate disruption. Consequently, transformation-oriented schools tended to engage more deeply with the CIEs, which resulted in more robust understanding of the CCLS and of its implications for teaching and learning.

Recent Emphasis of Policy Implementation Research and Analysis

In 1976, Chris Argyris of Harvard wrote a seminal article on theory generation in which he conceptualized the distinction between theory of action, espoused theory, and theory-in-use. Applied to policy, a theory of action is an original conception of how a policy idea should operate. The espoused theory is the policy itself – how it is explained to its intended audience. The actual implementation of the policy is its theory in use.

From a different lens, a number of theorists have conceptualized the policy-making process by which different constituencies vie for influence during the policy creation process. Most classically, Kingdon (2002) discussed how constituencies both inside and outside of government contend for influence and attention in the creation of the “policy soup” as well as the processes that produce the factions vie to contribute ingredients to the policy preparation process.

Another important aspect of policy design theory is to cohere the message both internally and with other policies and programs. Hartley (1994) pointed out the presence of mixed messages or contradictions that are often contained in education policy. He argued that these contradictions to some extent express the tensions between different camps of policy beliefs, which in turn reflect the different central purposes of education represented in a democratic society. More pragmatic in scope, Linn (2005) none-the-less provided a nice example of the mixed messages often inherent in policy in practice by identifying the conflicting demands of the federal No Child Left Behind Policy and state policy, which sent mixed messages to schools about their priorities for producing school performance that met accountability targets.

At the other end of the policy process is its reception by its intended audience. Much of the recent emphasis of policy implementation studies has been to investigate policy implementation, or Argyris' theory in use, from the perspective of the targets of policy. Spillane, Reiser and Reimer (2002), for example, recast implementation theory by using a cognitive framework to describe how implementers made sense of policy throughout the implementation process. They identified a series of cognitive markers, including prior knowledge, beliefs, and experiences, as ways in which to understand how implementers' responses to policy are shaped in ways that are similar or different from the policy designers' intentions.

Coburn (2001) extended this idea to the social nature of policy implementation in her exploration of collective sense-making. She examined how teachers in professional learning communities in one California elementary school understood and interpreted multiple policy messages about reading instruction. Using an in-depth case study, she examined how the teachers had discussions with colleagues, how they made decisions about which policy messages to attend to in their classroom choices, and how they negotiated the technical and practical details of implementation.

Supovitz (2008) pointed out both the ongoing reformulations associated with the implementation process, as well as the organizational influences of those processes. He reported on a Consortium for Policy Research in Education study of the implementation of six different high school reform designs and noted that individuals at multiple levels of the system (district, school, department/team, classroom) made adjustments to the reform policies and programs according to individual, social, and organizational factors. Further, these adjustments occurred temporarily, with some actors making repeated adjustments at different time points. He termed this selective and repeated implementation process 'iterative refraction' to reflect the prismatic influences that shaped how policy was re-interpreted by different actors at different levels of the system over time.

While Spillane, Coburn, and Supovitz focused on the different factors by which already formed policy was interpreted during the implementation process, this study looks at the antecedent policy crafting process. In this paper I seek to look at what Argyris (1976) called the espoused theory, or the way in which theories are actually designed to be implemented. To do so I take a close look at the framing, design, and language of one particular policy and analyze the intentions of the policy design.

Context

New York City is far and away the largest school district in the United States, with over 1 million students and 1,700 schools, almost twice as large as the next largest district of Los Angeles. NYC is diverse ethnically, socially, economically, and culturally. New York also has a history of

decentralization. School principals hire and evaluate their teachers. Schools can choose from amongst a wide-ranging list of district approved curricula across the content areas. Additionally, school leaders confer with faculty to develop both individual and school-level professional development opportunities.

Implementation of the Common Core Learning Standards (CCLS) has been a central part of reform in New York City since 2010, when district leaders decided to focus their instructional improvement efforts around the Common Core State Standards. These Standards are an ambitious set of learning expectations in literacy and mathematics that describe what students should know and be able to do as they progress throughout the grade levels (Grossman, Reyna, Shipton, 2011). While these standards do not specify a curriculum or pedagogical strategies, they challenge teachers to rethink the ways in which they provide students with educational opportunities and foster the intellectual engagement of students. Each year since, the New York City Department of Education has created a set of focusing expectations for schools in order to guide their engagement with the Standards.

Each school in the city also belongs to a support network, called a Children First Network, or CFN. CFNs grew out of the New York City Department of Education (NYDOE) Empowerment Schools initiative designed to synthesize operational and instructional support for schools. The goal is to devolve as much decision-making power as possible to the people who know schools best: principals, teachers, and school staff. Principals get to pick one of the 55 SCFNs that best meet the needs of their schools; if they're not satisfied with their Network support, they can move to a different Network. Each CFN employs a cross-functional team directly accountable to principals and delivers personalized service to an average of about 25-30 schools. CFNs are non-geographic by design. Some networks are organized around a particular area of expertise or philosophy. Some CFNs serve mostly middle schools, and others serve schools in particular geographic areas of the city.

