



# Enacting Common Core Instruction: How School District Leadership Drove Implementation of LDC and MDC in Kenton County, KY

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## A Note about Terminology

In this case study, we use several terms that are specific to the LDC and MDC initiatives. Brief definitions are provided below.

- **Formative Assessment Lessons (Lessons)**, the math lessons or tools that have been developed by the Shell Centre, are a central component of the MDC initiative. The Gates Foundation has begun referring to the Lessons as Classroom Challenges, and they were previously referred to as FALs. While we use the term Lesson(s) throughout this case study, we acknowledge that the use of this term is evolving with the expansion of the initiative.
- The **LDC Framework** includes CCSS-aligned **template tasks**, which educators fill in with their specific content to create a writing task. Teachers identify the skills students need to complete the task and create a **module**, a plan for teaching students the content, and literacy skills necessary to complete the writing task.
- **LDC and MDC** refer to the broader initiatives, which include professional development in math and literacy to help teachers and other educators use the tools, Lessons and formative assessment strategies on a daily basis.

## The LDC and MDC Initiatives: An Overview

Funded by The Bill & Melinda Gates Foundation, the Literacy Design Collaborative (LDC) and Math Design Collaborative (MDC) offer a set of instructional and formative assessment tools in literacy and math, which were developed to help educators better prepare all students to meet the Common Core State Standards (CCSS) and succeed beyond high school. The Foundation's goal is to provide supports for educators to implement the instructional shifts called for by the CCSS.

According to the LDC website, LDC “offers a fresh approach to incorporating literacy into middle and high school content areas.”<sup>1</sup> It makes literacy instruction the foundation of the core subjects, allows teachers to build content on top of a coherent approach to literacy, and prepares students with the rigorous reading and writing skills necessary for postsecondary success. LDC modules are designed to deliver CCSS as a foundation for teaching.

As part of MDC, experts from the Shell Centre developed a set of Formative Assessment Lessons (Lessons) for secondary mathematics teachers to facilitate CCSS-based student mathematics learning and provide teachers with feedback about student understanding and mastery. Lessons reverse the traditional, teacher-driven instructional model by challenging students to work on a series of math problems both independently and collaboratively.<sup>2</sup>

In the early years of the LDC and MDC initiatives, the Gates Foundation supported the districts and school networks to co-develop and pilot the tools. This support included professional development, efforts to link tool-users across sites, and ongoing refinement of the tools to better meet the needs of educators.

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<sup>1</sup> <http://www.mygroupgenius.org/literacy>

<sup>2</sup> The Daily: Unleashing Group Genius, Volume 2, Number 1, June 27, 2011. Retrieved from: <http://www.kenton.kyschools.us/userfiles/915/Acrobat%20Document.pdf>

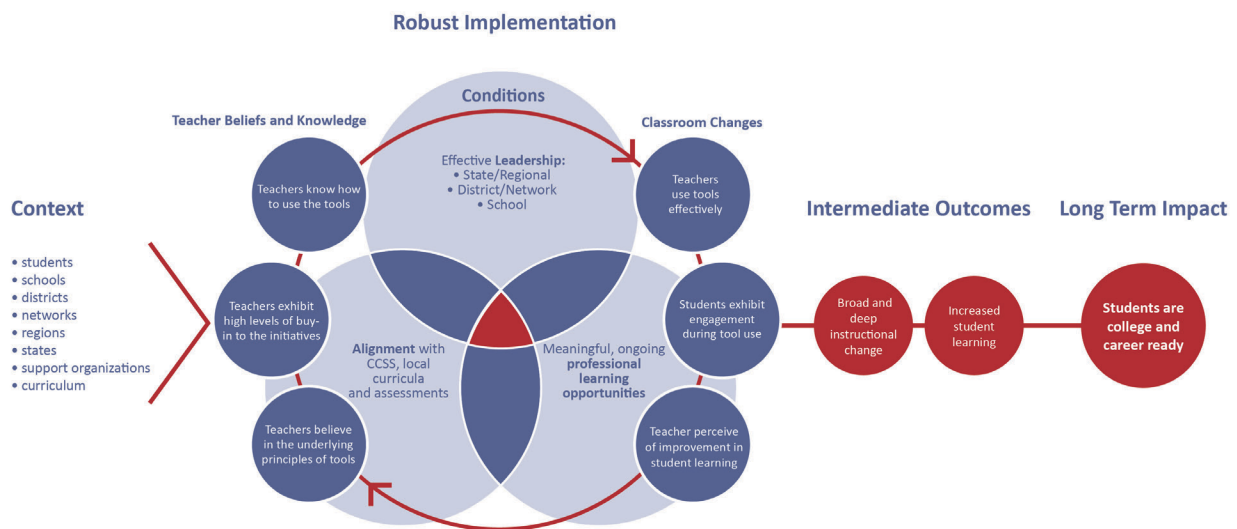
## Case Study Background

Following two years of extensive data collection in eight sites throughout the country, Research for Action (RFA) is producing four case studies to illustrate how the LDC and MDC tools have been adopted in different settings and contexts, and which approaches and supports have contributed to the successful adoption and use of the tools. The case studies provide a set of “road maps” for other sites that will be adopting or scaling up the tools. They are grounded in the three overlapping conditions found to be necessary for effective scale-up of these tools:

- Effective leadership at multiple levels;
- Alignment with the CCSS, curricula, and state assessments; and
- Meaningful and ongoing professional learning opportunities (PLOs).

These conditions are depicted as three overlapping circles in the Theory of Action for the overall initiative (see Figure 1).

Figure 1. Theory of Action<sup>3</sup>



These conditions provide the organizing framework for the case studies and guide our analysis of the strategic approaches undertaken by state, regional, local, and network entities that enabled strong initial implementation.

RFA chose case study sites that shared initial success in implementing the tools, but which differed dramatically on three dimensions:

- Geographic location and student demographic characteristics;
- Type of lead entity responsible for planning and coordinating implementation, such as a state department of education, a local district, an educational network, or a regional service center; and
- Scope of the initial tool roll-out.

<sup>3</sup> More details on RFA’s Theory of Action for the LDC/MDC Initiatives can be found in our Year Two report on the adoption and implementation of the tools at [www.researchforaction.org](http://www.researchforaction.org).

Each case study illustrates how the tools were implemented and scaled under a specific set of circumstances that are likely to be applicable to many other sites. As such, they are intended to inform further exploration and discussion on how to effectively rollout the LDC and MDC tools across a wide range of districts and schools.

Table 1. Case Study Sites

Case Study Site	Kenton County School District	Hillsborough School District	PA Intermediate Unit 13	Small New York City High School
District Size/Type	Single, mid-size, rural and suburban district	Single, large urban and suburban district	22 small and mid-size, urban, rural and suburban districts with 16 in LDC	Large urban district
Lead Implementation Entity	District	District	Regional service center	District
Tools Implemented	LDC and MDC	LDC	LDC	MDC
Publication Date	December 2012	May 2013	November 2013	September 2013

**About This Case Study**

This document describes how Kenton County used district-level leadership to roll out the LDC and MDC tools. It is comprised of the following sections:

- A brief overview of the educational reform context in Kentucky and Kenton County;
- A description of the central role of Kenton County district leaders in shaping the early success of MDC and LDC implementation; and
- An overview and description of seven district-led strategies that have impacted early adoption and success of the MDC and LDC initiatives.

## Kentucky and Kenton County: A Fertile Environment for Large-Scale Reforms

### A History of State Reforms and Strong District Leadership Enabled Adoption of Literacy and Math Tools

After many years at the bottom tier of states on a number of student achievement indicators, Kentucky rose to 14<sup>th</sup> in the nation in 2011, according to Education Week's *Quality Counts* report. Although its overall score was a C+, particularly significant was the fact that Kentucky scored 90.2 (A-) in "Standards, Assessments, and Accountability," illustrating the state's early commitment to adopting the CCSS and implementing standards-aligned instructional tools. Kentucky's educational transformation resulted from decades of collaborative work among the state, local districts, and the Pritchard Committee for Academic Excellence, a longstanding private, non-profit advocacy group that helped lead the charge in the development and implementation of standards-based educational reforms beginning in the 1980s. Kentucky became recognized as a national leader in education reform with the development of academic standards as a result of the Kentucky Education Reform Act of 1990. Almost two decades later, Kentucky again created landmark education legislation with the passage of Senate Bill 1 in 2009, calling for the revision of the state assessment and accountability system for K-12 education by 2011-12 based on new college and career readiness standards.

When Kentucky became the first state to adopt the CCSS in 2010, Kenton County School District had already been awarded a grant from the Bill & Melinda Gates Foundation to pilot the standards-aligned MDC tools, and they received a grant to begin implementing LDC in fall 2010. Building on the state's robust history of educational reforms, Kenton County's district leaders had prepared and positioned their district as fertile ground for implementing the CCSS and piloting standards-aligned tools like LDC and MDC.

A year later, in 2011, the Gates Foundation awarded Kentucky an integration grant to implement LDC and MDC and a new educator evaluation system statewide. Kenton County was selected as one of the state's 12 district recipients. Its strong district leadership and track record piloting the LDC and MDC tools, combined with Kentucky's decades-long efforts to boost student achievement, created the conditions for early adoption and effective implementation of the LDC and MDC tools in Kenton County.

