

Better Mathematics Through Literacy Daily Agenda: Day One		
Big Picture Goals: <ul style="list-style-type: none"> • Compare/Contrast Student-centered mathematics instruction with “traditional” mathematics instruction • Introduce and explicate the major tenets of Cognitively Guided Instruction (CGI) • Building Community 		
9:00 am <i>Please Note:</i> <i>All times are tentative and subject to change!</i>		Continental Breakfast Summer Institute Registration Participant Binders Initial Survey and Disposition Forms “Draw Yourself Doing Mathematics”
9:15	Tim, Linda, Susan, Sue, Carolyn, Barry, and Sharon	Official Welcome and introductions Meet your workshop facilitators Meet the Technical Assistance Team Ice Breaker: Five Degrees of Separation
9:40	Tim	Project Overview: Why are we here? and How can I make a difference?
9:50	Linda	Establishing our Community and our Social Norms Setting the tone for our week together
10:10	Tim and Barry	Pre-assessment of mathematics content knowledge and mathematics pedagogical content knowledge.
11:00	Susan	Introducing the T-Chart Perceptions of Student and Teacher Actions in Early Childhood Mathematics
11:15	Sue	Setting the tone for the week – A Read Aloud <i>The Math Curse</i> by Jon Scieszka

11:30		Lunch
12:30	Tim	Becoming Mathematicians: Group Problem Solving The Locker Problem Group Sharing of Solutions and Solution Strategies Group Discussion
1:40	Susan	T-Chart: Part II Student and Teacher Actions during Problem Solving
1:50		Afternoon Break
2:00	Tim & Sue	Cognitively Guided Instruction in the Mathematics Classroom Video Cases: Jasmine, Mr. Myer's Kindergarten class Promoting Meaningful Learning Teaching and Learning for Understanding
2:55	Susan	T-Chart: Part III Reflecting on Cognitively Guided Instruction and Student and Teacher Actions
3:10	Tim	T-Chart Culmination Think-Pair-Share Reflecting on what it means to "Do Mathematics"
3:30	Susan	The Reading and Writing Connections Implications for Mathematics and Literacy Using Writing with Early Childhood Students
3:50	Sue	Growing in the Profession Read-aloud: <i>Mrs. Spitzer's Garden</i> by Edith Pattou How Does YOUR Garden Grow?

4:45	Tim, Susan, and Sue	Daily Feedback Form Homework: Read "Teaching is a cultural activity" by Straub and Hiebert
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Better Mathematics Through Literacy

Daily Agenda: Day Two

Big Picture Goals:

- **Securing the connection between counting and one-to-one correspondence**
- **Building the bridge between counting and addition**
- **Using Cognitively Guided Instruction as a Basis for Number Sense**
- **Developing Place Value and Number Sense through Counting**
- **Creating Counting Books**
- **Building Community**

<p>8:30 am</p> <p><i>Please Note:</i></p> <p><i>All times are tentative and subject to change!</i></p>		<p>Continental Breakfast</p> <p>Welcome Back – Recapping Yesterday</p> <p>Introducing the Parking Lot: a place for your questions and comments</p>
<p>9:15</p>	<p>Susan</p>	<p>Debriefing Homework Reading: Teaching Is a Cultural Activity</p> <p>Thinking about Being Student Centered</p> <p>The Little Boy</p>
<p>9:00</p>	<p>Tim</p>	<p>Let's Think about Counting</p> <p>Scenario 1: The Shepherd Boy</p> <p>Scenario 2: Kids Fighting Over Legos</p> <p>One-to-one Correspondence and Skip Counting</p>
<p>9:45</p>	<p>Sue and Susan</p>	<p>Building Stations that Connect Counting and Literacy</p> <p>Read Aloud: <i>Mouse Count</i> by _____</p> <p>Cheerios, Animal Crackers, and Goldfish! Oh My!</p> <p>Connecting the Stations to OAC Standards for Early Childhood Literacy and Mathematics</p>