The district evaluates schools through a site visit quality review process. The Quality Reviews are a 2-3 day school visit to each New York City school. Before a reviewer visits a school, the school leadership creates a self-evaluation based on a Quality Review rubric. During the review, the external evaluator visits classrooms, talks with school leaders, and uses a rubric to evaluate how well the school is organized to support student achievement. Reviewers draw upon the school's self-evaluation and other school data during conversations they have with principals, teachers, students, and parents during the school visit. These reviews result in a set of ratings on a number of dimensions.

During the time period studied, the district was also developing a new teacher evaluation system focused on principal observations of instruction and feedback using the Danielson Framework for Teaching. The system includes more frequent observations of instruction and conversations between school leaders and teachers about each teacher's ongoing development and impact on student learning and ongoing professional development to support each teacher's growth.

Study Design

In this paper I identify eight elements embedded in the short CIE policy statement that reflect deliberate decisions on the part of policy makers to influence implementation approaches. Using data from interviews conducted with eight of the central office architects of the policy, I examine the design features of the policy as envisioned by its creators.

The eight central office interviewees included senior leaders in the Office of Achievement Resources, the Office of Performance, and the Office of School Support. These offices were centrally charged with developing policy and support for Common Core implementation.

The interviews were conducted in Fall 2011 and were completed as background and foundation for our main study of examining how a sample of New York City schools were responding to and implementing the Common Core. The main study included fieldwork and interviews in 16 elementary and middle schools of diverse student backgrounds and levels of prior performance that were located across all five boroughs of the City (Goldsworthy, Supovitz & Riggan, 2013). In addition to asking about the city's Common Core implementation efforts, the interviews also focused on other supports, including professional development opportunities for schools, the city's school support network structure, materials and online resources, and how their implementation support efforts interacted with the city's accountability system and other initiatives (implementation of the Danielson observations framework, school quality reviews, etc.). Even so, the interview data provided ample information about the thoughts behind the design choices of the CIEs.

The Policy Design

Beginning in 2011, district leaders decided to focus schools on a small set of 'instructional expectations' that were called "Citywide Instructional Expectations" or CIEs. The CIEs were a targeted set of expectations that were intended to "engage teachers in the next stages of aligning curriculum and assessment to the Common Core." For teachers, the 2011-12 CIEs focused on three central activities:

1. Examining student work in relation to the Common Core, sometime in Fall 2011
2. Selecting or developing two performance tasks, one in English language arts and one in mathematics, in Winter/Spring 2011-12 and administering them to students.
3. Analyzing the resulting student work for instructional implications.

Because this analysis focused on the phrasing, sequencing, and messaging intended by the policy-makers, it is important to read the CIEs verbatim:

At a minimum, teachers will be expected to:

- **In teams, look closely at current student work** to understand the steps needed to reach the level of performance that the Common Core demands (fall 2011).
- **Engage all students in at least one literacy task and one math task aligned to strategically selected Common Core standards.** These tasks should be embedded in Common Core-aligned curricula and include multiple entry points for all learners, including students with disabilities and English language learners (winter 2011-12).
 - In literacy, students will complete a task that asks them to read and analyze informational texts and write opinions and arguments in response.
 - In math, students will engage in a cognitively demanding mathematics task that requires them to demonstrate their ability to model with mathematics and/or construct and explore the reasoning behind arguments to arrive at a viable solution.
- **In teams, look closely at resulting student work** to continue the cycle of inquiry, making future instructional adjustments and communicating lessons learned to other school staff (spring 2012).

2011-12 Citywide Instructional Expectations, Final version June 1, 2011

Although short, this policy is a rich cornucopia of expected activities, guidelines, and signals packed with layers of meaning that speak to a variety of constituencies, including teachers, inquiry teams, school leaders, network staff, and a range of support providers. These 13 lines, or 160 words – that could fit comfortably into 8 tweets – pack a lot of punch.

Deconstructing the Policy

The CIE policy was carefully constructed based on a set of assumptions about effective reform implementation in a decentralized system. It was crafted to send a series of messages to teachers, school leaders, and other education groups supporting the NYC schools. The expectations carried within them the preferences, priorities, and beliefs of the policy designers and contained a series of precursor activities that were not explicit in the policy but non-the-less required for strong implementation.

While at first glance the CIEs might seem relatively straight-forward, they had a host of underlying meaning and intent, and to engage with them seriously implied a range of preparatory and simultaneous activities. As one of the policy architects explained:

