Listening
Tour:
Fall 2014
Dear reader:

We see Eureka Math, and indeed all our curricula, as living documents, responsive to and rooted in the experience of its users. I'm pleased to share with you our findings from a “Listening Tour” we conducted this fall. This tour, during which we visited school districts in four different states (Louisiana, New York, Arizona, and California), is the second in a series of tours we plan to continue, not only for Eureka Math users, but for those implementing our ELA and history curricula as well. A typical Listening Tour visit lasts about two days, and includes focus group discussions with teachers and administrators, classroom observation and debriefs, and a parent night. This fall, we visited 15 elementary, middle, and high schools, and listened to feedback from about 200 teachers, administrators, and parents.

The findings summarized here reinforce what we heard in our first Listening Tour in spring 2014. For example, teachers spoke to us about the need for collaboration and resource-sharing; we're now launching a virtual community exchange that will allow Eureka Math users to network and share best practices. We also heard some new concerns, such as aligning assessments to state tests and the need for video footage of exemplary classrooms.

The feedback we receive during these tours helps us continually improve the curriculum, develop effective professional development, and create the right resources to support teachers. We are grateful to St. Charles Parish Public Schools, Deer Park School District, Yuma Elementary School District One, and Berkeley Unified School District for giving us this opportunity to listen.

Sincerely,

Lynne Munson
President and Executive Director
Great Minds
#1: Getting started with implementation

Although the first year of implementation, especially the first few months, was challenging, we heard from educators that Eureka Math was one of “the best math programs” they’ve ever used. They believed that it either was, or would be, responsible for building deeper understanding and problem-solving skills in students.

At the same time, teachers reported feeling overwhelmed by the density of material in each lesson, the ambitious pacing, and the struggle to meet the needs of students coming into the curriculum unprepared. The biggest design-related frustrations seemed to be: a) the density of the lessons (e.g. “the curriculum is a mile wide and a mile deep” – administrator at Deer Park Schools), b) a perceived disconnect at times between what’s taught in the concept development and what students are expected to do in the problem sets, and c) the need for more practice and example problems, particularly for success by lower-level students.

Time with the curriculum really seemed to be the determining factor in a teacher’s general comfort level and ability to navigate their way through some of these challenges. Those in their second year of implementation felt more confident using the curriculum. A K-5 math teacher leader at Berkeley Unified School District reported that having one year of experience was a “huge game-changer, [making it] much more doable, [and making] choices more purposeful.”

The feature of the curriculum most often cited for recognition was its coherence across the K-12 continuum. “I really, really love the cohesiveness of how the curriculum is developed as you go through the grade levels,” said one teacher leader at Berkeley. Our team discerned a real confidence about the mathematical and pedagogical choices made by the curriculum writers and a respect for the balance that had been achieved between fluency, conceptual understanding, and application.

Even in places where implementation had been challenging, we heard universal support for sticking with the curriculum and confidence about future results as current students advance through the grades.
While the implementation of *Eureka Math* is extremely challenging, educators see great value to the program, both in terms of student learning and in their own development as professionals.

#2: Leadership and collaboration

It was clear to us that the more opportunities available to collaborate, particularly with colleagues at the same grade-level, the more confident teachers felt with the curriculum and the more successful their implementation was. Teachers reported that working together with grade-level colleagues to make strategic instructional choices, discuss pacing, and reflect on their implementation was among the most valuable support they could receive.

The deep involvement by district and school leadership in implementation was vital, primarily because they could put structures in place to support the needed collaboration and PD, and because their dedication to making it work helped everyone through the challenges. Specific supports that administrators were able to provide included

- allowing teachers to participate in decision-making processes,
- regular classroom observations and feedback sessions,
- vertical and horizontal collaboration time, and
- departmentalization of upper elementary grades to allow for more grade-level planning time.

Grade-level collaboration and strong administrative leadership are keys to successful implementation.

#3: Sustained professional development

Virtually everyone we spoke to who had participated in professional development (PD) delivered by the *Eureka Math* team reported that it was very valuable. The predominant message we received is that there just wasn’t enough of it. A number of teachers reported feeling “abandoned” after having received initial PD support.

Specific suggestions for improving PD included:

- providing teachers with a better understanding of the “big picture” before diving into the “how to” training,
- not engaging in “random acts of demonstration,”
- focusing on implementation, and
- providing more videos of model lessons and classroom footage from the start to finish of a lesson.