10:45		Morning Break
11:00	Tim	<p>Bridging the Gap Between Counting and Addition</p> <p>Building Number Sense and Skip Counting</p> <p>Number Pattern Recognition</p> <p>Activities with Number Cards</p> <p>One more, Two more, One Less, Two Less</p> <p>Anchors to Ten and Twenty</p> <p>“Race to a Flat”</p> <p>Time to Reflect: Which of these activities would you find most useful?</p>
12:15		Lunch
12:45	Sue	<p>Making Connections to Literacy: Counting Books</p> <p><i>Ten Black Dots</i> by Donald Crews</p> <p><i>Twelve Ways to Get Eleven</i> by Eve Merriam</p>
1:10	Susan	<p>More Connections to Literacy:</p> <p>Before, During, and After Readings</p> <p>Interactive Read-Alouds</p>
2:15	Sue	<p>Content integration: Mathematics and Literacy</p> <p>Bottle Caps and Money</p> <p>Let’s Get Creative – Making your OWN Counting Books!</p> <p>Participant work time with floating afternoon break as needed</p>
3:30	Susan, Sue, and Tim	<p>Group Sharing of Counting Books</p> <p>Allowing Your Students to Create Their Own Books</p> <p>Tips for Creating Student-centered Texts and Classroom Publishing</p>

4:15	Tim	Daily Feedback and Reflection Introducing the NCTM Content Standards Introducing the NCTM Process Standards Building Success: Incorporating the Process Standards into Early Childhood Mathematics Education
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Better Mathematics Through Literacy

Daily Agenda: Day Three

Big Picture Goals:

- Asking higher-order questions in early childhood mathematics
- Accessing student thinking through operation problems in context
- Building an integrated and conceptual understanding of the four basic operations
- Developing an understanding of why traditional algorithms make sense and yield correct answers
- Integrate NCTM Process Standards into early childhood mathematics
- Building the Writing Process – prewriting, drafting, editing, and revising, into the context of mathematics classrooms
- Build community

<p>8:30 am</p> <p><i>Please Note:</i></p> <p><i>All times are tentative and subject to change!</i></p>		<p>Continental Breakfast</p> <p>Welcome Back – recapping yesterday</p> <p>Parking Lot Issues</p> <p>Looking Ahead</p>
<p>8:45</p>	<p>Tim</p>	<p>Problem of the Day – Interpreting Student Work</p> <p>Vicki’s solution to the Fossil Problem</p> <p>Understanding Vicki’s work verbally and symbolically</p> <p>What does Vicki know? What is Vicki ready to do next?</p>
<p>9:15</p>	<p>Sue, Susan, and Tim</p>	<p>Thinking about your homework: the NCTM Process Standards</p> <p>Jigsaw Activity</p> <p>Visual Displays for Process Standards and Sharing</p>

10:00	Susan	Reading for Understanding Decoding, Comprehending, and Applying
10:30		Morning Break
10:45	Tim	Examining Students' Invented Operations Rethinking Algorithms in the Early Childhood Grades Deconstructing the Four Operations
11:15	Tim and Sue	Making Connections – Integrating the Operations Looking at student work: Invented operations <i>Amanda Bean's Amazing Dream</i> by Marilyn Burns
12:15		Lunch and A Shared Reading: <i>Problem Solving Using the Mathematician's Chair</i>
12:45	Sue and Susan	Debriefing your thinking and ideas about the article Table Talk Group Discussion
1:30	Sue	Writing for Understanding Student Journals
2:00	Linda	Sharing Bloom's Taxonomy Thinking about the Questions We Ask and the Tasks We Assign Taxonomy Flip-books
2:20	Tim, Susan, Sue and Linda	Using Children's Literature as a Basis for Mathematics Activity <i>Teacher Work Time with Floating Break as Needed</i> Putting yourself in "The Mathematician's Chair" Posing Problems on Children's Literature

		Examples of Problem Solving Packets Group Sharing of Problems
3:30	Linda and Susan	How in the world do I grade this? Formative Assessments and Rubrics Creating Rubrics Connecting to Standards, Benchmarks, and Grade Level Indicators Sharing Examples of Early Childhood Rubrics
4:00	Sue	Building Success – Creating Rubrics for One of Your Mathematics Tasks
4:30	Tim	Midweek Feedback and Reflection Homework: Formulate a scoring rubric for one problem from a fellow classmate Read: “Never Say Anything a Child Can Say” an action research article by Reinhart

Better Mathematics Through Literacy

Daily Agenda: Day Four

Big Picture Goals:

- **Developing a conceptual understanding of fractions and fraction notation**
- **Using manipulative to teach fractions for understanding**
- **Compare and contrast multiple representations of fractions**
- **Investigating contextual situations for fractions as paths to learning for understanding**
- **Developing Writing to Learn strategies in Early Childhood Mathematics**
- **Bridging the language of fractions with corresponding symbolic notation**