As Table 2 indicates, Kenton County is a largely white, mid-sized district of mixed income that serves a slightly higher than average proportion of special education students. Its graduation rate is slightly higher than the national average, but its academic performance on standardized tests is about average for Kentucky.

Table 2. Kenton County Demographic and Student Performance Overview<sup>4</sup>

Indicators		Significance
<b>Number of schools and student body size</b>	21 schools (11 elementary, 4 middle, 3 high schools)  13,828 students	Mid-size rural/suburban district; fifth largest in Kentucky
<b>District/student race and ethnicity</b>	Black – 2.2% Hispanic – 3.2% Other – 4% White – 90.2%	Largely homogenous student population in terms of race and ethnicity
<b>Students eligible for free or reduced lunch</b>	34.7%	One-third of students receive free or reduced lunch
<b>District special education population</b>	15%	Higher than the national average of 12%
<b>District English Language Learners population (ELL)</b>	2.7%	Relatively low ELL population
<b>District student attendance for 2010-11</b>	95.7%	94.6%
<b>High school graduation rate</b>	81%	Higher than the state average of 75% and national average of 70%
<b>Per pupil spending</b>	\$9,572	Below the state average of \$10,697
<b>District middle and high school student scores at or above proficiency</b>	By state accountability measures, Kenton County is in the 82 <sup>nd</sup> percentile and classified as a proficient district	District middle and high school student scores at or above proficiency

Figure 2 below provides information about the roll out and scale-up of the LDC and MDC initiatives in Kenton County. To prepare for the MDC initiative, Kenton County and several other pilot districts nationwide received “readying” professional development, which situated the instructional strategies of the Lessons in a larger formative assessment pedagogical approach. A small group of teachers from each high school participated in this professional development. In Year One, all high school teachers and all middle school teachers received readying training, with only a small group of middle school teachers piloting the Lessons. The middle school readying training was provided by the district, which developed it in consultation with an MDC professional development provider. In Years Two and Three, all middle school and high school teachers were fully involved in the initiative. During the evolution of the MDC initiative in Kenton County, the district worked to align the tools with the curriculum and also set expectations for teachers’ use of the tools. Additionally, more Lessons were developed and made

<sup>4</sup> Kentucky Department of Education District Report Card for 2010-11 school year. Kenton County School District website: <http://applications.education.ky.gov/SRC/ProfileByDistrict.aspx>

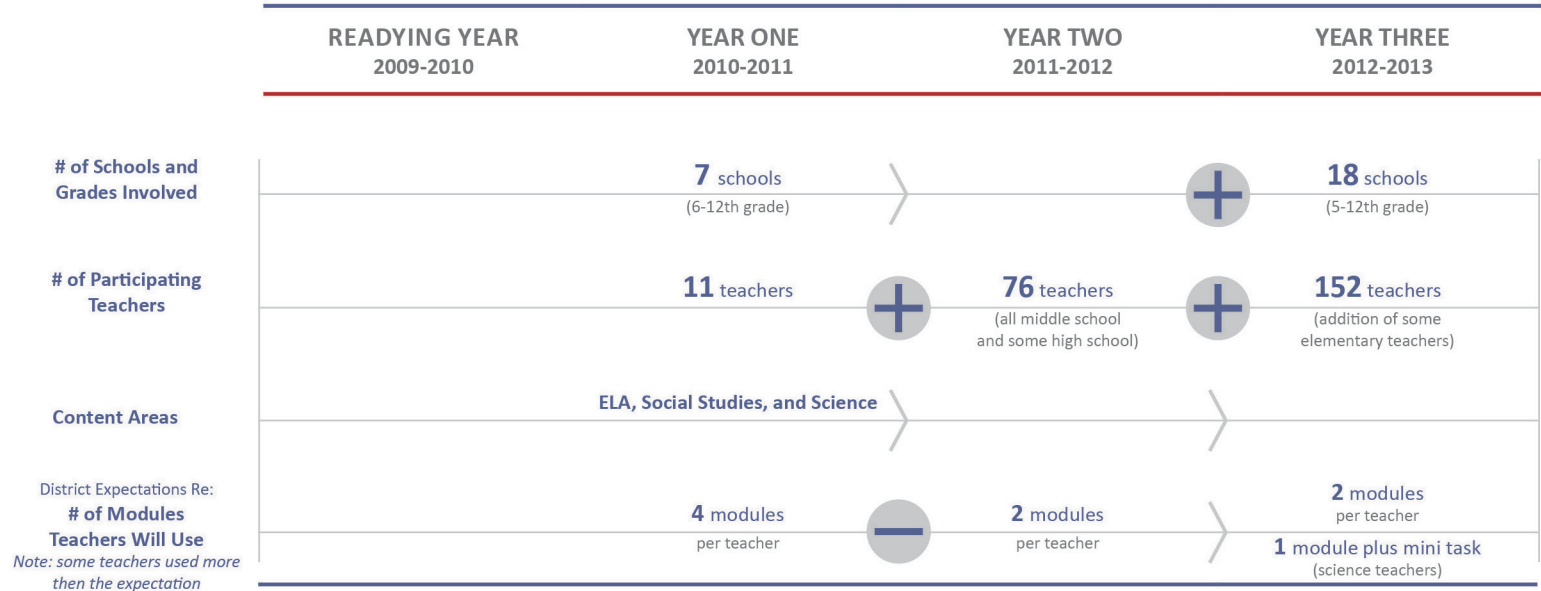
available to teachers. These three endeavors – curriculum alignment, clear district expectations, and increased tool availability – meant that Kenton County teachers used more Lessons in Year Three.

Kenton County’s implementation of LDC began in Year One, with 11 teachers, made up of one to two teachers from every middle school and high school in the district, in every participating content area: ELA/English, science and social studies. In Year Two, all middle school teachers in the three content areas participated in LDC and additional high school teachers joined as well. In Year Three, Kenton County included additional high school teachers. In Year One teachers implemented four modules; in Years Two and Three, teachers implemented a minimum of two modules; district leaders reported that two modules were a more manageable number for their teachers. In order to overcome implementation challenges in science, science teachers will implement one full module in Year Three and additional mini-tasks throughout the curricula.

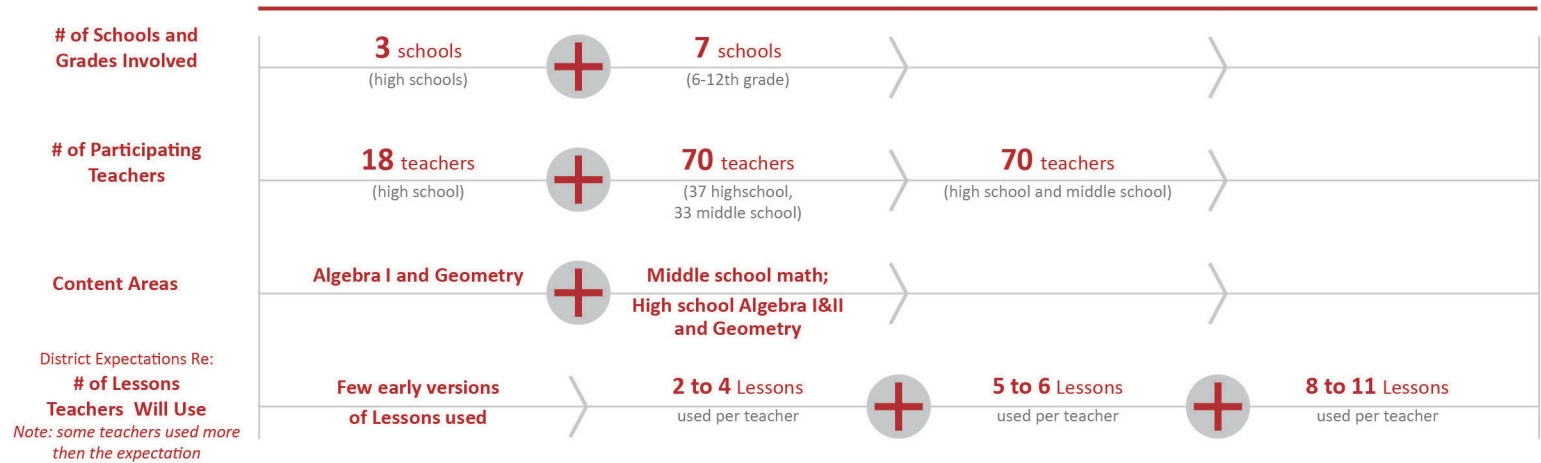


Figure 2. Expansion of LDC and MDC Tools in Kenton County

**LDC**



**MDC**



## Building on a “Rock” Solid Foundation: Strong District Leadership Drove Effective Implementation and Strategies for Alignment and Professional Learning in Kenton County

The story of successful implementation of LDC and MDC tools in the Kenton County School District centers on district-level leadership. Underpinning the work was the Superintendent’s early interest and commitment. Early on, the Superintendent attended a conference where the MDC framework and early Lessons were presented. According to the MDC Project Leader, “he [Superintendent] saw how challenging and engaging the Lessons were and was also aware of the shifts coming with the new CCSS. As a result, he sought to involve Kenton County in this work.” The Assistant Superintendent was introduced to an early version of the LDC framework and she found it an engaging way to effectively integrate literacy instruction across content areas. With a clear mandate from their superintendent and equipped with in-depth knowledge about the tools and classroom expertise, district leaders<sup>5</sup> rolled-out a set of innovative strategies that positively impacted the early adoption of the tools by teachers and principals.

