

Learning Experiences for “Incredible” Kids: Lessons that Invite Gifted Behaviors



Elizabeth Fogarty, University of St. Thomas
Catherine Little, University of Connecticut
Janine Firmender, St. Joseph’s University

This project is supported under the Javits Gifted and Talented Students Education Program, PR/Award Number S206A170030, as administered by the OESE, U.S. Department of Education.



Project



This project is supported under the Javits Gifted and Talented Students Education Program, PR/Award Number S206A170030, as administered by the OESE, U.S. Department of Education.



Project Goals

- Exploring student behaviors that may be evidence of advanced academic potential
- Linking instructional practices to the high-potential behaviors students may show
- Infusing strategies to elicit and support high potential into standards-based instruction for all learners
- Considering next instructional steps when students demonstrate high-potential behaviors



Project to Date

- Total of 38 teachers across 6 school districts
- Development of 28 sample lessons across three grade levels
- Lesson implementation with observations and teacher reflections



Focus of Session

- Introduce the lesson framework we use as a context for drawing out high potential behaviors
- Describe sample activities that infuse critical and creative thinking strategies with standards-focused content learning
- Share teacher reflections on student engagement with activities and demonstration of potential





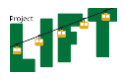
6 High Potential Behaviors - "Look Fors"



Strategies to Engage and Challenge

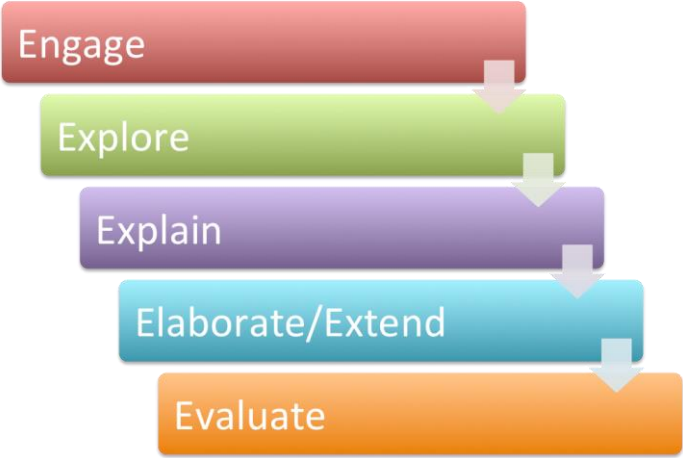



For more information, see <https://www.fcps.edu/academics/elementary-school-academics-k-6/advanced-academics/critical-and-creative-thinking>



Lesson Plan Framework


- 5E Inquiry Model - approach drawn from science education to encourage exploration and questioning
- Applied to ELA and mathematics lessons to support engagement and promote demonstration of high-potential behaviors



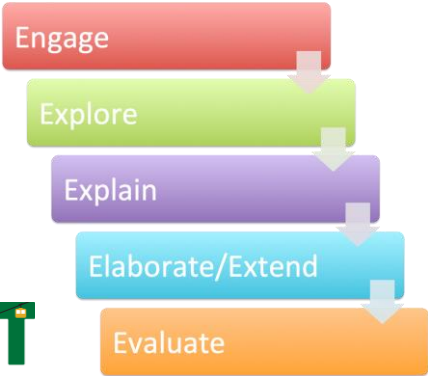


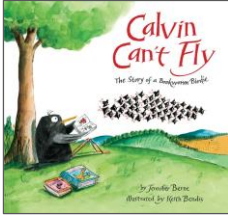
Why Can't Calvin Fly?


