

CCSS Literacy and Math Tools

*An Interim Report on
Implementation and Sustainability
during the Pilot Year*

Research for Action

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Executive Summary

CCSS Literacy and Math Tools: An Interim Report on Implementation and Sustainability during the Pilot Year

Overview

This document summarizes the findings from the initial round of research on the development and piloting of two types of instructional tools designed to support teachers’ integration of the Common Core State Standards in literacy and math. In this interim report, Research for Action (RFA) presents key findings from the first half of the 2010-2011 school year in the following five categories:

- Literacy and math theories of action
- Strategy for the development and implementation of literacy and math tools
- Tool implementation and use
- Sustainability
- Recommendations

Research Methods

The report is based on the following data:

Data Source	Literacy Initiative	Math Initiative
Teacher Surveys	4 sites 50 surveys	1 site 18 surveys
Interviews with Teachers ¹	4 sites 50 interview respondents	1 site 20 interview respondents
Interviews with Principals and District Administrators	4 sites 19 interview respondents	1 site 2 interview respondents
Classroom Observations	4 sites 24 observations	1 site 15 observations
Professional Development Observations	3 sites	2 sites

¹ Note: Teacher interviews about the literacy initiative include 9 reading coaches, 2 special education teachers, and 1 reading specialist. Teacher interviews about the math initiative include 2 special education teachers.

Literacy and Math Theories of Action

The Foundation’s strategy in this initiative is driven by theories of action (TOAs) that presume a supportive and ready context; extensive pilot testing in early adopter sites to test, refine and scale the use of the tools; robust implementation; and growing impact of the tools on classroom practice and student learning. (See the full report for two TOAs that highlight aspects unique to literacy or math.)

Strategy for the Development and Implementation of Literacy and Math Tools

The Foundation’s strategy for the development of literacy and math tools provides some commonality across the literacy and math tools, but also accommodates flexibility in the program developers’ approach so that the tools meet the distinct needs of the literacy and math initiatives.

Common strategy elements include:

- The Foundation partnered with program developers with expertise in literacy and math to create tools.
- The Foundation selected pilot sites through two approaches.
- The Foundation supported the development of tools designed to address core activities of teaching and learning in literacy and math.
- The Foundation supported tools requiring teachers to adopt new instructional practices.
- The Foundation provided support for sustained professional development during the pilot year.
- The Foundation supported a rigorous evaluation of the pilot phase.

Findings

1. Literacy Tool Implementation and Use

Literacy Tools in Action:

- 92%² of teachers in the pilot sites believed that Task 11 was a good fit for their curriculum and 82% reported that Task 11 was a good fit for their students.
- Literacy tools were aligned with the pedagogical practices of most English teachers.
- Science and social studies teachers appreciated the opportunity to integrate writing into their classes.

² In one site, reading coaches developed modules. All of the bulleted findings in this section apply to both teachers and reading coaches.

- At some sites, collaboration around the LDC work broadened to include other educators, including librarians, special education teachers and/or reading specialists.

Challenging Aspects of Literacy Tool Development:

- Many teachers found the current template for creating modules difficult to navigate, especially while developing their first module.
- In initial module development, most teachers/coaches had questions about how to use the instructional ladder.
- Teachers wanted the flexibility to add a few words or revise the wording of the template task.
- Most science and social studies teachers experienced difficulties finding high quality content reading material that met the needs of students with a range of reading levels.

Challenging Aspects of Literacy Tool Use:

- Some science and social studies teachers voiced concern about the amount of time spent on writing at the expense of covering content.
- Teachers found it more difficult to implement modules when they were not involved in the module development process.

Using Literacy Tools to Meet a Range of Student Needs:

- Teachers reported that the modules were flexible enough to adapt to the range of academic abilities of their students, but they wanted more support in differentiating instruction.
- Teachers with a significant ELL student population struggled to differentiate instruction.
- Teachers reported that they could use the tools with their special education students, but reported feeling more successful if they had additional support.

2. Math Tools Implementation and Use

Math Tools in Action:

- Teachers are using the FALs and most (94%) believe that they are aligned to their curriculum.
- All teachers reported that tools are accessible to all students, regardless of their math skill level.
- Teachers facilitated student learning by conferencing with students at the group or pair level during the collaborative activity rather than provide direct instruction.