District leaders engaged principals and teachers early in the implementation process and compellingly conveyed the foundational nature of the LDC and MDC initiatives. One principal described his understanding of the foundational nature of LDC and MDC in the following way:

*They [district leaders] talk about really being focused on our big rocks. And trying to let the pebbles and the sand, like issues in the cafeteria I was dealing with, become things that I delegate, so that I can prioritize the bigger stuff. We consider our Gates work [LDC and MDC] to be one of those big rocks.*

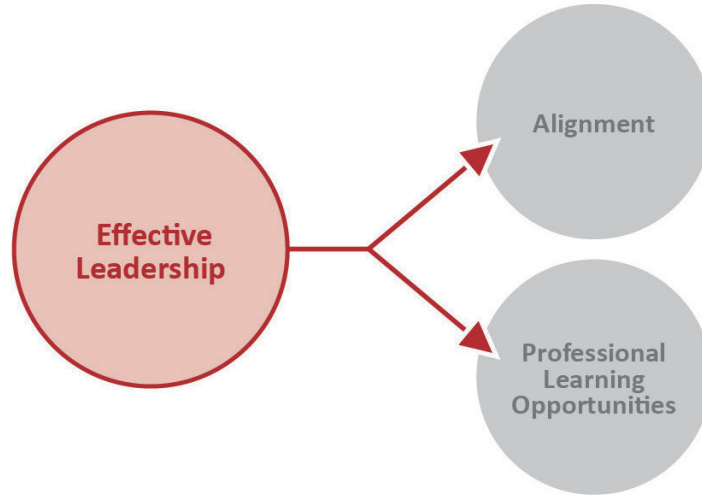
Kenton County district administrators and project leaders have kept these instructional “big rocks” front and center at all levels of decision-making: from employing consistent communication and messaging about LDC and MDC across district schools, to the deployment of district staff with deep content and classroom expertise to lead tool implementation, to the development of teacher leaders. Prioritizing the “big rocks” has provided a strong foundational layer for the district’s strategic approach while also strengthening the conditions for robust implementation identified by RFA during its first two years of research. These conditions are: **effective leadership** at multiple levels; **alignment** with local and state standards, curricula and assessments; and meaningful and ongoing **professional learning opportunities** (PLOs).

In Kenton County, district leaders’ strong implementation role and innovative strategic approach have been the drivers of alignment and PLO efforts. Effective district leadership in Kenton County has enabled the MDC and LDC initiatives to take root and grow. Figure 3 illustrates the dominant role of strong leadership in Kenton County.

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<sup>5</sup> We use the terms “district leader” or “district project leader” to refer to the four district-level staff charged with leading MDC and LDC implementation in Kenton County, and “district administrators” for other district-level staff, including those in the Superintendent’s office, who supported and oversaw the initiatives but were not directly involved in day-to-day implementation.

Figure 3. The Dominant Role of Effective Leadership in Kenton County



### What the Conditions Looked Like in Kenton County

#### Effective Leadership: District leaders...

- Prioritized and communicated the central role of LDC and MDC tools as part of the district’s academic mission.
- Selected credible and committed leaders to roll out and support the tools.
- Simultaneously implemented math and literacy work for synergy/cross-team learning.

#### Alignment: District leaders...

- Selected new or used existing curricula to reinforce and strengthen tool use.
- Used the tools to prepare for – and go beyond – state writing requirements.

#### Professional Learning Opportunities: District leaders...

- Supported a wide-array of teacher collaboration.
- Invested in teacher leadership.
- Refined work based on teacher and administrator feedback.

## Kenton County’s District-Wide Approach to Implementation

How did Kenton County’s leadership drive the successful implementation of the LDC and MDC tools? Below, we identify seven strategies that Kenton County used to achieve this goal. For each, we provide evidence of how and why it’s working. Throughout this section, we also identify Works in Progress – enduring challenges that Kenton County is facing and that other districts are likely to face during the implementation process.

### I. District Strategy: Consistently Communicate Messages about the Priority of the LDC and MDC Tools and their Alignment with the CCSS

#### What did district leaders do?

Kenton County district leaders understood that a clear and common understanding of how the LDC and MDC tools helped teachers provide CCSS-aligned instruction would help with early tool buy-in. To this end, they used multiple avenues to communicate to principals and teachers the following messages:

- The LDC and MDC tools are a central priority of the district; and
- The LDC and MDC tools are designed to help teachers provide standards-aligned instruction.

District leaders delivered these messages at school-level and district-wide meetings and reinforced them through professional support to principals and teachers. These messages were communicated uniformly and consistently by the superintendent’s office, embraced and repeated by district leaders, and eventually championed by school principals.

The convening of monthly principal sessions is an example of this strategy. At these sessions, LDC and MDC project leaders had the opportunity to provide tool-specific training to principals and reinforce tool alignment with CCCS. Kenton County’s LDC project leader described these monthly sessions:

*We have 90-minute training sessions for principals and assistant principals once a month. We show them the LDC and MDC work and let them experience it. We video tape it, analyze it, and we keep it out in the forefront so that the principals have an understanding of how it all fits together.*

The district’s MDC project leader also mentioned the need to consistently make the connection between the tools and CCSS:

*We need to simplify things for principals. We need to help them see that that the CCSS, LDC, MDC, and the district’s curriculum are all the same thing.*

#### What did this strategy mean for the district?

A notable effect of the district’s consistent messaging has been that school leaders and teachers at every level understand how the LDC and MDC tools help them provide CCSS-aligned instruction. This widespread understanding is reflected in our teacher survey data:

- More than 90% of Kenton County teachers surveyed reported that LDC and MDC aligned to the CCSS; and
- Teachers saw the unique value in using the tools to address the new standards (88% of teachers for both LDC and MDC).

In interviews, Kenton County teachers and principals confirmed this strong belief that the tools are closely aligned with the CCSS:

*LDC Teacher: The connection with CCSS is clearer, not just to me, but also to the students. They're seeing the connection. I have my learning targets up and on their study guides. They know the standards that apply to that unit and are able to see that we hit this or that.*

*Principal: Oh, absolutely [I think that participating in these initiatives will help my teachers address the expectations of the CCSS]. I think, this [LDC and MDC], and the other initiatives that we're doing, it all came at a good time. Yes, it was a lot to add at the very beginning, but I do think it all kind of dovetails.*

## **II. District Strategy: Select Credible and Committed Project Leaders to Coordinate and Support Tool Implementation**

### **What did district administrators and leaders do?**

District administrators knew that successful tool implementation in Kenton County required a strong and multi-disciplinary leadership team that understood the broader goals and scope of the initiatives, but who also had the skills and experience to credibly coach and support teachers and principals on the use of the tools in the classroom. With this hybrid leadership role in mind, the leadership team tapped four educators with deep content expertise, classroom experience, and professional facilitation skills to become LDC and MDC project leaders.

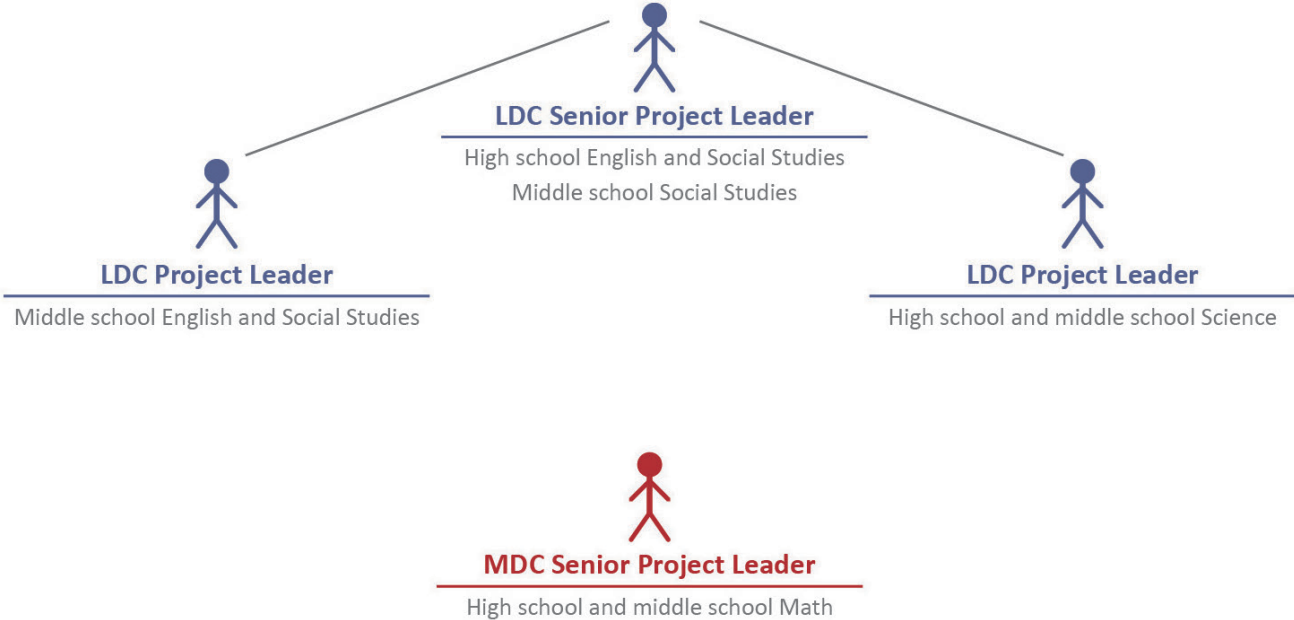
These four project leaders, part of a Secondary Curriculum and Instruction group at the district, embodied a set of important characteristics:

- They clearly understood both the district's vision and the hard work required of teachers to accomplish it;
- They worked as a bridge between the schools and the district, providing and facilitating professional development for teachers and principals;
- They were accessible and available to work with teachers in small groups and one-on-one; and, importantly
- They did not have evaluative authority over the teachers they were supporting.

Teachers viewed district project leaders as “coaches” and “super colleagues” whom they respected and could turn to with questions, concerns, challenges, and even push back. This coaching and support approach helped generate a collaborative dynamic when project leaders visited teachers' classrooms.

Although project leaders assumed numerous roles and their specific responsibilities evolved throughout the roll-out of the initiatives, they generally organized their work by dividing responsibility by content area and/or grade level (see Figure 4). Notably, none of the four project leaders worked exclusively on LDC and MDC. Their other responsibilities, however, complemented and strengthened their LDC and MDC work. All four leaders worked directly with teachers and principals around curriculum and instruction for their respective disciplines and provided support on standards-based instruction, data analysis, best instructional practices, and collaborating with and coaching teachers. Commenting on this integrated approach, one of the project leaders said, “We feel that this has been a strength in our design because it meshes all of these ideas rather than isolating LDC and MDC as separate entities.”

Figure 4. Project Leaders’ Responsibilities



**What did this strategy mean for the district?**

The combined classroom and district leadership background of the four project leaders enabled them to embrace their hybrid role, in which they were invested with significant leadership responsibilities over the entire MDC and LDC initiatives, while, at the same time, providing individual and group professional support to teachers and principals.

Teachers responded well to this approach. They found the professional development helpful, and they highly valued the accessibility and responsiveness of the project leaders. Indeed, in surveys, most LDC and MDC teachers (92%) agreed that professional development provided by district staff equipped them with the skills to use modules and Lessons.

Teachers were similarly enthusiastic in interviews. The following two quotes from teachers illustrated the type of individualized support provided by district project leaders and their accessibility:

*LDC Teacher: We have multiple phone calls with LDC project leaders, at any time – especially with [the senior leader]. I call the guy’s cell phone any time I have any question. He always answers me on the first round, no matter what he’s doing, poor guy. He can be in the middle of supper, and he’ll still answer me and address all my questions.*

*MDC Teacher: The MDC Project Leader will come in any time we ask. She will come in and work with a teacher, especially if it’s someone who is struggling with a class. She will discuss with us ahead of time to prepare us for teaching or helps by coaching us through if we need it. She co-teaches.*

Certainly, not every teacher took advantage of the district staffers’ support. However, our research found that even when teachers did not seek support, they were aware that it was available.

### III. District Strategy: Implement LDC and MDC Simultaneously

#### What did district leaders do?

With the goal of continuing to advance the early adoption and instructional integration of CCSS in their district, Kenton County district leaders decided to roll out the implementation of MDC and LDC at the same time. Even though this strategy was partially driven by the Gates Foundation’s initial grant to Kenton County, their decision to implement the initiatives simultaneously – using a multi-disciplinary project leadership team – yielded benefits that strengthened the district’s overall capacity to infuse instruction with standards-driven tools. This simultaneous implementation enabled collaboration and cross-fertilization of ideas among the four district-level project leaders and between district staff, principals, and teachers.

The coordinated nature of the project leadership team further facilitated cross-fertilization. The four district project leaders shared office space, worked with some of the same schools, and regularly shared updates, ideas, and common solutions. They also collaborated on the design and delivery of PLOs tailored to district-wide, school-level, and/or grade and course-level audiences.

#### What did this strategy mean for the district?

The cross-fertilization of ideas enable by the simultaneous implementation of LDC and MDC led to sharing of best practices, as illustrated by the two examples below.

- 1) After learning how the MDC project leader prepped and coached teachers before a Lesson and met with them afterwards for reflection and debriefing, LDC project leaders adopted this approach to coach small groups of teachers, before and after module implementation.
- 2) In the “readying” year of MDC, Kenton County involved most of their high school teachers and experienced some teacher resistance. Kenton LDC, in turn, adopted a “graduated” approach to LDC teacher involvement by implementing with a smaller group of teachers in Year One and expanding the number of teachers in Year Two. Seeing that this was a successful approach to build teacher knowledge and buy-in, Kenton MDC engaged all middle school math teachers in readying professional development in Year One and engaged a small group of middle school math teachers in piloting Lessons in Year One, expanding to all teachers in Year Two.

The LDC senior project leader commented on the process of adopting the MDC pre and post-lesson work with teachers:



*Seeing the math project leader's work, particularly in instructional methodology and plans to get teachers ready to do their MDC and then to process the MDC, that's really helped guide me in thinking about pre- and post-meetings with my teachers this year.*

MDC's senior project leader explained that simultaneous work on both initiatives – and the collaborative nature of the implementation at the district level – has helped all four project leaders consistently emphasize the district's focus on the CCSS:

*We work together an awful lot because we feel like it's really important to find the commonalities between what we're doing. It's important to simplify it as much as possible for principals so that they don't need to be an expert on 300 different things, but they can still understand the basics of what's going on.*

## **IV. District Strategy: Align LDC and MDC with District Curricula and State Assessments**

### **Aligning LDC and MDC with District Curricula**

#### **What did district leaders do?**

During the spring of 2011, one year after Kentucky's adoption of the CCSS and half a school year into MDC and LDC implementation, district leaders began looking for new English Language Arts (ELA) and math curricula that would enable teachers to enact the standards across their practice – not just when using the LDC and MDC tools. To ensure consistency with Kenton County's early CCSS adoption and the tool integration work, district leaders used LDC and MDC tools as the lens to examine curriculum changes, meeting with principals and ELA and math departments to discuss curricular options. Later that summer, they finalized the decision to adopt the College Board's SpringBoard curriculum for ELA and math, a field-tested and CCSS-correlated model of rigorous instruction in ELA and mathematics for all students in grades 6-12.<sup>6</sup>

Because SpringBoard was specific to ELA and Math, LDC district project leaders also worked with science and social studies teachers during Year Two to create modules that align with their curriculum units.

#### **What did this strategy mean for the district?**

##### **English Language Arts**

District leaders' choice of SpringBoard gave ELA teachers a "boost" in their work with LDC modules. Teachers liked that the curriculum, as with the LDC modules, requires teachers and students to "unpack" the final writing assignment prior to beginning the module or unit. Through this process, students are better able to understand how their smaller mini-tasks build up to the end goal. SpringBoard also provides additional quality text options for LDC modules, which teachers found challenging when they first started using modules.

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<sup>6</sup> SpringBoard "back maps" the essential skills and knowledge students needed to prepare for AP and college success and emphasizes the skills needed to bridge the gap between high school and college expectations: higher-order critical thinking; problem-solving; deeper conceptual understanding; expanded academic vocabulary; media literacy; and strong process skills.



A middle school ELA teacher described the synergy between the new curriculum and LDC:

*The LDC modules fit into this SpringBoard unit. It has not been overwhelming to look at Unit Two and see where we place LDC. It is an argumentation unit and so is the LDC module. The readings that we use for LDC came out of Springboard. We lucked out because we did not have to recreate the wheel.*

District project leaders and teachers also used LDC as a vehicle to further align SpringBoard with the CCSS. When they discovered that the 6<sup>th</sup> grade ELA SpringBoard curriculum was missing a unit on argumentation (an important component of the CCSS and a popular LDC template), project leaders and teachers worked together to develop an argumentation module and insert it in the curriculum guide. An LDC project coordinator explained:

*Our 6<sup>th</sup> grade didn't have any argumentation in SpringBoard whatsoever; it only lent itself to informational and explanatory [writing]. We had to design an entire unit which we call unit 2.5 to put inside of unit 3 to address argumentation. Even though I am calling it a unit, we really did have to create the entire unit and of course we made the module the most important part of this unit developmentally. ... It [argumentation] is absolutely essential to the CCSS, which is the basis for all of our decision-making.*

Given these efforts, it is not surprising that a large majority of Kenton County ELA teachers (91%) reported that LDC was aligned with the curriculum.