A big take-away for our team was that teachers were so consumed by day-to-day lesson preparation that they didn’t have the time needed to study the curriculum as a whole. Because they weren’t familiar with what was coming next, and the progressions within a grade level and throughout a grade band, they didn’t feel as nimble as they’d like in making instructional choices that would not undermine later lessons and would support the needs of all learners.
There was considerable discussion about the need for support in customizing lessons to fit individual classroom needs. Many teachers expressed the desire to see what a Eureka Math classroom would look like with “real students.”

When asked about the kinds of PD that would be most useful at the start of implementation, the following three topics were ranked most important:

- grade-specific PD,
- demonstration lessons (in particular fluency lessons), and
- how to plan effectively.

In terms of ongoing support our organization might be able to provide, the message was: timing does not reflect how long it really takes to do an activity and there are too many lessons anyway; Deer Park teachers said the biggest question is figuring out what can be skipped over. Teachers from all four districts expressed the need for guidance on how to “strategically customize” lessons and make choices about what to do and not do.

### #4: Assessments

We heard a lot about assessments. On the whole, teachers like the exit tickets at the end of each lesson, feeling they provide useful feedback on students’ understanding of the topics covered and that they are a flexible diagnostic tool. On the other hand, teachers, particularly elementary teachers, have reservations about the mid-module and end-of-module assessments, feeling they introduce more complex problems than students have practiced in class. Teachers said the time between instruction and the end-of-module assessment was too long; they need many more assessments throughout the module.

Finally, we noted that districts and schools have expectations of the existing assessments that exceed their original intent. Their lack of alignment with state tests, the fact that they’re paper-pencil based when state tests will be administered online, that they were difficult to score using the rubrics provided, and that they couldn’t be correlated to standards to generate predictive proficiency information were among the concerns we heard. (More on assessments below.)

### #5: Parents resources

We spoke to district staff about the reaction of parents to the Eureka Math curriculum and also spoke directly to parents. Parents are frustrated less about the right or wrongness of this new way of doing math and more about their inability to help their children with homework because the terminology, models, and routines are so different. They can’t help their children
if they don’t understand it themselves. And without resources for them to do so, tension reigns. We asked teachers and district leadership what resources they’ve found most beneficial and 94 percent said that having sample problems with homework pages, where parents could see examples of how problems were actually worked out, would be a big help. In fact, we heard in multiple focus groups that sample problems were needed for each lesson on, not only for parents, but also as a reference for students.

Parents need resources to help their children with homework.

#6: Student knowledge and attitudes

An overwhelming majority of teachers we spoke to said that students were showing progress like they have never seen before and that, as a teacher from Berkeley said, “students have ‘aha’ moments all the time with this curriculum.” That is not to say that the transition is not challenging for kids. Some teachers were concerned that it was best suited for advanced students, some were concerned about a negative impact on student confidence, and others wondered if it would produce an even wider gap between the high-performing and low-performing students.

While an administrator at Albert Cammon Middle School reported a large cohort of students who “don’t get it,” teachers throughout St. Charles Parish said that as they find their momentum with the curriculum, students do indeed rise to the challenge and start to understand why they’re doing what they’re doing.

We heard from teachers that their higher-level students were balking at having to explain how they got answers, but they believed these students’ needs were being met and that the challenge of dialoguing about math and considering alternative strategies was good for them. We heard multiple teachers say at St. Charles and Berkeley, “there are options for math success even for struggling kids [because] there are multiple strategies for each student.” What we were told is that even though the lower-level students struggle, they’re not giving up because they have something meaningful to work with. One teacher from Emerson Elementary in Berkeley said, “They are more successful with this program than any other in 33 years.”

Overall, we heard that despite the challenges and frustrations, “we are creating children that think” and “it’s taking our math students farther than we ever expected them to be” (administrator at Yuma Elementary School District).

Although the transition for students is challenging, teachers see remarkable progress in students’ knowledge and attitude toward mathematics.
Response to “Key Findings” 1-3

Getting started with implementation

Leadership and collaboration

Sustained professional development

In response to these findings, our team is preparing an implementation guide that identifies practices supporting a successful implementation, including healthy homework practices, lesson planning and pacing guidelines, recommendations on the use of formative assessment data, and structuring of professional collaboration time. The guide will also include a long-term trajectory of professional development that provides flexible timelines of PD topics for administrators, instructional leaders, and teachers, beginning as early as a year prior to the start of teaching. The structure empowers schools to make the most of training opportunities by doing appropriate pre- and post-training work at their school sites.