Questioning and Curiosity as Gifted Behaviors



Think/Pair/Share
to discuss where
Bob is going







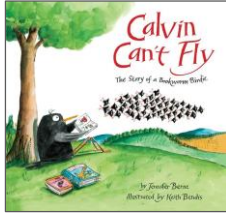
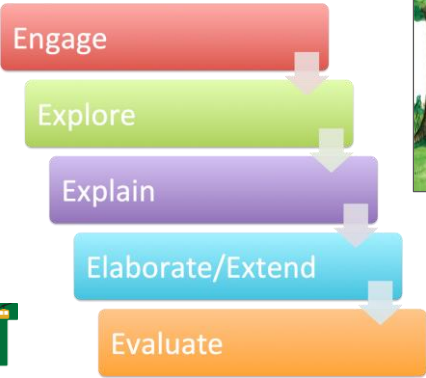
Attention to Student Behaviors

Creative- a student was asking some unusual questions such as “does he have stretchable legs?” “Why does it look like he’s being kidnapped?”; *Perceptive-* some students were able to recognize that Calvin looks sad in the first one but happy in the next. They were able to conclude that the other birds were trying to help him to fly; *Strategic-* Why is he not able to fly? Many of the students were able to recognize when their question was answered. - *grade 2 teacher*



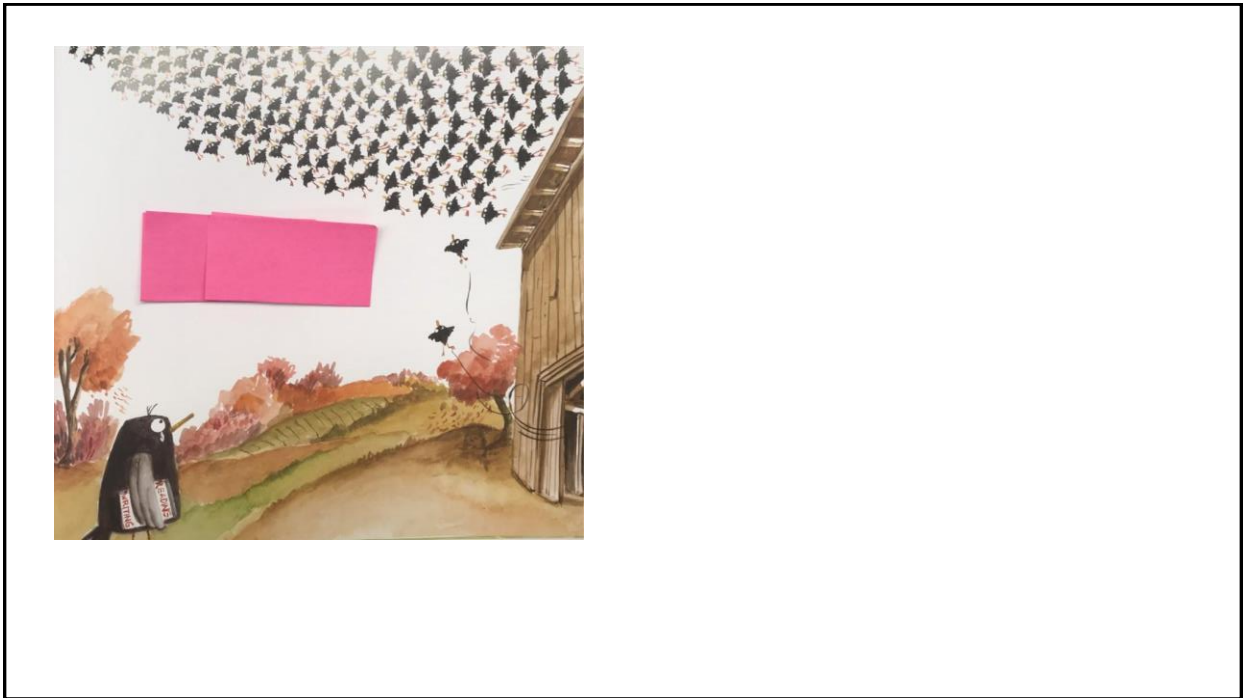

Why Can't Calvin Fly?