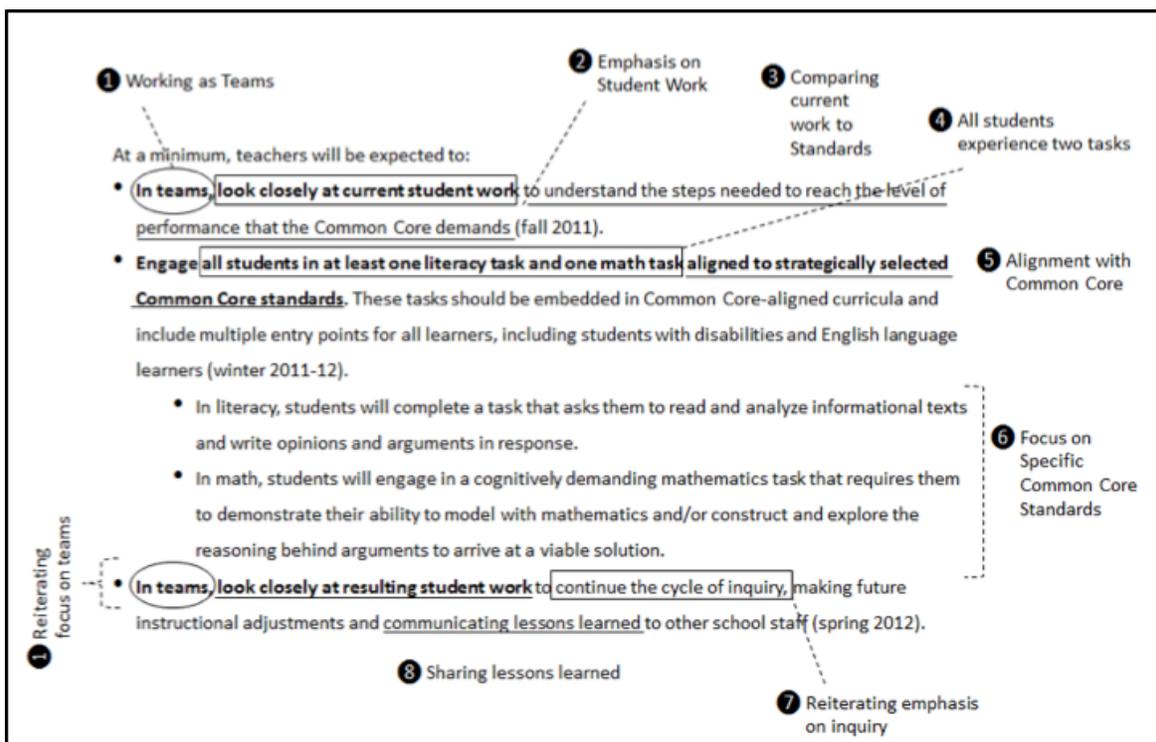
The instructional expectations for this year are very narrowly focused in terms of the system is being asked to produce two things, and that's two tasks that are aligned to the Common Core, one in literacy, one in math. That's the basic expectation. But as we all know, in order to fulfill that expectation, there's a lot

of information that the system, particularly schools and teachers, have to process. So, they have to understand the Common Core in general, and they have to understand the Common Core for the specific grades which they teach. They have to understand what the pedagogy and the pedagogical changes are that will change, that will shift as a result of having to implement these very specific standards that we delineated for the system. And there has to be a lot of training that needs to take place in order for teachers to be able to implement these two seemingly easy things.

This more complex set of expectations were embedded and carefully layered within the policy itself. Figure 1 shows a marked-up rendition of the policy in which I point out eight key components. These focus on important elements and choices of the policy designers. Although it is unclear who actually penned the policy, the ownership felt by those who were interviewed indicated that it was a collective, collaborative, and iterative process which included substantial input, feedback, and tinkering and that it was probably collectively authored by a group even larger than those interviewed. For this reason, I will refer to the creators of the policy collectively as the 'policy architects.'

What follows in this paper is an analysis of each of the eight components I identify in the 2011-12 CIEs as its key elements. Informed by the interview data from the policy architect transcripts, I expounded on the importance and rationale for each component. Where it was discussed, I also talk about alternatives that were considered. While this is certainly an imperfect representation of the full picture of how the policy was constructed, there are many important insights in this reconstruction exercise.

Figure 1. Decomposition of 2011-12 New York City Citywide Instructional Expectations (CIEs)



1 *Working as Teams*

The opening words of the CIE - repeated verbatim in the last bulleted item in a re-emphasis that forms a pair of bookends – is that teachers should work as teams in their implementation of the Common Core. Collaborative inquiry into their professional practice was a routine that district's leaders had been emphasizing since 2007. In collaborative inquiry, teams of teachers learned to work together to diagnose the needs of specific groups of their students to develop strategies to improve their learning. Collaborative inquiry is a central piece of the district's larger reform strategy and was designed to build school capacity to close the achievement gap in their schools (Robinson, 2010).

Thus it was very deliberate and meaningful that the CIEs should emphasize team effort. As one policy architect said, "One of the key entry points is the teacher inquiry teams and the school-based inquiry teams." For school members this was a clear signal of both the importance of collective activity in engaging with the Common Core and a reinforcing alignment with the DOE's collaborative inquiry team initiative. Equally important was the fact that teachers in the system had been practicing collaborative inquiry for several years and this had become a routine in many schools. Therefore, the policy architects could use this as a platform on which to build teacher engagement with the CIEs.