## **Math**

Similar to the curriculum synergy perceived by ELA teachers, math teachers reported that SpringBoard reinforced instructional strategies they were using with the Lessons. A large majority of MDC teachers (89%) reported that the Lessons were aligned to their curriculum. They said that the curriculum required them to engage students in mathematical discussions, facilitate group work, provide students with opportunities to reason through difficult math problems, and explore multiple pathways to arrive at the right solutions – all central aspects of the Lessons.

A high school teacher explained how using Lessons, combined with SpringBoard, enabled her to further develop her facilitator role:

*The Lessons are really helping me, especially with SpringBoard, in going around to the groups and having them work together on so many things. It's gotten me out of telling them how to solve a problem and into asking questions to the small groups like, 'How do you think you should do it? What do you know? What do you need to find?'*

While teachers reported the Lessons were a good fit with SpringBoard in terms of pedagogy, the district's decision to connect Lesson use with professional development resulted in teachers using Lessons at a time that was out of sequence with curriculum content. Consequently, at the end of Year Two, almost two-thirds of math teachers in Kenton County said that they had used a Lesson when it did not align with their curriculum content. A high school math teacher explained that Lesson timing with curriculum was still a work in progress:

*Alignment is much better than it was last year. I think there was a lot more thought, time, and effort put into actually picking the tasks and where they go. The issue was that a task may have fit better at a different time in the*

*unit. We chose not to do it then based on the fact that we had to wait for the professional development session. There's been some improvement; we're still working on it.*

To further improve alignment in preparation for Year Three, district project leaders worked with teachers in grade-level groups over the summer to select and align Lessons with curriculum units and built in opportunities throughout the calendar to check-in and address timing issues. Further, in Year Three, teachers are determining the timing of the Lessons. While Lesson use is still connected to professional development, since professional development is “in-house,” and facilitated by the project leader and teacher leads, they can set the time for each Lesson that is grade and content/concept appropriate. Below, the MDC Project Leader provides an example:

*When the 7<sup>th</sup> grade teachers are in a unit, the Teacher Leader communicates to inquire about pacing for all teachers. They work as a team to set the dates that work for them. This allows us to still collaborate across the district at a specific grade level at a time appropriate for that group.*

### **Science and Social Studies**

In Kenton County, the LDC project leadership team provided important support for aligning LDC modules with science and social studies. One project coordinator was fully dedicated to working with science teachers while the two other LDC project leaders worked with social studies teachers. Their collaborative work with teachers to develop and align modules with curriculum units helped facilitate a shared sense of curriculum alignment amongst science and social studies teachers.

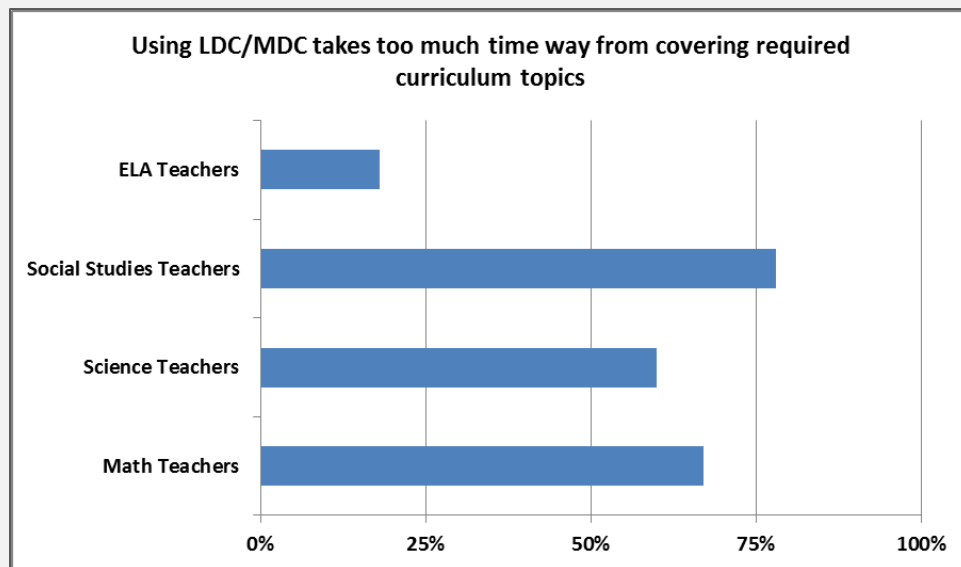
Among surveyed teachers, 100% of science and 95% of and social studies teachers said that LDC modules were aligned with their curricula.

A social studies teacher described the good fit between LDC strategies and the curriculum:

*Within the social studies curriculum, you have so much room and flexibility to maneuver in regard to content and teaching strategies. I tell all the kids that social studies – and being a historian – is not about knowing the information from memory. It's about being able to utilize skills to go and find the information. I feel like that's what this LDC module has done. Using the dictionaries and looking at the primary sources has really enhanced those abilities. I feel like it fits in pretty well with my curriculum.*

## Alignment with district curriculum is still a work in progress.

Despite the positive perceptions of alignment and the general enthusiasm teachers expressed about using MDC and LDC with the SpringBoard, science, and social studies curricula, more than half of math and science teachers and three-quarters of social studies teachers felt that working with the tools took too much time away from covering required curriculum topics. The pedagogical shifts required by the LDC tools and the CCSS standards are more demanding for science, social studies, and math teachers compared to ELA teachers. This group of teachers also reported more concern that the time necessary to implement LDC and MDC interfered with preparing students for state assessments. This is an ongoing challenge; district leaders, principals, and teachers continue to work in order to make the appropriate modifications.



## Aligning LDC and MDC with State Assessments

### What did district leaders do?

Decisions about assessments are made at the state level and there has been and will likely continue to be changes in the assessments used during this time of transition to the CCSS. While the decisions about state assessments are not the purview of district leaders, there is one example of how Kenton County leaders aligned LDC with a state assessment requirement.

The state of Kentucky had required all districts to submit portfolio writing pieces in ELA, science and social studies across all grade levels for many years. The requirement, which recently changed, now requests a sample of student writing from each district, rather than requiring every student to submit a writing piece in each content area. However, Kenton leaders decided to continue requiring all students to submit writing because LDC provided teachers with a rigorous instructional framework that would

ultimately result in higher quality student writing. They decided to use LDC as a vehicle to strengthen the district’s overall capacity to meet the state’s writing requirement. A district LDC project leader described this decision:

*You can see how well LDC helps us get there [meeting the writing requirement]. ... The LDC and the artifacts [student work] that are generated are still super useful in demonstrating that we’re meeting the expectation of the state toward the CCSS, but we think that we have an even higher standard here at this district.*

The LDC senior project leader also noted that LDC helped the district demonstrate that it meets, and possibly exceeds, the state’s expectations on writing standards.

**What did this strategy mean for the district?**

District leaders’ efforts to align LDC and MDC with state assessments are still in development. However, their choice of standards-aligned curricula for ELA and math, module alignment work with science and social studies curricula, and the decision to use LDC as a vehicle for meeting the state’s writing requirement have helped many teachers feel better equipped in how they prepare students for state assessments.

A significant majority of Kenton County MDC (74%) and LDC (75%) teachers said that the tools helped them prepare students for state assessments.

A science teacher explained how LDC helps prepare students to meet the writing requirement:

*It [LDC] provides a framework for me to launch the literacy piece. In the past, I just waited until the end of the school year to start the writing requirement - and what we got is what we were going to keep. This provides a framework in my content area. I don’t feel like it is an additive; it’s embedded in what I teach.*

**Alignment with state assessments is still a work in progress.**

Despite the relatively high percentage of teachers that reported that LDC and MDC helped them prepare students for state assessments, one quarter of teachers remained concerned that the tools did not help them prepare students for state assessments. District project leaders continue to work with teachers and principals to explore additional ways in which the LDC and MDC initiatives can serve as a platform for teachers and principals to better prepare students for state assessments. District project leaders recognize the benefits of using the tools to prepare students for state assessments, but they also acknowledge the challenges of the state’s changing assessment climate.

**V. District Strategy: Provide Professional Learning Opportunities that Encourage Collaboration and are Tailored to LDC and MDC**

Kenton County provided a number of PLOs for LDC and MDC. The district provided formal professional development by:

- Using 12-18 hours of the 24 yearly professional development hours required by the state for LDC/MDC work.
- Providing an additional 10-20 hours of PLOs per teacher with grant funding.
- Both of the above types of PLO involved teachers from across the district meeting by grade level and course.
- Making LDC/MDC instructional strategies the focus of job-embedded PLOs at the middle school and high school at one-hour meetings that took place monthly. These meetings occurred during planning periods and were facilitated by the project leaders.

In addition to the three kinds of PLOs listed above, many teachers met in small groups or pairs with colleagues at their school to plan or to discuss implementation. They sometimes requested informal meetings with project leaders as well. In addition, some departments used their meeting time to discuss LDC/MDC or to look at student work.

