

CGI Math Teacher Learning Center
www.cgimath-tlc.org
Cognitively Guided Instruction (CGI) – Grades 3-6
3-day course overview
Summer 2019

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Day 1: Multiplication and Division Problems Types and Strategies (Whole Numbers)

1. Welcome and Introductions
2. Overview of Cognitively Guided Instruction
3. Multiplication and Division Word Problem Types
4. Students' Intuitive Strategies for Solving Multiplication and Division Problems
 - a. Direct Modeling
 - b. Counting/Adding
 - c. Relational Thinking
5. Multiplication and Division Relationships – Connections to State Math Standards
6. Using CGI 3-6 in the classroom
 - a. Common Components of a CGI Classroom
 - b. Connect to Standards of Mathematical Practices

Day 2: Fractional Quantities: Equal Sharing Problems and Strategies

1. Opening; questions; recap
2. Developing the Concept of Fractional Quantities - Equal Sharing Word Problems
3. Students' Strategies for Solving Equal Sharing Problems
 - a. Non-Anticipatory Thinking
 - b. Additive Coordination
 - c. Multiplicative Coordination
4. Fraction Concepts Embedded in Students' Strategies – Connect with Fraction Standards
5. How to use Equal Sharing Problems with your students
6. Plan to use Equal Sharing Problems with your students
7. Closing

Day 3: Student Interviews (if possible); Using information about Students to Guide Math Instruction

1. Opening; questions; recap
2. Prepare to Interview Children
3. Interview Children
4. Analyze Children's Solution Strategies
5. Planning instruction based on these children's strategies
6. Fraction Problem Solving Experience – Connect to Standards of Practice.
7. Closing

If it isn't possible to bring in students for math interviews, we can discuss beginning ideas about fraction multiplication and division.