2 *Emphasis on Student Work*

One of the most momentous decisions that the policy architects had to make was what activity to cohere the 2011-12 CIEs around in order to maximize the likelihood of engagement with the Common Core. If you seek to change 'the core' of teaching and learning, then what activity do you ask teachers to engage in? This is not a simple question, because the history of education is quite literally littered with unsuccessful attempts to change instruction that end up solely as organizational changes outside of the classroom or faint wisps of the ambitious intent of reformers (Elmore, 1996). In fact, the NYC policy architects were evidently quite aware of this history. In separate interviews, two of them explicitly referenced Richard Elmore's work on how policies generally fail to influence the instructional core. Their interpretation of Elmore's work is that most past policy failures were due to a failure to affect "the interaction of students and teachers in the presence of content." Although this argument is more often associated with Cohen & Ball's (1999) work on the interrelatedness of teachers, students, and materials, the NYC policy team had clearly internalized the central idea that they needed to find a way to engage teachers in the core instructional work of reflecting on their practice if they had a chance at producing meaningful instructional change.

Of course, this is easier said than done. What does a policy maker choose if he/she wants to design a policy that guides educators inward towards the core instead of outward towards the

trappings? There seems to have been a long debate amongst different groups and individuals within the NYDOE as to which entry point to choose to encourage teachers to engage deeply with the meaning of the standards for their practice. Some people felt that curriculum mapping was the best lever for change, because the curriculum is the strategic plan for choosing what content to deliver and how to sequence that content in a meaningful way. But others argued against the curriculum as the entry point. "You can map all the live long day, but if you're not changing the practice in the classroom, then it doesn't matter, then this just exists on the paper," argued one of the policy architects.

Others contended that the entry point should be pedagogy, and that the policy should focus teachers on key instructional strategies that would help ramp up and foster the rigor demanded by the Common Core. After all, the instructional choices that teachers make are essential components of the cognitive demand of students' classroom experiences. But, echoing the importance of the triumvirate of interactions amongst teachers, students, and materials, others argued "Well, yeah, but if we do that in isolation, or you're not considering how you're adjusting your curriculum, you're not thinking about the assessments, then that can only take you so far." So a policy emphasizing particular pedagogical approaches was considered and rejected.

What about standardized testing? Standardized tests have a long tradition as a policy lever that can change classroom practices (Linn, 2000; Hamilton, 2003; Koretz, 2008). We might not always get the changes we hope for, but there is strong evidence that teachers respond to the signals of testing (Supovitz, 2009). But the team of policy architects also rejected standardized testing because they felt that the results of summative tests provided insufficient data to reveal the richness of student thinking necessary to catalyze the discussions that they hoped would help teachers to better understand the kinds of teaching and learning experiences they would have to create to help students meet the expectations of the CCLS. So a large scale testing program – the predominant mechanism currently used in the American education system to motivate change in classroom practice – was considered and abandoned.

In addition to their theoretical debate, the policy architects also used evidence from pilot programs and collected focus group information to provide data and test out strategies before considering whether to incorporate those strategies into subsequent policies. For example, one leader explained how the City's policy makers learned from listening to teachers' early reactions to the Common Core:

When we started showing teachers the draft of the Common Core standards as they became available-- I guess it was almost a year-and-a-half ago-- we sort of heard reactions at two ends of the spectrum. One was, "We're already doing this. This is what our students already know how to do. This is what we're already teaching." And at the other end, "There's no way we can do this. Our students can't do this. This is way too hard." So, people sort of would bounce

from one of those extremes to the other. And the best way that we found to sort of bring focus back to the middle was to look at examples of student work. And it works best when you look at an example of your own students' work in comparison to an example of student work that we can say, "This is Common Core-ready student work."

The policy architects finally settled on performance tasks and the resulting student work as the best catalyst for encouraging robust teacher conversations about the instructional implications of the Common Core Learning Standards. By performance tasks, they intended teachers to develop or select authentic or open-ended tasks that required students to engage with a problem and show their thought processes as they worked towards a solution or conclusion. "We defined assessment broadly, so that it's not a test, but that it actually produces the data we want teachers to be analyzing, which is student work. And that's how we landed at performance-based assessments, which are tasks with prompts and problems for students to engage with," explained one of the architects.

Focusing on performance tasks that produced student work that would reveal student thinking and understanding had the benefit of being a fairly short and discrete activity (a task), even while it was integrally connected to the larger issues of curricular choices, pedagogical strategies, and assessing for understanding that teachers would have to engage with if they were going to shift their instruction to align with the expectations of the Common Core. Another of the policy creators described how student work seemed to be the best way to engage educators from different entry points:

And one of the things that we found was that the task, and in fact, actually, looking at student work was often the key lever. So, no matter what your entry point was-- Like, if people wanted to get jazzed or really notice like, "Wow, this is different than what we've been doing" we found that looking at student work and actually pulling it apart and trying to reveal the student's thinking, using different kinds of protocols, that that was a really key entry point.

Others talked about the conversations that discussions of student work seemed to enable during professional development experiences:

...being able to see what happens when people look at student work, and how it has a very direct connection and correlation to what they do next and creates a lot of 'aha' moments. We had so many sessions throughout the year, and the ones where you just really saw people come to life around, 'Oh, I need to change something I'm doing to get a change in my students' were those where they were able to have implemented a task and be able to look at student work, and then look at other teachers' student work too and say, 'Well, wow. What did I do differently? What did you do differently?' and really be very directly reflective on what's going on in the classroom.