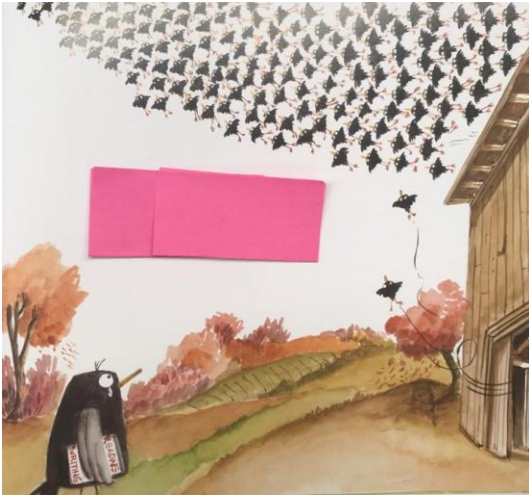
Questioning and Curiosity as Gifted Behaviors



Think/Pair/Share to discuss where Bob is going

Have students write questions about the above picture and this one. How were the questions different?



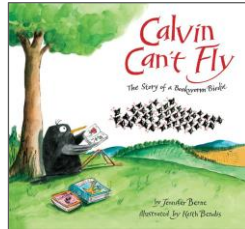
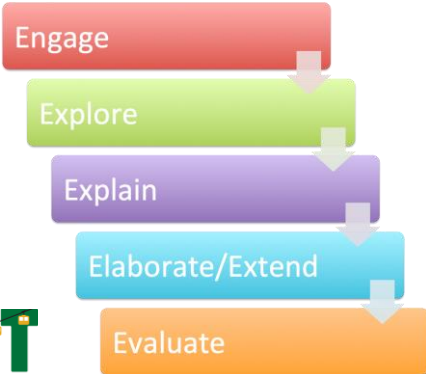


The illustrations are fabulous and lend themselves to asking questions. This led the kids to understand what they were doing once they got to their own books. The kids were very focused and got right to work. - *grade 2 teacher*



Why Can't Calvin Fly?

Questioning and Curiosity as Gifted Behaviors



Think/Pair/Share to discuss where Bob is going

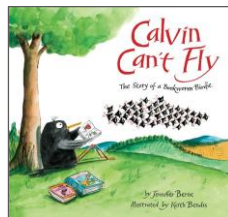
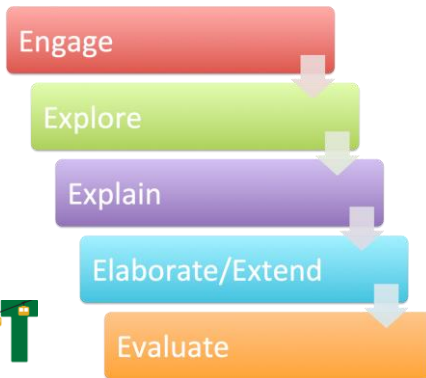
Have students write questions about the above picture and this one. How were the questions different?

Questions I have about the text	Answers & Evidence



Why Can't Calvin Fly?

Questioning and Curiosity as Gifted Behaviors



Think/Pair/Share to discuss where Bob is going

Have students write questions about the above picture and this one. How were the questions different?

Questions I have about the text	Answers & Evidence

Add 4 questions about the character. Put the sticky notes in the text where you find evidence.

Unexpected Evidence of Potential

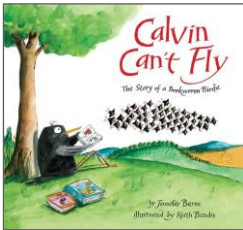
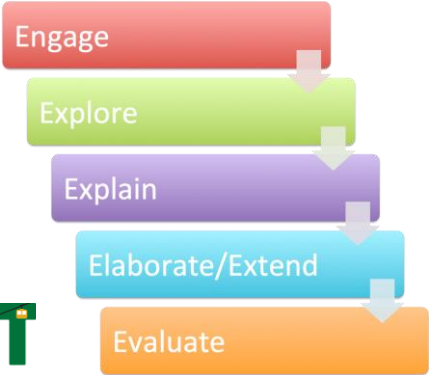
- I was surprised by some of my lower readers who were able to come up with some unique questions that connected to the text.
- A lot of children I expected to rely solely on the pictures in their texts to draw questions, but many used specific language from the text.
- I noticed many students synthesizing information from both the pictures and the text as they read to develop more complex questions. For instance, in one text, the character's face looked scared. The student wondered why this was. As they read on, they read that he was scared of the woods. They used that new information to develop the question of why he was scared of the woods. Furthermore, I had students who were very curious and generated questions before even opening the book. Just from the title and from the cover picture, students had questions about the text.

