Building a Statewide System of Support in Early Mathematics for ELL Students

A Peak at the work in Washington State

Erickson Early Math Institute
October 13-14, 2017
Rachel Eifler
P-3 Professional Development Coordinator
Activator

• Each person has a photo card
• Find the person who has your exact match
• Looking at your cards, answer the question: how many? You might answer this question more than once. Be sure to explain your thinking
A Look at the System

http://www.k12.wa.us/

https://www.waesd.org/
History of the Work

2011- Gates’ Foundation funded P-3 work within Educational Service Districts (ESDs) across the state. Two ESDs, Puget Sound ESD and Northeast Washington ESD, chose to focus on math.

2011-2014- PSESD and NEWESD collaborated to create professional development resources related to early mathematics for teachers and administrators. Resources were shared out through the AESD network to early learning coordinators and regional math coordinators.

2012- WaKIDS (Washington Kindergarten Inventory of Developing Skills) data began to emerge revealing that math was an area of focus across the state.
Washington State Teaching Strategies GOLD™ Kindergarten Entry-Level Observation Data

*Colors in the above chart are not associated with the color band system used in WaKIDS Teaching Strategies GOLD™.*
Washington State Teaching Strategies GOLD™ Kindergarten Entry-Level Observation Data - ELL & DLL

*Colors in the above chart are not associated with the color band system used in WaKIDS Teaching Strategies GOLD™.
Response to the Data

- The documents and resources created from the P-3 work influenced the creation of *The Learning Pathways in Numeracy* [http://www.k12.wa.us/WaKIDS/pubdocs/LearningPathwaysInNumeracy.pdf](http://www.k12.wa.us/WaKIDS/pubdocs/LearningPathwaysInNumeracy.pdf), which was completed and published in October 2014.

- Statewide/consistent early numeracy professional development modules created and rolled out statewide: Counting and Cardinality, Operations and Algebraic Thinking, Geometry.

- Early Learning Fellows:
  - 180 early learning leaders across the state.
  - Early Learning and K-12 educators.
  - Regional Fellows’ networks include school districts, higher education, library systems, Child Care Aware, Department of Early Learning, Head Start programs, Reach out and Read, and more.
  - Fellows create action plans and provide professional development in mathematics with an intentional focus on racial equity and family engagement.
Implications for the Classroom

Allow Children to experience mathematics as they play and explore the world around them.

Mathematizing the day – intentionality in math language

Involves observing the child and asking guiding and purposeful questions to help them build their knowledge and understand what the child knows

◦ “How many chairs do you have in your house?”
◦ Which tower is taller, how do you know?
◦ Who has more jewels in their box, how do you know?

Opportunities to share their thinking and reasoning with access to multiple modalities for communication (manipulatives, whole body, drawing, pictures, etc.)
Learning Pathways in Numeracy

Learning Pathways in Numeracy:
Addressing Early Numeracy Skills

October 2014
Learning Pathways in Numeracy

What concepts/skills are being addressed?

Where are these children on the Pathways document?
WA KIDS – ELL
Math Domain

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<tbody>
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<td>32.1%</td>
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<td>Non-English Language Learner</td>
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<td>62.7%</td>
<td>60.7%</td>
<td>66.6%</td>
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Bridgeport School District
WaKIDS Math Data 2011/2012

![Bar chart showing ELL and Non ELL data for Bridgeport 2012.](chart.png)

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<th>Group</th>
<th>Total Count</th>
<th>Count Meeting Indicator</th>
<th>Percent Meeting Indicator</th>
<th>State Percent Meeting Indicator</th>
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Bridgeport School District WaKIDS Math Data 2016/2017

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<th>Count Meeting Indicator</th>
<th>Percent Meeting Indicator</th>
<th>State Percent Meeting Indicator</th>
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<td>11</td>
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<td>63.6%</td>
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</table>
Thank you

Questions

Rachel Eifler reifler@esd101.net
Anne Gallagher (State Director of Mathematics) agallagher@k12.wa.us