Looking at student work had the distinct advantage that it focused on how students understand what teachers sought to convey, rather than focusing on teacher intent. This meant that the focus was on what students learned, rather than what teachers taught. Authentic student work had the additional advantage of being a window into student thinking. In this way, student work could provide insight beyond if students understood a concept to how they understood (or misunderstood) the concept. This perspective on student thought processes is a real key to giving teachers information that can more precisely inform subsequent instructional choices (Supovitz, 2013).

Thus, the policy team used a data informed (data being both literature and pilot study data) process to carefully examine the set of options for activities to introduce the CIEs and arrived at authentic student work as the most promising entry point to encourage teachers to engage with the new standards and their implications for teaching and learning.

3 *Connecting student work to standards.*

Another key phrase in the policy was that teams of teachers should look at student work in order to “understand the steps needed to reach the level of performance that the Common Core demands.” Thus the architects imbued into the policy the essential purpose for looking at student work. *The specific reason for examining student work was to gauge it against the expectations of the Common Core Learning Standards.* As one of the policy architects explained, using the examination of student work in contrast to the CCLS, every school should “understand the gap in their literacy and math between what students are currently producing and what the Common Core calls for.” Thus, the policy designers intended that teachers would look at their students’ current levels of performance and compare it to the expectations embodied in the CCLS.

Several of the architects referred to this as an exercise in ‘norming’ that they envisioned would occur at many levels of the system and open up conversations about the higher expectations represented in the CCLS and what it would take for teachers to help students to meet them. As one architect explained, “What the Common Core does is it anchors that inquiry process, creating an opportunity for us to norm what good enough looks like for the City towards this new standard, and to actually have a conversation about it.” Thus the policy designers intended that the CIEs would catalyze rich conversations about what changes would be needed to close the gap between current levels of student performance, as reflected in their work, and desired levels of performance, as articulated in the Standards.

Even more ambitiously, the policy designers viewed the norming process not just as a within-school activity, but something that would catalyze cross-school interactions and knowledge sharing. “I want every school to understand the gap in their literacy and math between what students are currently producing and what the common core calls for. And we want that norm

to cross schools, so that a school is not answering that in isolation," explained one of the policy architects.

The vision of using the CCLS as a set of norms against which teachers and schools leaders can iteratively check their current level of performance against expected levels of performance is a powerful concept. Standards are external experts' statements of performance expectations that specify what students should be able to do at certain junctures of their educational development. We usually conceive of them as criteria to guide the design of student experiences and we envision professional development as a companion means of building practitioners' capacity to design and carry out lessons to help students to successfully achieve the Standards.

The architects of the CIEs, however, had a different view. They viewed the policy as a professional development mechanism in and of itself. By examining the gaps between current student performance and the expectations of the Standards, and enacting instructional approaches designed to close the gap, the policy was, in essence, catalyzing professional growth experiences for teachers. Professional development was not conceived of as a separate experience to help teachers understand how to meet the Standards, but as an integrally incorporated activity built into the policy. As one of the policy architects explained, "Instead of presuming expertise and turnkey in which you become the expert and then you go make somebody an expert, what we're trying to build is a rigorous-focused learning stance that uses the power of norming student and teacher work to change practice." Thus, the architects *sought to incorporate ongoing professional improvement into the regular work of teachers and school leaders through their efforts to implement the CIEs*. Rather than constructing a vast professional development apparatus to support policy implementation, they sought to incorporate professional development into the very act of engaging with the CIEs.

This is a notably distinctive view of professional development. Rather than conceiving of professional development as instructing people (often in an external location at a pre-arranged time) about a set of practices that they are then expected to transfer back into their own setting (with on-going support in the best of cases), this model provided a rationale for teacher teams to use in their own settings and their own work activities as a way of engaging with a new set of self-designed and enacted practices.

Importantly, this reform approach shifted the responsibility of professional development to the source. Instead of transplanting external 'solutions' into the fields of practice, this reform asked teams of teachers to be their own professional developers; to closely examine the mismatches between their current students' knowledge and skill levels (which are assumed to be a consequence of current teacher practices) and the expectations of the Standards, and to engage in a group inquiry process as to what changes they would make in their curricular arrangements and pedagogical practices to bring student performance up to the levels of the new standards. In this way, teachers are defining their own needs and searching for solutions that fit them. This

is not to say that teachers in NYC do not have more traditional professional development, but this approach, aligned with the Network support model, allowed schools and teacher teams to seek professional development that targeted their own assessment of need rather than to attend something that is externally and abstractly calibrated to meet some general notion of group need. We might call this self-directed, rather than externally directed, professional development.

This approach has some down sides too. First, those unmotivated to engage in the norming activity, and those with minimal capacity to productively engage in the CIE would be more likely to engage only shallowly or grow frustrated by an ineffectual process. In addition, it is also possible that teachers as learners might misinterpret the value of a perceived solution or accept a relatively weak adjustment and codify it into their own repertoire, thus perpetuating ineffectual or inefficient approaches. In theory, this would be mitigated over time, as teachers tested out approaches to closing the gap between current practices and practices that got students to the Standards.