## **Providing PLOs that Encourage Collaboration**

### **What did district leaders do?**

District project leaders were responsible for coordinating all PLOs for teachers and principals.<sup>7</sup> From the very beginning of both initiatives, they understood that peer support and collaboration would be crucial to the scale and depth of LDC and MDC tool adoption and use in their district. They knew that collaboration would enable teachers to better manage the intense nature of planning and implementing LDC modules and MDC Lessons. With this in mind, district leaders designed a variety of PLOs that encouraged and modeled teacher collaboration.

Kenton County district leaders provided the following:

- Formal and informal training sessions designed for teachers to collaborate in the development or revision of LDC modules or in the alignment, pacing, and enactment of Lessons, and in the analysis of student work;
- Resources for teacher collaboration, such as funding and logistical support for meetings; and
- Time and space to have face-to-face interactions with teachers in small groups or on an individual basis.

This emphasis on face-to-face meetings was a key element of district leaders' responsive and accessible coaching approach, which facilitated a culture of collaboration with teachers and principals. The LDC senior project leader explained the role of these face-to-face contacts:

*We see the face-to-face as the critical part of professional learning. Email or other electronic contact is much more effective because of the face-to-face work.*

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<sup>7</sup> In Kenton County, both LDC and MDC teachers are compensated for time spent in formal professional development sessions. Many teachers also spend time in informal, unpaid collaboration.

## What did this strategy mean for the district?

Kenton County teachers valued face time with their project leaders and the opportunities the leaders created for teachers to collaborate on their own across course and grade levels. A middle school science described both:

*It was helpful when just the 8<sup>th</sup> grade science teachers were working on the module. [An LDC project leader] was there when we did it the first time. After that, we would send him documents and he would give us feedback. We emailed our instructional ladder back and forth. We'd send it to him, get some feedback, and then the four of us would get together and work on it some more until he told us it was 'ready to go.'*

District leaders also created PLOs in which teachers worked collaboratively at a more systemic level. For example, they brought a group of high school math teachers together across all schools to align and pace Lessons with the district's curriculum. A high school math teacher described the benefit of this more systemic collaborative work:

*One of the wonderful side effects of this work is that this is the first time in my 12 years of teaching that the district has brought together all three high schools to work closely together on something. Before, we were just separate entities. Now we are working with people from the other high schools to make curriculum maps together, build in the Lessons into our curriculum, and evaluate the best placement of a Lesson. I think it's very beneficial.*

Some teachers in Kenton County even described the opportunity to collaborate with colleagues as the most helpful form of professional development they received.

## Tailoring Collaboration to Meet the Specific Needs of the LDC and MDC Initiatives

### What did district leaders do?

District leaders tailored LDC and MDC collaboration opportunities based on the specific needs of each initiative and its teachers. For this reason, collaboration took different shapes as the work expanded during the second year of implementation.

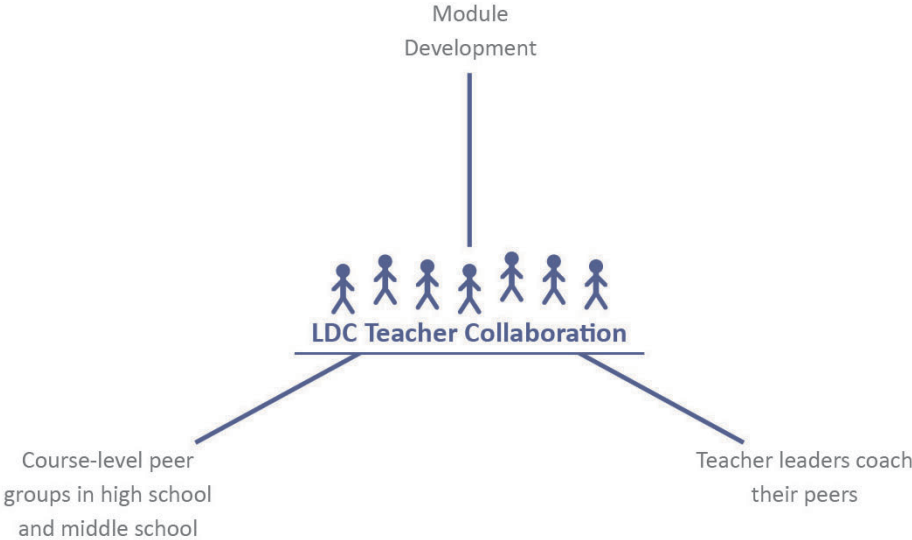
**Much LDC teacher collaboration occurred in small groups and focused on module development.** During the first year of implementation, many teachers did not have an LDC peer teaching their particular content and grade level. They relied heavily on the support and guidance of their LDC district project leaders. In Year Two, when the number of teacher participants grew from eleven to about seventy, district leaders embedded collaboration into module development and revision processes, particularly in middle schools. For example, small groups of teachers from each grade level and content area and made up of one teacher from each middle school worked together to develop a module and then share it with their school peers.

The intense nature of the LDC module development process also lent itself to smaller, more informal professional learning settings. Therefore, district leaders created opportunities for teachers to form course or grade-level peer groups and for teachers with LDC experience to provide individual guidance and support to new LDC teachers. Some teachers called collaboration the most helpful type of professional development; this perspective, along with many teachers interest in the modules,

facilitated teachers’ willingness to devote time to work with peers. Figure 5 illustrates the main forms of LDC teacher collaboration.

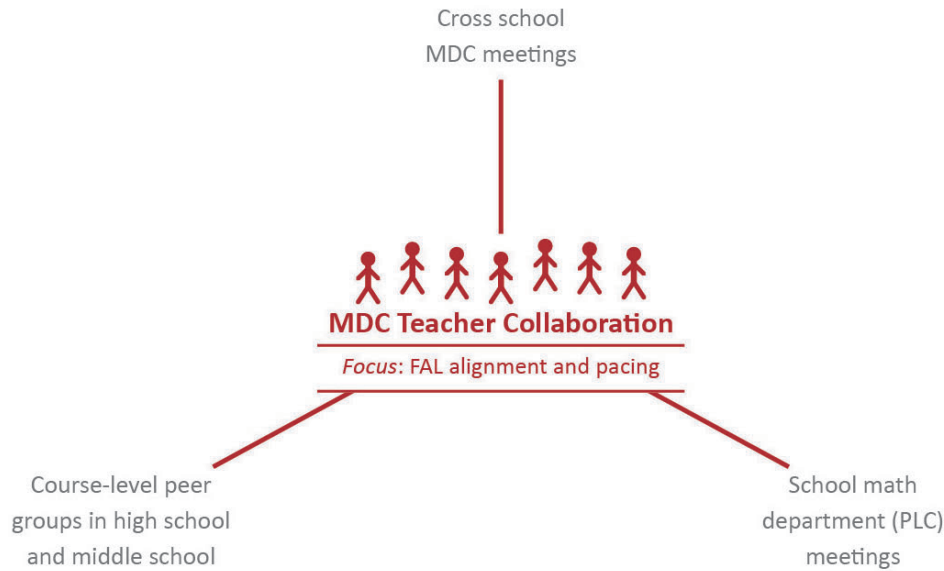
The LDC senior leader emphasized the significance of teacher collaboration at the course level to determine where a module fits well in their content and then designing that module together. This kind of collaboration began in Year Two and continues in Year Three. The leader noted that “the power of teacher discretion in the LDC framework cannot be overstated.”

Figure 5. LDC Teacher Collaboration



**MDC teacher collaboration often occurred in district-wide or department meetings and focused on implementing the Lessons.** Due in part to the pre-developed nature of Lessons, district leaders encouraged collaboration through more formal PLOs that addressed not only Lesson use in the classroom, but also their alignment and pacing within the curriculum. These more formal opportunities included district-wide, after-school professional development sessions, pre and post Lesson implementation meetings with course-level peer groups and professional learning community or math department (PLC) meetings. For example, high school math departments often made time in their monthly PLC meetings to discuss MDC implementation. Figure 6 illustrates the main forms of MDC teacher collaboration.

Figure 6. MDC Teacher Collaboration



### What did this strategy mean for the district?

**Large percentages of LDC teachers agreed that collaboration was helpful.** In surveys, LDC teachers agreed that collaboration was helpful in:

- Developing LDC modules (90%);
- Revising LDC modules (90%);
- Implementing LDC modules (90%);
- More effectively using the LDC framework (87%);
- Better supporting student learning (87%);
- Using students' products to inform their instruction (80%); and
- Providing helpful feedback to students about their writing (77%).

In interviews, teachers confirmed that collaboration was helpful for both teachers who had experience with LDC and those that were using modules for the first time. A teacher with LDC experience described how she benefited from collaboration with her peers during the second year of the initiative:

*It was really good for me to get feedback from teachers on the module I developed last year. The process was awesome. I loved sitting down with the other teachers and having them buy in. I just got an email from a teacher at another school that asked me how to grade the final copy. Last year I was kind of on an island by myself. It's neat to see everybody doing it this year.*

A middle school ELA teacher working with LDC for the first time conveyed the benefit of being able to rely on her more experienced peers during the second year of the initiative:

*The experienced LDC teacher walked us through all these steps because we had never seen the foundations for this. Getting this thrown at you is overwhelming. But to have somebody to talk to who had gone through the training last year and worked with it all, made it a lot easier for us to understand what we were looking for.*



**Large percentages of MDC teachers also agreed that collaboration was helpful.** In surveys, MDC teachers agreed that collaboration was helpful in:

- More effectively using the Lessons (93%);
- Determining where to use a Lesson as a unit (90%);
- Better supporting student learning (85%);
- Using the Lessons in my class (88%);
- Facilitating collaborative group work (88%);
- Developing feedback questions (88%);
- Facilitating the plenary or whole-class discussion (85%);
- Reviewing pre-assessments (81%); and
- Determining how to group students (71%).

