



## Principal's Implementation Checklist

### Developing Computational Fluency in Addition and Subtraction (Grades K-4)

#### Course Objectives:

Participants will gain awareness level knowledge about:

1. Alternative problem solving strategies in addition and subtraction
2. Computational fluency
3. Instructional strategies for building on what children already know
4. The big ideas underlying a student's understanding of quantity, addition and subtraction

During a brief classroom "walkthrough" observation, the school principal can use the following checklist to note activities and strategies taught in the course and implemented in the classroom.

Teacher:	Date:	School:			
	<b>Degree of Implementation</b>				
<i><b>Teacher behaviors:</b></i>	<i><b>1 (low)</b></i>	<i><b>2</b></i>	<i><b>3</b></i>	<i><b>4</b></i>	<i><b>5 (high)</b></i>
Allows students to ask questions about mathematics					
Asks open-ended questions and allow students "wait time".					
Gives students time to discuss mathematical ideas and solutions with each other.					
Asks students to explain and show their math thinking and solution paths.					
Encourages students to look for different ways to solve mathematic problems.					
Assesses student understanding during the lesson and appropriately adjusts questions and prompts to support and extend student learning.					
Leads students to be persistent in mathematical problem solving.					
Prompts students to reflect on their solutions by saying "Show me how you got that" or "Tell me how you figured that out" rather than by correcting them or telling them their answer is wrong.					
Provides students with engaging					



contexts (games, authentic problems such as bundling newsletters into tens, problems integrating class events and topics of study, etc.), and models (real objects, unifix cubes, hundred charts, open number lines, etc).					
Emphasizes flexibility in the use of strategies.					
Encourages students to try new or challenging things.					
Helps students to become efficient problem solvers.					
Emphasizes accurate problem solving.					
Uses data to assess students' progress in learning mathematics.					
Comments: _____					
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