Challenging Aspects of Math Tool Use:

- The robust implementation of the math initiative was hampered by the limited number of FALs available for teacher use.
- Teachers found it challenging and time-consuming to prepare class materials prior to lessons.
- Teachers were unable to complete an entire FAL in one class period.

3. Sustainability

Sustainability refers to a reform's ability to endure beyond the short-term and the initial infusion of outside support.

Buy-in: Literacy

- Most teachers (92%) reported that the LDC framework is a strong model for teaching literacy in the content areas.
- 92% of teachers using literacy tools reported that the tools provide them with new information about students' knowledge of subject matter and about students' skills.
- Some teachers reported early perceptions of tool benefits, including that they provided a better understanding of students' strengths and weaknesses as readers and writers, and that the resulting student work increased their expectations for what students can do.
- 88% of teachers using the literacy tools reported that they increase student engagement in literacy learning.

Buy-in: Math

- All math teachers (100%) reported that the FALs provided them with a strong and engaging model for teaching mathematics to high school students.
- All teachers (100%) using FALs reported that the tools provided them with new information about students' mathematical thinking skills and said that the FALs gave them useful information about what their students know and do not know.
- Teachers reported that tools also reach those students whose mathematical knowledge and understanding is not particularly strong.

Tool Alignment: Literacy

- Districts and states are currently in the very early stages of their work with the CCSS, and, in many literacy sites, most teachers have had little contact with the CCSS.

- Some literacy sites are able to integrate the new tools with literacy approaches they are already using district-wide.
- In two districts, teachers were concerned about alignment between the template task and/or the module framework and the state standardized assessment.

Tool Alignment: Math

- When considering whether to adopt new initiatives, textbooks, etc., administrators and teachers looked for alignment, compatibility, and consistency with the Gates work.

Human & Social Capital: Literacy

- More than 80% of teachers reported that the support they received in developing and implementing the modules was helpful.
- More than three-quarters of teachers agreed that they wanted professional development on adapting instruction for different populations such as ELL, special needs and gifted learners, and on developing modules and scoring student writing.
- Participating teachers identified peer collaboration as one of the most valued aspects of this initiative's professional development.
- The tool developers' professional development role varied by site as they responded to the different contexts and structures in each site.
- In general, district administrators were more deeply involved in professional development and overall project coordination than were building principals.

Human & Social Capital: Math

- All math teachers (100%) surveyed reported that professional development was helpful.
- While all teachers reported feeling supported by their district to use the FALs (100%), 78% percent reported that they have what they need to use the FALs in their classroom.
- The large majority of teachers using the math tools reported wanting *more* professional development (83%).
- Professional development sometimes competed with instructional time.
- There is both buy-in and engagement from principals about the math work.

Funding and Long-Term Commitment

- At this early stage of the initiative, it is unclear what level of funding is needed to sustain this work once it is established; this has not been an area of focus for our research thus far.

- Individuals in both the math and literacy sites expressed concern about whether there would be enough funding to sustain and scale up this initiative.

Recommendations

RFA has developed an initial set of recommendations intended to strengthen and support how teachers use the tools, and to enhance the prospects for sustaining and scaling-up this initiative.

Recommendations for the Literacy Initiative

- Continue providing teachers with robust professional development, focused on building their expertise in developing modules.
- Provide science and social studies teachers with additional support to locate rich, high content texts at appropriate reading levels and with strategies for providing feedback on student writing.
- Provide support for teachers to develop their facility in using insights from module instruction to inform ongoing teaching.
- Work with educators in specific sites to help them resolve conflicts they articulate between the modules and existing curricula, rubrics, or state assessments.

Recommendations for the Math Initiative

- Provide teachers with packaged sets of lessons to decrease the preparation time for FAL use.
- Provide teachers with more direction about how to group students and arrange seating during the collaborative activity.
- Facilitate more discussion about both formative assessment strategies and how to instructionally respond to the information collected from tasks.

Recommendations for Initiative Sustainability and Scale-Up

- Develop and support principal involvement in and knowledge of the initiatives to preserve tool use in schools.
- Involve practitioners in sharing learning and best practices across sites after the pilot year ends.