In interviews, teachers described the format and benefits of MDC teacher collaboration. One math department head described how she convened department meetings for teachers to plan together before using a Lesson:

*I call a meeting and we sit down to decide which Lessons we're going to do and to go through them together. We look at each part of it. If one teacher has done one already, we ask her 'what did you do, how was it?' We talk about the different sections and help each other.*

**Teacher collaboration spread beyond LDC and MDC.** District leaders effectively encouraged collaboration through PLOs tailored to the specific needs and characteristics of the LDC and MDC initiatives. Many teachers in Kenton County had never worked with subject area peers from other schools prior to their participation in these initiatives. In interviews, teachers described how instructional collaboration grew beyond their participation in LDC or MDC.

A middle school ELA teacher and high school math teacher described how LDC and MDC collaboration helped create a group of teacher peers across the district:

*My grade level/content area group met to develop our module after school and online. What I loved about those meetings was that I got to meet other teachers and form friendships throughout the entire district. Because of those [LDC] meetings, I got to know other teachers and we now shoot ideas back and forth all the time. It's had benefits beyond just the Gates work.*

**District leaders are devising strategies to ensure the sustainability of MDC and LDC PLOs and collaboration.** Kenton County school district leaders recognized that sustaining LDC and MDC professional development and collaboration beyond the Gates Foundation grant will be challenging, and they have begun to devise strategies that can respond to this funding change. One strategy under consideration is to let teachers apply some of their required professional development hours to LDC and MDC PLOs. District leaders are confident that the strong collaboration networks they have cultivated over the past two years will help sustain the initiatives. The district's MDC senior project leader conveyed this confidence:

*I know there are really deep-seated relationships among teachers at particular grade and course levels across the district. Even though they might not meet as often as they do now, that communication and collaboration will continue.*

**Despite high satisfaction, collaboration is still a work in progress.**

Teachers faced scheduling and planning time challenges in their efforts to collaborate with their peers. At the high school level, teachers were on different school-year schedules - semesters vs. trimesters. This meant that even when teachers were teaching the same course, they were not teaching the same topic at the same time. This was a bigger issue for LDC because teachers were working closely on module planning and needed to spend more time collaborating across schools outside of formal meetings.

In general, MDC teachers had more common planning time than LDC teachers, and middle school teachers had more common planning time than their high school peers. Overall, more than two-thirds of MDC teachers (71%) had common planning time with MDC colleagues, but only about two-fifths of LDC teachers (39%) had common planning time with their LDC colleagues.

## **VI. District Strategy: Develop Teacher Leaders who will Help Sustain the LDC and MDC Work at the School and District Levels**

### **What did district leaders do?**

In a strategy closely aligned to their teacher collaboration work, Kenton County district leaders began cultivating teacher leaders from the initial stages of the LDC and MDC initiatives. Consistent with their responsive approach, they tailored teacher development efforts to the specific needs of each initiative.

**Teacher involvement in LDC started small and district leaders developed teacher leaders from this group.** During Year One of the LDC implementation, district leaders engaged a small group of 11 teachers representing science, social studies and ELA across all the middle and high schools. They identified teacher participants who were successful in teaching their content and who had an interest in incorporating strong literacy practices into their teaching.

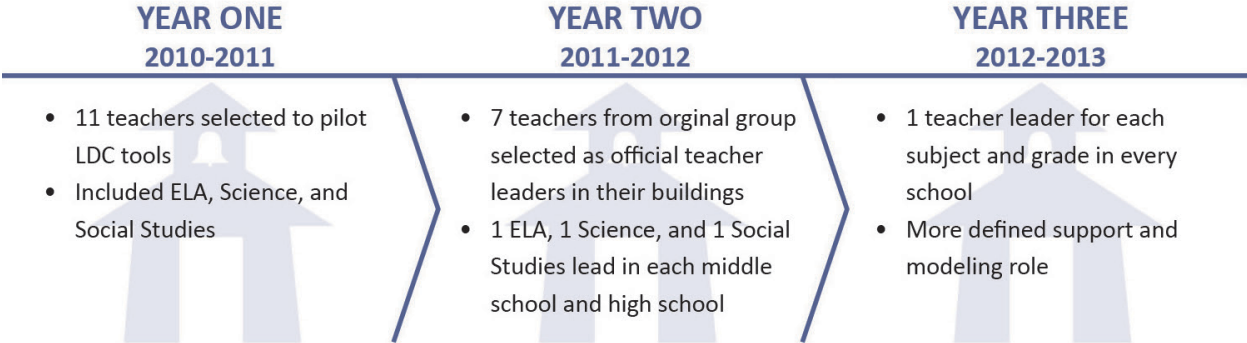
In Year Two, district leaders designated seven of these teachers as teacher leaders. There was a subject lead for each of the three content areas in both middle schools and high schools. Experienced teachers' primary role during the second year was to support new teachers throughout module creation and implementation.

In preparation for Year Three (2012-13), district leaders bolstered the role of LDC teacher leaders. In Year Three:

- An LDC teacher leader for each course and in each school met with grade-level groups throughout the module development or revision process. Both district and teacher leaders usually participated in pre- and post-implementation meetings;
- Teacher leaders are expected to be available as a resource for module implementation and to “capture video artifacts of their instruction that could be useful to other teachers;” and
- Teacher leaders led or co-led analysis of student work, and after module implementation, oversaw a group reflection process to coordinate module revisions and distributed the revised modules to the group.

Figure 7 illustrates the progression of LDC teacher development across the first three years of implementation.

Figure 7. The Growth of LDC Teacher Leaders from Year One to Year Three



**MDC quickly involved all high school and middle school teachers and the district math leader selected teacher leaders who showed promise in tool use and who could champion the tools.** MDC high school teacher participation started big, engaging most high school math teachers during the “readying” year. A small group of middle school teachers became involved in Year One and all middle school teachers were involved in Year Two.

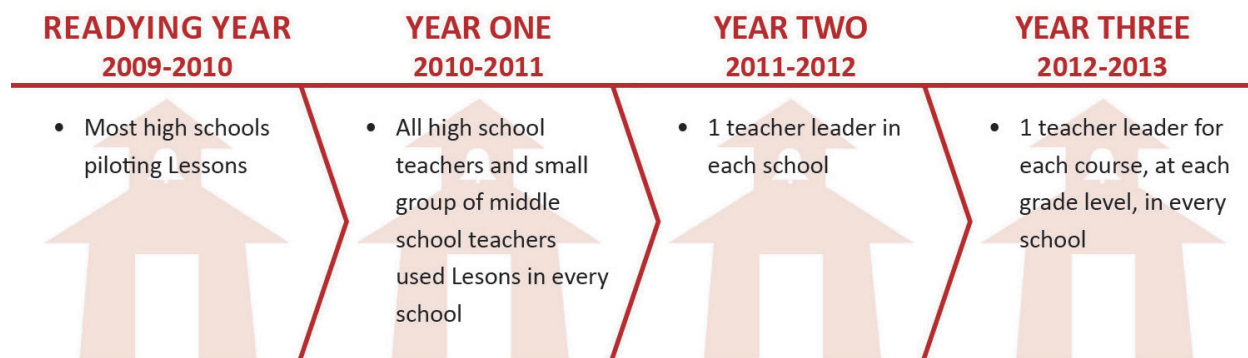
In Year Two, the MDC district leader designated one teacher leader in each building who had used the Lessons during the previous year. These teacher leaders provided support to their peers and shared promising practices.

In preparation for Year Three, district leaders developed a more formal structure for teacher leaders, identifying teacher leaders for each course at each grade level across district schools. They worked to clarify teacher leader responsibilities and expectations, which included the following:

- Communicating with teachers across the district at their content level about MDC;
- Helping with Lesson review, alignment, and pacing during professional development sessions;
- Teacher leaders usually led pre- and post-implementation meetings, with the support of district leaders; and
- Videotaping themselves for professional development purposes.

Figure 8 illustrates the progression of MDC teacher development from the initial readying year to the current implementation year.

Figure 8. The Growth of MDC Teacher Leaders from Readying Year to Year Three



### What did this strategy mean for the district?

Even though the work of developing teacher leaders is in progress and continues to evolve as teachers gain more and deeper experience with the tools, teachers and principals are finding their role helpful. A middle school principal described the specific role of the LDC teacher leader in her building.