④ *All students experience two tasks*

Another decision embedded in the language of the policy was the choice to emphasize that all students should experience at least two performance tasks, one in literacy and one in mathematics. At first, this seems like an awkward construction – it doesn't say that all teachers have to administer tasks, but that all students will engage in two tasks. This was not careless language. Rather, it was purposefully expressed this way to put the emphasis on students. As one of the architect's explained:

I think this is an important aspect that gets lost sometimes. We're not talking about every teacher doing something. Our judgment was that if we start with every kid, that actually is a meaningful - more than just symbolic - message. That every kid is going to be engaged in at least two of these things this year, so that they, the kids, can actually experience what the future will be like, to some degree.

Another interviewee noted that which teachers should implement the CIEs was pointedly not specified, although the content of the Common Core gravitated the responsibility towards literacy and mathematics teachers. Rather, the policy makers sought to reinforce the message that it was the students who were the focus.

So maybe it's not going to be every teacher in a given school that's going to be experiencing this, and we've heard valid criticisms from folks that even though we haven't said it, it's going to fall on the shoulders of English teachers and math teachers only, which is, typically, the complaint over the years around everything around accountability. But we didn't message that. So we mes-

saged that it can be any teachers who have the capacity and that reach kids. But ultimately we want the task and the student doing the task to be a focal point for these teachers, and to take that information after they do it, and to reflect in their teacher teams, which will likely bring in more teachers than just giving the task themselves, and socialize what it is that these new Standards are asking of kids.

Thus, the reformers emphasized student experience over teacher experience, calculating that the investigation of the data in teams would touch all teachers. Further, the lack of specification over which teachers should implement the tasks also reinforced the interdisciplinary emphasis of Standards implementation.

5 *Implementing Within Common Core Aligned Curriculum*

The policy asked teachers to assure the tasks they assigned to students were “aligned to strategically selected Common Core Standards” and “embedded in Common Core aligned curricula” to engage a diversity of students (Special Education and ELL students). As several of the policy architects noted, the crafting of the policy language in this way raised the ambition of the request to teachers:

... we recognized that for teachers to be able to implement these tasks well, they have to have a well-sequenced unit, they have to allow kids opportunities to practice on the way up to these performance tasks.

We recognized that if we provide a lot [of curriculum] then that’s useful for people, but it’s a little bit harder to adapt. If we don’t provide any [curriculum], then teachers could make the mistake of just dropping the task into their instruction without preparing students for it, without using it as like a culminating opportunity for a set of lessons.

The policy architects also anticipated that they were creating a demand for clarity of what Common Core aligned curriculum looked like, because the request implied that teachers would need to know what it meant to embed a task in Common Core aligned curricula. As one explained, again referring to what they learned from the pilot work, “one of the things that sort of came up through the pilot work was that it was helpful for teachers when they were developing these assessments and teaching them not just to sort of drop in the assessment, but to develop the lesson and unit plans that lead up to those assessments, so that became part of the work too.”

This construction seems to have served two purposes. First, it signaled to teachers that the performance tasks they administered to students should not be decontextualized from their

curriculum (which, in fact, some teachers did). Second, it raised questions about what a Common Core aligned curriculum really looks like. How should teachers figure this out? One way is for teachers to use the standards and develop their own examples of Common Core aligned curricular units. Another source was that external providers, like the Teachers College Writing Project, had developed Common Core-aligned curriculum units. Another major resource for teachers was the NYCDOE online Common Core library, which contained a set of “bundles”² for different subjects and grade levels that illustrated what a performance task embedded in a Common Core-aligned unit should look like. Thus, the policy architects were creating a demand for Common Core-aligned curriculum units and anticipating the demand by positioning themselves to offer some examples that fulfilled the need that the policy created. In this way, the policy created incentives for teachers to start to figure out what Common Core aligned curricula would look like. In the decentralized context of New York City, curriculum was a school choice, and there were a plethora of textbooks and curricular materials in use. While the policymakers did not expect teachers to recreate entire curricula from scratch (although some ambitious ones did just that), they did intend for teachers to make connections between their curriculum and the tasks they chose to administer.

6 *Focus on Specific Common Core Standards*

Instead of leaving it wide open for teachers to choose what elements of the Common Core Standards to focus their engagement around, the policy provided some important guidance on this for teachers. The policy makers specifically picked two elements of the standards – analyzing informational texts in literacy and analyzing reasoning in mathematics – that were components of the Standards that cut across both grade levels (and were central to the mathematical practices) and subjects.

As one policy maker explained:

And so, we asked that they focus on a set of standards, not the whole thing, but reading for informational text . . . and then a couple of mathematical practices - creating arguments and modeling, and then the standards for the math, the actual standards, were really building towards helping kids succeed in Algebra in the eighth grade and beyond.