8:30 am		Continental Breakfast Welcome Back – Recapping Yesterday Parking Lot Issues
<i>Please Note:</i> <i>All times are tentative and subject to change!</i>		
8:45	Susan	Sharing the Rubrics Receiving Feedback to the Rubrics You Created
9:10	Sue	Debriefing the Homework Reading 3 – 2 – 1 Reading Strategy
9:45	Susan and Sue	Sticky Issues about Fractions “The hardest thing(s) to teach about fractions is ...” “The hardest thing(s) to learn about fractions is ...” Group Discussion
10:00	Tim	Problem of the Day: How Old is Aunt Helen?
10:20		Morning Break
10:30	Tim	Making Friends with Fractions

		<p>Conceptual Understanding of Fractions</p> <p>Using Manipulatives to Build Flexible Understanding of Fractions</p> <p>“Hanging Your Fractions Out to Dry”: a Conceptual way to compare and order fractions</p>
12:15		Lunch
12:45	Tim	Using Manipulatives to Understand the Operations with Fractions
1:30		Afternoon Break
1:45	Susan	Multiple Intelligences and Sensory Teaching
2:15	Tim, Sue, and Susan	<p>Fraction Stations with Manipulatives</p> <p>Making Connections to Children’s Literature</p> <p>Building Conceptual Understanding of Fractions, Literacy, and Mathematical Processes</p> <p>Floating Break (<i>as Necessary</i>)</p>
4:00	Susan and Sue	<p>Making Sense and Making Connections</p> <p>Recapping the afternoon’s work</p>
4:25	Tim	<p>Revisiting the Sticky Issues</p> <p>Daily Feedback and Reflection</p> <p>Homework: Read “Algebra in the Early Grades? Absolutely!” by Burns</p>
4:30		Dismissal

For Friday, Please wear tennis shoes and comfortable clothes!

Better Mathematics Through Literacy

Daily Agenda: Day Five

Big Picture Goals:

- **Developing Algebraic Thinking in the Early Childhood Grades**
- **Integrating technology into Early Childhood Mathematics**
- **Reading information from graphs**
- **Relating verbal information to graphic representation**
- **Exploring multiple representations of patterns and graphs**
- **Using graphs as a source for creative writing and story telling**
- **Building Reading Comprehension Skills**

<p>8:30 am</p> <p><i>Please Note:</i></p> <p><i>All times are tentative and subject to change!</i></p>		<p>Continental Breakfast</p> <p>The Official "Last Day Sigh of Relief" ☺</p> <p>Parking Lot Issues</p> <p>Looking Ahead to the Day</p>
<p>8:45</p>	<p>Tim</p>	<p>Problem of the Day</p> <p>Recognizing and Extending Patterns</p>
<p>9:10</p>	<p>Tim</p>	<p>Homework Article Debriefing</p> <p>Patterning Activities: Attribute Trains and Growing Letters</p>
<p>10:00</p>		<p>Morning Break</p>
<p>10:15</p>	<p>Tim</p>	<p><i>Let's Get Moving</i> – Using Motion Detectors and Graphing Calculators in Early Childhood Classrooms</p> <p>These Boots Are Made For Walkin'</p> <p>Videotape of Kindergarten students with Exploring Motion</p> <p>Teacher's Teaching with Technology (T³)</p>

12:15		Lunch
12:45	Tim	Graphs from Stories and Stories from Graphs
1:15	Susan and Sue	Children's Literature as Stories of Motion Creating Timelines Sequencing Events Creating Classroom Activities for Motion and Literacy
2:10	Sue	Read-Aloud: The Listening Walk Recapping our thoughts and activities about motion
2:45	Barry and Tim	Post-workshop Inventories Follow-up Observations during the School Year
3:15	Linda	Follow-up Lesson Plan Submission during the School Year – Goals and Expectations for your Action Research
3:30	Tim, Susan, Sue, Carolyn, Barry, Linda, and Sharon	Where Have We Been; Where Are We Going? Recapping the Week Dates for Follow-up Sessions Expectations for the Follow-up Sessions Culminating Event in May What Will YOU Take Back to Your School Making A Difference with Better Mathematics Through Literacy
4:00	Tim, Sue, and Susan	Daily Feedback and Reflection A Fond Farewell and Dismissal <i>See you in September!</i>