Our focus is on developing site-sufficiency and self-sustainability. To that end, we have reworked our professional development sessions to be more process-oriented (than information-oriented), addressing questions like the following:

- “How do we study the curriculum to prepare a lesson?”
- “How do we practice an instructional component?”
- “How do we analyze data and apply it to our lesson preparation?”
- “How do we customize a Eureka lesson to meet the needs of students?”
- “How do we analyze our teaching practice?”
- “How does an instructional coach or colleague best support the effectiveness of a colleague?”
We are excited to expand the use of classroom video footage, student work, practice, and demonstration within our PD sessions and resources, thereby keeping the classroom reality ever-present.

To vastly increase the ready availability of resources and support to implementing schools, the *Eureka Math* team plans to host an on-line community exchange – facilitating collaboration among Eureka implementers through discussions and sharing of resources and ideas.

We currently offer a support page for teachers, which includes pacing guidelines, parent tips, and release notes: [http://greatminds.net/support](http://greatminds.net/support). These resources are available to all users at no cost.

**Response to “Key Finding” #4**

*Assessments*

We are collaborating with providers of a web-based assessment platform to offer a comprehensive tool for assessment and data analysis. The tool will allow teachers to build formative and interim assessments, choosing from a bank of items that align to their current progress through the curriculum. Data from these assessments can be immediately available to inform instructional decisions at whatever frequency is desired and tracked across the year to measure student progress towards mastery of standards and preparedness for state tests.

**Response to “Key Finding” #5**

*Parent resources*

We are piloting a resource that provides annotated worked examples of problems analogous to the homework for each lesson. The sample problems are intended to build parents’ understanding and prepare them to confidently support their children with homework on a daily basis. In higher grades, the resource can be used by students themselves.

Parent tip sheets are also available for each Module from Grades Pre-K to 8 on our website: [http://greatminds.net/parents](http://greatminds.net/parents).

**Response to “Key Finding” #6**

*Student knowledge and attitudes*

Our team is deeply vested in the maturation of the curriculum. It is our intention that these revisions leverage the current strengths of the program while improving its usability and mathematical coherence. The following list highlights some key revisions in-the-works.

- Tools for efficiently identifying and bridging gaps in students’ prerequisite understanding and skill.
- Reduction in the density of lessons across all grade levels to more succinctly convey the essential learning sequences, diminishing the ‘mile deep’ effect.
- Clear guidance on how teacher and student use of terminology is intended to evolve across grade levels.
Fluency resources organized in a way that empowers teachers to more responsively meet classroom needs; middle school teachers will gain ready access to fluencies targeted at remediating missing skills from Grades 3 through 5.

\[^1\text{Resources listed in responses to Key Findings #1-4 will be available by fall 2015.}\]
Appendix

Great Minds Participants

St. Charles Parish Public Schools
- Lynne Munson, President and Executive Director
- Scott Baldridge, Lead Mathematician and Writer
- Jill Diniz, Program Director
- Robin Ramos, Lead Instructional Coach
- Adam Baker, Lead Curriculum Writer
- Nashrah Ahmed, Coordinator of User Experience

Deer Park Public Schools
- Robin Ramos, Lead Instructional Coach
- Natanya Levioff, Director of Program Operations
- Tim Shen, Customer Relations Associate
- Melanie Gutierrez, Lead Curriculum Writer

Yuma Elementary School District One
- Barbara Davidson, Deputy Director
- Robin Ramos, Lead Instructional Coach
- Deb Meyer, Director of Sales
- Stefanie Hassan, Lead Curriculum Writer

Berkeley Unified School District
- Barbara Davidson, Deputy Director
- Robin Ramos, Lead Instructional Coach
- Marjani Warren, Account Manager
- Lacy Endo-Peery, Lead Curriculum Writer

We want to hear from you.

We’d like to give all of our users a chance to voice their feedback. Click here to share your answers to some of the questions we asked during the Listening Tour.

Send us your thoughts, questions, or comments at http://greatminds.net/contact or call us at 202-223-1854.