*The experienced LDC teacher in my building is doing two things this year as my lead. In the design phase, she is working with three other 8<sup>th</sup> grade social studies teachers to look at her modules and new modules for 8<sup>th</sup> grade. She's also consulting on the design of 6<sup>th</sup> and 7<sup>th</sup> grade social studies modules.*

A high school math teacher described the benefit of having someone to talk to about MDC in his building:

*It helps that these lead teachers are so strong, positive, and encouraging. It makes MDC that much stronger that we can talk to other people in our school who are doing the work.*

**LDC and MDC teacher leaders have taken their work beyond Kenton County.** District project leaders supported teacher involvement beyond Kenton County in regional and national meetings about LDC and MDC. Kenton teachers often played a leadership role in these gatherings, presenting about their work. A math teacher described the transformative effect of representing the MDC initiative outside of Kenton County.

*This summer, I attended the national LDC/MDC meeting and have started spreading the word. I am very involved and it started from the summer. It's been exciting and I think I've emerged as a leader. The more that I use the tools in my classroom, the stronger I get in implementing the strategies.*

In fall 2012, four Kenton County math teachers earned an invitation to a national education conference sponsored by Student Achievement Partners to become Core Advocates.<sup>8</sup>

At the conference, these teachers will be asked to take on a variety of roles, including: speaking and writing on behalf of the CCSS in professional learning settings, at public forums, and through published works; reviewing resources for quality in support of CCSS implementation; and collaborating with Student Achievement Partners to develop future tools and resources. The district's MDC project leader lauded their work:

<sup>8</sup> Retrieved from Kenton County website: <http://archive.constantcontact.com/fs029/1102382262043/archive/1111213323629.html>.

*This invitation is well deserved. These three teachers have done an amazing job implementing this work in their classrooms and have been leaders in scaling this work in the district.*

Just as they saw collaboration as critical to the scale and depth of the MDC and LDC initiative, district leaders see teacher leaders as key to sustaining the initiatives beyond the Gates Foundation funding. To this end, they have effectively employed strategies to transfer some of the MDC and LDC leadership to the building level so that, as the math senior project leader said, “the teachers really do own them.”

## VII. District Strategy: Continuously Reflect On, Assess, and Refine Implementation Strategies

### What did district leaders do?

In their frequent interactions with teachers and principals, district project leaders intentionally sought to identify strengths and weaknesses of the initiatives in order to make adjustments and changes that would strengthen overall instructional practice and student learning. In their daily work, including the coordination of formal and informal PLOs, they created space and time for principals and teachers to give them feedback about the initiatives. They listened to their requests, questions, and concerns and made changes accordingly, sometimes between one school year and the next, and other times during the same school year. Project leaders’ high level of flexibility and adaptability enabled them to address implementation issues in a timely manner.

Because a large part of the district leaders’ role related to professional development and support, many of the strategy reassessments and modifications captured in RFA’s research are related to these PLOs. However, there were larger initiative changes that were implemented as a result of project leaders’ overall reflective and adaptive approach to the initiatives.

Two of these larger changes relate to the expansion of LDC and MDC to middle schools.

- For LDC, the plan in the Gates Foundation grant was to have one person from each grade and content level in each school participate in the initiative. However, during Year One, middle school principals asked district leaders to include more teachers. As a result, district leaders decided to include all middle school English, science and social studies teachers in Year Two.
- In the case of MDC, growing enthusiasm for the initiative across the district, led district leaders to expand MDC to middle schools without additional funding from the Gates Foundation and prior to the development of middle school-validated Lessons.

**District leaders modified PLOs to strengthen tool use in the classroom and build teacher capacity to lead and sustain the initiatives.** District leaders assessed and revised the format and content of LDC and MDC PLOs to improve their effectiveness in building teacher knowledge, skills, and capacity to use the tools in the classroom and provide support to their colleagues. This ongoing assessment resulted in the evolution and improvement of PLOs from year to year – and sometimes midyear – in response to emerging issues and needs.

**After receiving feedback from teachers and principals, district leaders involved all LDC teachers in module development or revision.** During the fall of Year Two, it became clear that a subgroup of LDC middle school teachers who had not participated in module development had less knowledge about how to use modules in the classroom and expressed less buy-in than teachers who had

developed modules. One middle school teacher who received a pre-prepared module conveyed this challenge:

*I do not have much ownership of that module. It was just handed to me and I had to go to my counterpart, show it to her, and wade through it to figure out how to do it with little direction.*

In response to this challenge, district leaders revised their PLO plans midyear and involved all teachers in module development or revision during the second half of the school year. For example, one LDC project leader led meetings to help groups of teachers design the skeleton of the module, which teachers could then complete outside of the meeting. The project leader described the higher level of teacher buy-in once all involved teachers had the opportunity to develop a module.

*We got much more buy in, much more enthusiasm, and the clarity that we were looking for. Before, they felt like outsiders, like we were just asking them to do something and they didn't understand the purpose.*

Survey data indicated that this modification impacted most LDC teachers. Ninety-five percent of LDC teachers indicated that they developed at least one module during the 2011-12 school year, and 92% of teachers said that they understood how to use an LDC instructional ladder.

**After learning about Lesson pacing and timing challenges from teachers, district leaders convened math teachers during the summer to coordinate Lesson placement in curriculum maps.** In Year Two, the district's math project leader listened to teachers' perceptions of challenges related to requiring Lesson implementation to take place when PLOs were offered, and adjusted the Lesson implementation strategy so that teachers could have more ownership and autonomy over which Lessons to use and when to use them in Year Three. She organized summer sessions by school and grade level for teachers to work together to place specific Lessons in the curriculum map. This gave the teachers control of the timing of Lesson use and also enabled the project leader to implement pre- and post-implementation meetings with school and grade-level teacher groups during the school year.

### **What did this strategy mean for the district?**

**District leaders' reflective and responsive stance influenced the overall success of their strategic approach.** The PLO and broader adjustment strategies described in this section illustrate district leaders' commitment to continually reassess the effectiveness of their implementation strategies. This intentional and responsive stance toward their strategic approach enabled them to proactively address challenges and engage a large pool of teacher and principal talent in finding solutions. Their hybrid leadership skills - staying focused on the overarching goals of LDC and MDC while also paying close attention to the individual challenges and successes of teachers – facilitated a “top-down/bottom-up” approach that ultimately enabled district leaders to significantly strengthen teacher tool use in the classroom and expand the scale and depth of the initiatives throughout the district.

In continually reassessing and refining efforts focused on deepening and aligning tool use with the CCSS, they modeled the creative thinking and flexibility needed to sustain the LDC and MDC work in Kenton County beyond the Gates Foundation grant.

## Questions to Consider

This case study was designed to provide a concrete example of how one school district adopted and scaled the use of the LDC and MDC instructional tools. As your school or district considers how to adopt or scale the use of the tools, we suggest that you consider the following questions:

1. What does your school district do to highlight LDC/MDC's alignment with the CCSS?
2. Does your school district employ the use of project leaders to coordinate and support tool implementation? How do their responsibilities compare to those of Kenton County project leaders?
3. In what ways are the LDC/MDC initiatives aligned with your district's curricula and your state's standardized assessments?
4. What kinds of PLOs does your school district provide? Do these PLOs reinforce strategies needed to implement LDC/MDC?
5. What kind of opportunities do teachers in your district have to collaborate around LDC/MDC? What other kinds of collaboration would be useful?
6. Does your school district have teacher leaders within your schools who are experts in LDC/MDC? What is their role and how can it be strengthened?
7. How have your LDC/MDC implementation strategies changed over time? Have they changed in response to lessons learned?
8. What suggestions do you have for sustaining LDC/MDC in your district?



## About Research for Action

RFA is a Philadelphia-based nonprofit organization. We seek to use research as the basis for the improvement of educational opportunities and outcomes for traditionally underserved students. Our work is designed to strengthen public schools and postsecondary institutions; provide research-based recommendations to policymakers, practitioners, and the public at the local, state, and national levels; and enrich the civic and community dialogue about public education. For more information, please visit our website at [www.researchforaction.org](http://www.researchforaction.org).

### About RFA's Work to Study the Implementation of LDC/MDC Teacher Tools

RFA recently concluded a two-year, mixed-methods study examining early implementation and roll-out of literacy and math tools aligned to the CCSS in multiple sites across the country. RFA researchers collected survey data and conducted observations and interviews to determine teachers' use and perceptions of the tools.

After two years, RFA has produced a number of research products geared to both inform the Gates Foundation's strategy for supporting use of the tools, and for the teachers and administrators who are or will be using them. A complete listing of products associated with this project can be found at <http://www.researchforaction.org/rfa-study-of-tools-aligned-ccss/>.

As follow-up to this study, RFA is conducting a parallel study to examine the context and conditions necessary for scaling and sustaining tool use across districts and states, and for maximizing their impact on teacher effectiveness and student learning. RFA serves as the lead organization in a consortium of research partners that is examining tool effectiveness and scale up strategies, which includes WestEd, the UCLA Center for Research on Evaluation, Standards, and Student Testing (CRESST), Measured Progress, and the Center for Assessment and Learning (SCALE) at Stanford University.

Look for additional publications – including these four case studies, updated teacher booklets, and an interim report on state-level scale up and sustainability of these tools – in 2013.