This strategy had at least three benefits. First, these elements were identified by external experts as being high leverage. As one the policy makers explained, before choosing the focal standards they reached out to external experts to inform their choice and (presumably) therefore picked a high leverage activity to focus on (analysis):

2 Bundles are example curriculum units available at different grades and subjects; with connected activities, assignments and one or multiple performance tasks, and instructor notes.

So, we've chosen some very specific standards in consultation with the national conversation that we're focusing on, a lot of informational text and making an argument, mathematical modeling and mathematical reasoning, making an argument in math, focusing on the narrow band of mathematics related to preparation for Algebra and then Algebra, and say to people, 'We want you to look at that analysis and understand the difference between where you are and where we're trying to go.' That's what they should be doing at this time of year.

A second benefit was that they are having every student focus on the same analytic skill (argumentation) across subjects which, since it was repeated and hopefully reinforced, would increase the likelihood that the repeated practice makes the skill more deeply absorbed into the students' analytic repertoires.

Third, by having teachers both within and across subjects focus on the same analytic skill, they were engineering at least the *opportunity* for teachers to have within-subject, across-subject, and across-grade conversations. As we shall see, the policy makers did not leave it to chance that teachers would share these experiences.

7 *Reiterating emphasis on inquiry*

As mentioned earlier, the NYDOE had been stressing collaborative inquiry for a number of years, so this statement served as a trigger that connects readers to current practices and emphasizes the ongoing and iterative nature of the expectations in the policy. Several of the policy makers mentioned this connection when they were discussing the CIEs:

What the common core does is it anchors that inquiry process, creating an opportunity for us to norm what good enough looks like the city towards this new standard, and to actually have a conversation about the common core standards.

If I were to reduce inquiry to a sentence, it would be that we want teachers to examine the effectiveness of their work through the lens of student work, student data, and go through that cycle of trying new things and seeing how it goes, and taking some time to do that.

8 *Sharing lessons learned*

By explicitly asking teachers to share their lessons learned with other school faculty, the policy architects were reinforcing their message that improvement is a collaborative process and that the expectation is that people share their experiences with others for thoughts and suggestions, as opposed to keeping things private and closed. This signal coheres to and reinforces the statements to work as teams, made in two other places in the CIEs and to encourage people to create shared experiences (see #6 above).

Distilling the Policy Qualities

From the analysis of the choices of the policy architects in New York City, what can we say about the characteristics of an instructional policy that might make it more resilient and slower to dissipate? Here I distill five key attributes of the policy that make it distinctive.

1. Focus on a few manageable activities that hone people in on your vision/goals/priorities.

The 2011-12 CIEs were very streamlined. They focused teachers, schools, and reform supporters on a few key activities (implementing performance tasks and looking at student work) that concentrated their learning efforts. While there is a lot embedded within the CIEs, they did not appear overwhelming or create a long laundry list of requirements that encouraged a check off mentality for the sake of compliance (although that likely happened in some places). They did not appear onerous and served to focus, rather than dissipate, the energy of educators. Furthermore, these activities were carefully chosen to align with the District's goal of increasing the ambition of instruction towards the standards.

2. Make the focal activities high leverage (i.e. likely to bring about substantive changes in practice)

The progression that the policy architects went through as they considered what should be the focal point of the policy request was a particularly revealing sequence of policy deliberation. Should they focus teachers on curriculum mapping? Should they advocate what they considered to be particularly high-leverage pedagogical strategies? Should they set up a standardized testing system to specify what data teachers should look at and in what form? The deliberate focus of the CIE's on the administration of performance tasks and the examination of the resulting student work as the focus shows the thoughtful attention given to choosing an activity that was both meaningful and likely to engage teachers in important substantive discussions about their practice. The emphasis on the tasks as a way of revealing representations of student work also centered the conversation on the learning outcomes of students rather than the instructional inputs of teachers, and therefore placed the emphasis on what students receive rather than what teachers deliver. In this way, the policy architects increased the likelihood that those that fulfilled the Citywide Instructional Expectations would have a productive professional learning experience.

3. Have the activities require an understanding of the larger instructional process.

Despite the compactness of the Expectations, to engage deeply with the CIEs required that educators look at the range of elements that go into powerful instruction, including understanding

of standards, curriculum, pedagogical strategies, content knowledge, and assessment practices. In this way, the CIEs were constructed with a depth to them that allowed teachers at different levels of development to each gain understanding from their experience. In this way, the CIEs were built like an onion, with many layers that required those who engaged with them to look at many aspects of their practice and consider each one and how it related with the others.

4. Have the focused activities leverage prevailing organizational behaviors/practices

The CIEs also represented a consistency of building upon, rather than replacing, prior reforms. Much of the churn of reform replaces one effort with another in an incoherent way. Thus teachers have learned to wait out reforms rather than persisting with them in a way that allows for continued refinement of practice. Thus, another important aspect of the policy was how it leveraged prior reforms by focusing teachers on using their team structures inside of their schools to implement the policy. Rather than ignoring or supplanting prior efforts to build capacity to engage in different team configurations (inquiry teams, grade group teams, or subject matter teams), the CIEs built upon these practices and required teachers to utilize these structures to identify or develop tasks and examine the subsequent student work. Thus the policy continued to deepen the skills introduced by prior policies.

