

Preschool Mathematics Instructional Design Model

This model includes accessible tasks, open-ended problem-solving, small-group instruction, student choice and time for meaningful practice. By using the familiar structure of the literacy block/workshop, students can transition into the same way of working independently, playing games, and problem-solving.

Small Group / Work Time		
	Teacher Role:	Student Role:
<p>Teacher/Para Led Small Group (10-15 minutes designated small group time or during extended work time)</p> <p>During <i>designated small group time</i> (10-15 minutes), teacher/para lead targeted groups of students in small group instruction concurrently. The guided lessons correlate to the planned content or evidence of learning/misconceptions as determined by assessments.</p> <p>OR</p> <p>While students are engaged in centers, the teacher/para will lead small groups for guided lessons correlating to the content taught during whole group or evidence of learning/misconceptions as determined by assessments. <i>Teacher/paras continue to monitor student engagement in centers during work time.</i></p>	<ul style="list-style-type: none"> ● Plan purposeful and differentiated lessons ● Meet with identified groups of students based on data ● Revisit learning intention/success criteria from mini-lesson ● Facilitate learning through problem-based tasks ● Provide math tools to support thinking ● Provide feedback on strategies ● Record anecdotal notes and formative assessment data 	<ul style="list-style-type: none"> ● Analyze misconceptions ● Ask clarifying questions ● Actively participate ● Use math tools to support thinking ● Explain reasoning
<p>Work Time</p> <p>During work time, student work is organized and differentiated based on student need and learning centers. Math instruction is done throughout the school day and can be a focus in every learning center.</p> <p><i>Note: Independent work should be REVIEW vs. initial learning</i></p>	<ul style="list-style-type: none"> ● Plan purposeful and differentiated stations ● Provide students with choice of stations or activities within a station ● Provide math tools to support thinking ● Monitor students in workstations ● Reflect on observed behaviors to adjust work stations ● Hold students accountable for work during stations ● Provide feedback when appropriate 	<ul style="list-style-type: none"> ● Revisit previously learned content ● Apply knowledge through partner work or collaborative grouping ● Use math tools strategically ● Complete task as described ● Document work for evidence / accountability through math journal, recording sheets, photographs, video ● Construct viable arguments ● Critique the reasoning of others
<p>Reflection / Closure</p> <p>A deliberate time for students to reflect on what they've learned during center time.</p>	<ul style="list-style-type: none"> ● Facilitate discussion of strategies used during workstations ● Monitor student progress during the discussion 	<ul style="list-style-type: none"> ● Share strategies ● Analyze strategies for effectiveness and efficiency ● Reflect on learning to identify strengths and areas of further growth

References:

Lempp, J. (2022). *Math Workshop: Five Steps to Implementing Guided Math, Learning Stations, Reflection, and More*. Heinemann.