

# Louisiana Believes

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## Math Design Collaborative Overview

# WHO WE ARE



The Math Design Collaborative (MDC) is a **community of professional educators** working together to prepare students for college and the 21<sup>st</sup> century workplace.

*THOUSANDS OF TEACHERS ACROSS THE COUNTRY ARE USING MDC TOOLS*

# WHY MDC?



- Supports teachers through the behaviors outlined in the [Teacher Support Toolbox](#), specifically assessment creation and lesson and unit planning
- Lessons can be used with any curriculum a teacher already uses and are built around a set of rich tasks connected to the standards
- Process engages students in a productive struggle with the mathematics essential for college readiness
- Comprehensive professional development is provided by Louisiana trainers/teachers
- Tools and resources for collection and analysis of student and teacher performance data are aligned with [Compass teacher rubric](#)

# HOW WE DO IT



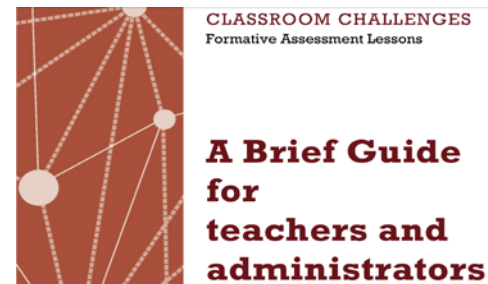
An **online platform** guides teachers through a design process that impels the teacher to grapple and, ultimately, master the Common Core’s instructional shifts while providing access to:

- Professional development modules
- Classroom challenges (formative assessment lessons)
- Resource guides and teacher “how-to” videos
- Student and teacher artifacts
- **Tools that support Unit and Lesson Planning and Assessment in the Teacher Support Toolbox**

# WHAT WE OFFER

## MDC FRAMEWORK DETAIL

### UNIT AND LESSON PLANNING



- The MDC Framework and tools provide **classroom challenges** (formative assessment lessons) that focus on the mathematical practices in the Common Core State Standards for Math.
- The classroom challenges/lessons include concept development lessons and problem solving lessons to **support Instructional Tasks described in the Toolbox.**
- The lessons include:
  - problems for students to tackle and solve
  - samples of student work for students to analyze
  - questions for students to discuss, in groups or as a class.

# WHAT WE OFFER

## MDC FRAMEWORK DETAIL

### ASSESSMENT



- Includes a summative assessment task collection which illustrate the range of performance goals required by CCSSM.
- **Tasks can be used to create Unit Assessments and constructed responses described in the Toolbox.**
- Contains detailed guidance for the teacher on ways to interpret student responses and on providing appropriate interventions, as well as solutions to the tasks.

# WHAT WE OFFER

## MDC FRAMEWORK





# Making Mathematics Matter: The Math Design Collaborative



# ONGOING RESEARCH DEVELOPMENT



Independent researcher, Research For Action, surveyed MDC teachers and confirmed:

- Over 96% of teachers reported MDC lessons deepen students mathematical knowledge
- 84% of teachers said that using MDC lessons is an effective way to teach their content
- 89% of teachers agreed that MDC lessons engage students with different mathematical abilities
- Over 80% of teachers said that their use of MDC lessons has increased their expectations for students' mathematical work
- A strong majority of teachers reported that MDC has helped them implement the CCSS

# FOR MORE INFORMATION...

<http://collegeready.gatesfoundation.org/Learning/MathDesignCollaborative>

## About the Math Design Collaborative

The Mathematics Design Collaborative (MDC) brings to mathematics teaching and learning high-quality instructional tools and professional support services that play a pivotal role in helping the Bill & Melinda Gates Foundation realize its ambitious goal of having 80% of

## MAKING MATHEMATICS MATTER

VOICES FROM STUDENTS AND TEACHERS  
IN THE MATH DESIGN COLLABORATIVE

<http://map.mathshell.org/>

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▶ [Project goals](#)

▶ [Products](#)

**New for 2013:** Ten new 'Classroom Challenge' f available, including [the first five lessons for Grade](#)