5. Anticipate the demand it will create and get a head start on building resources and support network to fill the need.

Policies reshape the prevailing conditions within an environment and manipulate the priorities and incentives for the actors within. They identify targets and create demand for anything that can assist with solutions. They signal to stakeholders what leaders deem important and produce a 'market' for resources that will assist in solutions. In this case, the policy created a demand both for high quality performance tasks and for Common Core aligned curriculum. The policymakers anticipated this demand and offered some (but not a monopoly) of high quality solutions to the problem through the units offered via the City's Common Core library. Interestingly, this gave the policy makers a further opportunity to influence response and clarify what Common Core aligned curricula looked like without mandating a particular curricular response.

Discussion

The Citywide Instructional Expectations are an interesting case of leaders creating a policy intended to promote learning rather than a policy designed to foster implementation. It's a fundamentally different way of thinking when leaders view an instructional change policy as a challenge of learning rather than a challenge of implementing. Implementation problems assume a known solution from the start, and the task is viewed as how to get people to adopt the

known solution. This is what we mean by *fidelity* of implementation – that the goal of a policy is to implement a known solution. Thus a policy that focuses on implementation assumes that the policy makers know *what* should be implemented and seek a consistent response by the policy targets. Learning challenges, by contrast, have less specificity up front, and are intended to foster *engagement* with a problem, rather than the adoption of a pre-designed set of solutions. In these cases, policymakers don't want people to adopt the same solution – they may not even know what the solution is – they want people to grapple with a problem, take ownership of it, and develop their own solutions. Implementation is very different than engagement.

Problems that demand solutions via implementation fidelity are those that Harvard Leadership professor Ronald Heifetz (1994) would call 'technical problems' – or problems for which there are known solutions. Problems for which there are no ready solutions are what Heifetz calls 'adaptive problems.' Adaptive problems, by their very nature, are not implementation problems, because implementation implies a known solution. So if we can't implement solutions to adaptive problems, what do we do? Adaptive problems require engagement rather than implementation.

The skills required to resolve adaptive challenges, according to Heifetz, are very different than those needed to address technical challenges. Technical challenges are resolved with expertise and good management, while figuring out adaptive problems requires innovation and learning. The problem of teachers changing their instruction to help kids get to a higher set of Standards is largely an adaptive problem. While some teachers, and even a few entire school faculties, may have the skills and capability to effectively teach to the Common Core, this is largely an unknown, i.e. adaptive, problem for most teachers.

The Common Core era represents a whole new terrain not just for teachers, but for the whole education enterprise – including curriculum developers, program developers, professional developers, and education leaders. Teachers are not going to reach the higher expectations of the Common Core by implementing a set of externally imposed strategies. Thus the expectations of the Common Core re-confront us with the fact that student learning is produced from a set of highly personalized interactions between teachers, students and content (Cohen & Ball, 1999). While effective teaching certainly has a technical aspect to it, it is a largely adaptive challenge because each student's cognitive and psychological makeup and their own developmental process requires a (sometimes slightly and sometimes dramatically) customized approach by teachers to productively engage them where they are with the content they are expected to master. Thus the Common Core demand engagement rather than implementation.

Another important aspect of a policy designed for engagement rather than implementation is that they become a professional development mechanism in themselves, rather than requiring companion professional development to foster implementation. Professional development is usually a companion to policy as a way to build peoples' capacity to implement policy. But what

if engaging with the policy itself is professional development? In this example, there was no externally mandated professional development that would help schools implement the CIEs. Although schools certainly could, and did, seek out professional development to help them implement the CIEs, engaging with the expectations themselves was professional development. Teachers and schools that took the CIEs seriously as a learning opportunity and deeply engaged with them instigated their own professional development experience. The expectations of the policy - investigating how performance tasks represented the expectations of performance aligned with the Common Core, selecting or building tasks that were integrated into curricular units, administering them, examining the resulting student work, considering how the student performance represented the quality of work expected by the Standards, and reflecting on the kind of teaching needed to produce the quality work by students that will meet the standards - catalyzed a personalized professional learning experience that was (at least potentially) far more powerful than externally transmitted professional development. So can we call the policy itself a professional development activity? If professional development is meant to stimulate people to think about different ways to perform their jobs more effectively, then the CIEs certainly represent a form of professional development.

In a second important way, the policy allowed for differentiated professional development. A common critique of large-scale professional development is that it is often like 'teaching to the middle', i.e. geared towards one instructional level (often the introductory one). But the CIEs allowed teachers to engage with them both from different vantage points (task selection, examination of student work, curriculum development, instructional implications) and from their own level of experience and understanding. Because the substance of the work was their own, teachers could adjust the sophistication of their engagement to their current level of capability.

The careful ways that the elements of the CIE policy were constructed make it a special piece of promotion. By decomposing it into its constituent parts and providing some of the companion explanations that provide the backstory to some of the thought processes of the policy architects as they made the choices that resulted in the policy, I hope to have provided some insight into the way that careful policymaking can work. Of course, the test of this policy, like any, is what is its decay rate as it is set free into the world.

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