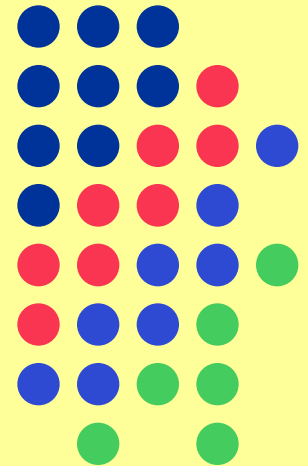
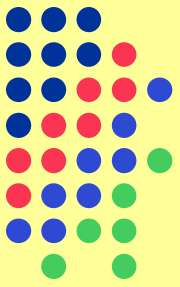


# Lesson Study

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Jamie Gadley, Host teacher,  
Denise McGuinness,  
Elizabeth Sampson,  
Tia Hawkins, Cynthia Walker,  
Susie Clark Ashton



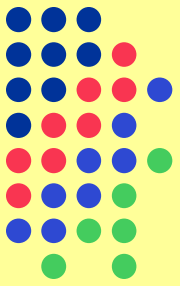


# Research--Misconceptions

- Confusion of coin values (dime and nickel)
- Difficulty with adding across the next dollar
- Addition errors
- Misinterpretation/misunderstanding of problem situation
- Misinterpretation/misunderstanding of question
- Difficulty recording the amount in each piggy bank each days
- Difficulty keeping track of the days
- Not knowing when to stop filling out the chart (i.e. how many days needed to answer the question)
- Recording the amounts on the first day as the original amounts without the addition of the allowance
- Confusion with the day the piggy banks have equal amounts and the day Alex first has more than Celia
- Adding 5¢ as .5 instead of .05
- Adding 5¢ to Alex's piggy bank and 10¢ to Celia's instead of the reverse

# Initial Piggy Bank Lesson

Will Alex ever have more?



## Goals

- To provide a context through which students can use a variety of strategies to solve a problem
- Students will identify, represent, and extend a pattern and explain their problem-solving approach and solution.

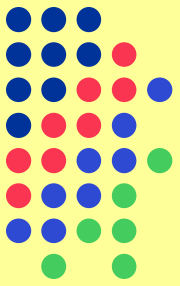


# Tools to Solve the Problem

- Make a table
- Use coins
- Complete a calendar
- Identify a pattern and solve with number sentence

Day		
	Alex's Piggy bank	Celia's Piggy Bank
Sept. 1 (Day 1)		

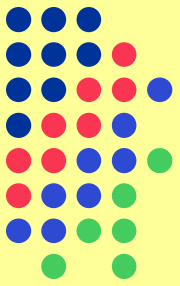
# Synthesizing Student Work



- During the warm up the students played a game where they were given money amounts on a card in coins and they had to find their match in numbers. Most of the students were successful.
- Jamie explained the problem.
- Math tools were placed at their tables.



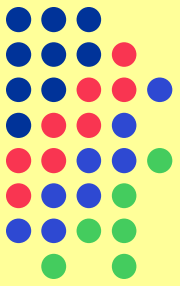
# Synthesizing Continued...



- **Some were a little confused as to how to solve the problem**
- **Jamie's scaffolding helped the students to solve problem in multiple ways:**
  - Charts of their own, some used the provided materials**
  - Others drew pictures**
- **Students had an opportunity to share out how they solved the problem and what math tools they used.**



# Enhancing the Lesson



- Some students may have had too many tools to choose from.
- Could use an actual calendar or a specific date attached to the question – just days and the number of days it would take for ‘x’ to occur.
- Make predictions first about ‘x’ occurring on a certain day – instead of telling them that ‘x’ occurred on a certain day.
- Include the extension questions ahead of time to challenge those ‘early’ finishers.