

Balanced Mathematics / Cognitively Guided Instruction (CGI)

Presentation to the Board of Trustees

March 4, 2015

Dr. Brett Geithman, & The MBUSD Math Committee

Recommendation Process

- Fall 2013 MBUSD Mathematics Committee was formed
- October, 2013 Elementary Common Core Professional Development through UCLA
- 2014-15 Common Core Professional Development through UCLA
 - 5 days secondary
 - 2 days elementary
 - Up to 120 days of UCLA support for secondary throughout the school year
- Committee researched best practices for mathematics
- UCLA demonstration lessons, December 2014

Recommendation Process

- November, 2014: Math Committee voted and approved (85% threshold) for the Standards of Mathematical Practice to be the MBUSD Mathematics Philosophy
- December, 2014: Math Committee voted and approved (85% threshold) for Balanced Mathematics/Cognitively Guided Instruction (CGI) to be the MBUSD Mathematics Instructional Methodology
- February, 2015: Math Committee unanimous recommendation for the Three-Year Mathematics Timeline

MBUSD Mathematics Philosophy

1. Make sense of problems and persevere in solving them
6. Attend to precision

2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others

4. Model with mathematics
5. Use appropriate tools strategically

7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.



Reasoning and explaining



Modeling and using tools

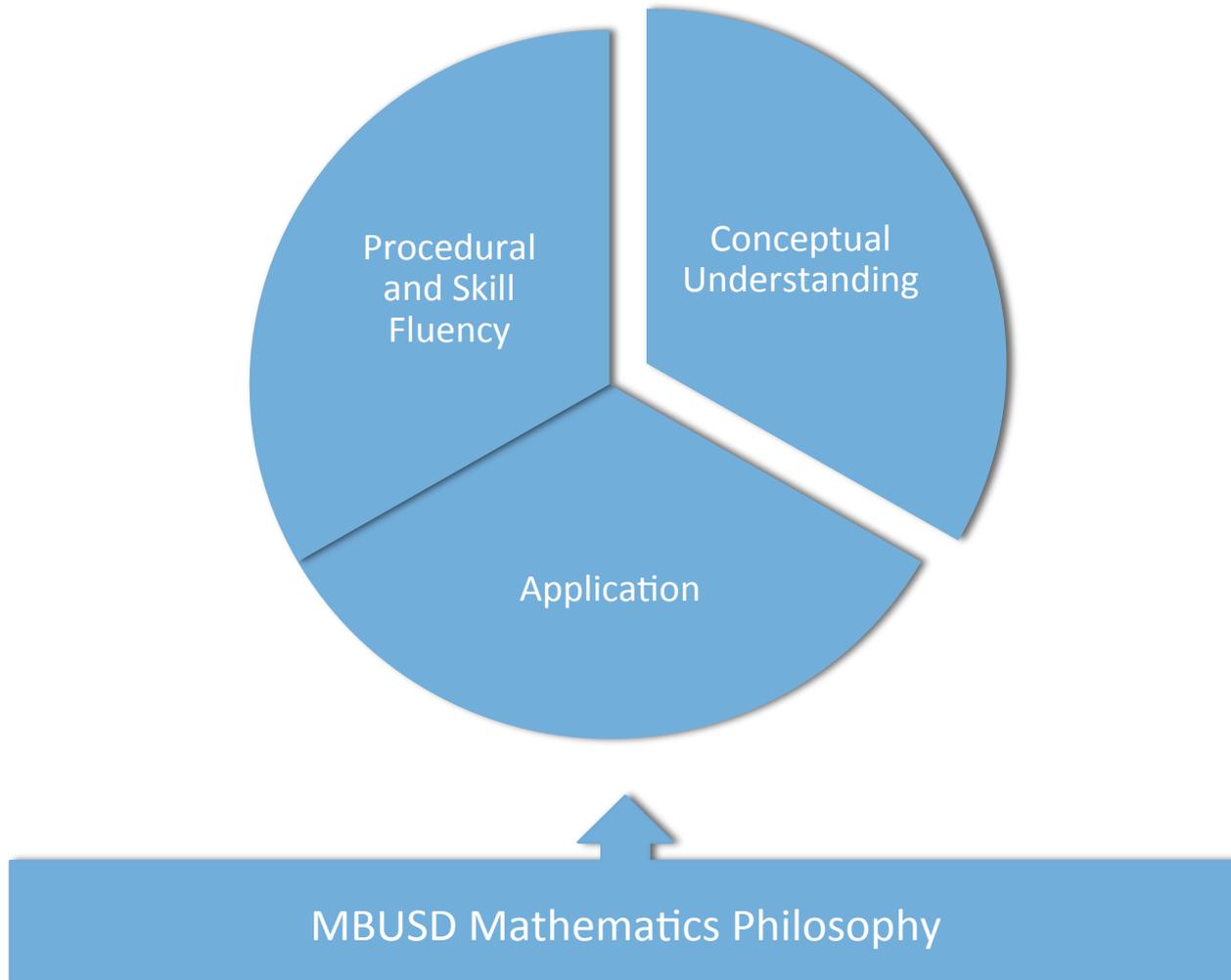


Seeing structure and generalizing



Overarching habits of mind of a productive mathematical thinker.

Instructional Methodology: Balanced Mathematics



How will we transition to Balanced Mathematics/CGI?

2014-15 School Year (proposed plans, pending Board approval)

- March 16th Professional Development Day
 - Elementary: CGI Day 1
 - Secondary: Continue Standards for Mathematical Practice/Balanced Mathematics and instructional planning/collaboration
- Elementary CGI Day 2
 - August 17th or release days in March/April 2015
- Curriculum Mapping
 - Elementary: UCLA, district office, and interested elementary teachers
 - Secondary: \$13,000 for mapping courses using UCLA as a resource

How will we transition to Balanced Mathematics/CGI?

2015-16 School Year (proposed plans, pending Board approval)

- Professional Development Days
 - Elementary: (CGI Day 2: August 17th), CGI Day 3: August 18th or release day in September, CGI Day 4: release day in January, 2016 or summer 2016
 - Secondary: August 19th and 20th
- Secondary Teacher Leader Summer Workshop
- Lesson Study
 - One mandatory, two optional
- Optional After School Workshops
- Coaching
 - Minimum of 2 sessions per teacher
- Curriculum Mapping
- Common Assessments
- Textbook Adoption Process
- Parent Workshops

How will we transition to Balanced Mathematics/CGI?

2016-17 School Year (proposed plans, pending Board approval)

- Professional Development Days
 - Elementary: CGI Day 4 and 5: summer 2016
- Lesson Study
 - One mandatory, two optional
- Optional After School Workshops
- Teacher Leader Coaching Cadre
- New textbook implementation

How will we transition to Balanced Mathematics/CGI?

2017-18 School Year (proposed plans, pending Board approval)

- Lesson Study
 - One mandatory, two optional
- Optional After School Workshops
- Teacher Leader Coaching Cadre

Requests for Approval

- **MBUSD Mathematics Philosophy:** Standards for Mathematical Practice
- **MBUSD Mathematics Instructional Methodology:** Balanced Mathematics/Cognitively Guided Instruction (CGI)
- **Phase I of the Three-Year Timeline**
 - CGI Day 2 release/substitute days (\$11,400)
 - CGI Day 2 summer workshop and CGI Day 3 (\$34,200)
 - Secondary curriculum mapping (\$13,000)
 - *all items are on the consent calendar

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