- Grade 2 teachers



Why Can't Calvin Fly?

Questioning and Curiosity as Gifted Behaviors



Questions I have about the text	Answers & Evidence

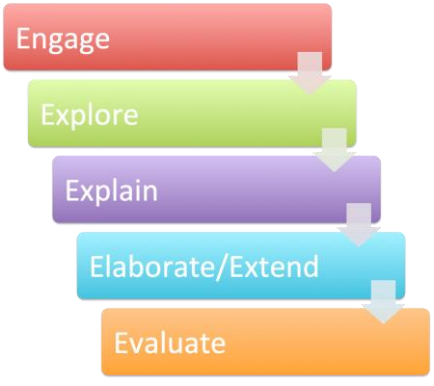


Lego Arrays

Fluency, Originality, Flexibility, and Elaboration as a Strategy Supporting Creative and Strategic Behaviors




How many LEGO heads are in the array?



Lego Arrays

Fluency, Originality, Flexibility, and Elaboration as a Strategy Supporting Creative and Strategic Behaviors


How many LEGO heads are in the array?




Create an array for the number 24.

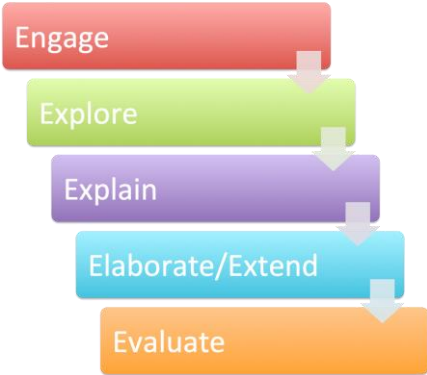
Write as many multiplication and division equations as you can.

FLUENCY



FLUENCY, ORIGINALITY
FLEXIBILITY &
ELABORATION






Lego Arrays

Fluency, Originality, Flexibility, and Elaboration as a Strategy Supporting Creative and Strategic Behaviors


How many LEGO heads are in the array?



Create an array for the number 24.


Write as many multiplication and division equations as you can.

Explain how the multiplication and division equations represent the array of 24.




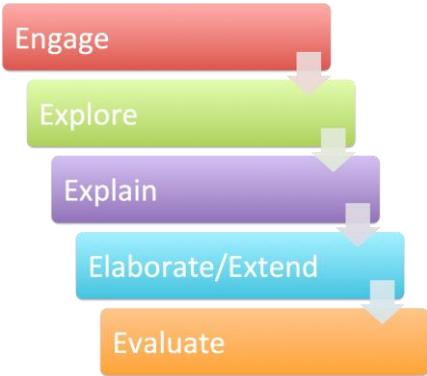
FLUENCY

ELABORATION



FLUENCY, ORIGINALITY
FLEXIBILITY &
ELABORATION






Demonstrating Potential

Two students who I expected to excel in this did. They were able to make connections between multiplication and division and explain that how you see it is based on what you're looking at and how you shift the numbers. I was surprised by another student who made this connection while working with the number 24. - *grade 3 teacher*

Lego Arrays


Fluency, Originality, Flexibility, and Elaboration as a Strategy Supporting Creative and Strategic Behaviors

How many LEGO heads are in the array?



Create an array for the number 24.
Write as many multiplication and division equations as you can.

Explain how the multiplication and division equations represent the array of 24.




Build LEGO brick arrays for another number... 48, 60, 72, 84, 96, 108
Larger numbers increase task complexity.

FLUENCY

ELABORATION

FLEXIBILITY




Engage

Explore

Explain

Elaborate/Extend

Evaluate






Lego Arrays

Fluency, Originality, Flexibility, and Elaboration as a Strategy Supporting Creative and Strategic Behaviors


How many LEGO heads are in the array?



Create an array for the number 24.

Write as many multiplication and division equations as you can.

Explain how the multiplication and division equations represent the array of 24.



Build LEGO brick arrays for another number...


48, 60, 72, 84, 96, 108

Larger numbers increase task complexity.

FLUENCY

ELABORATION

FLEXIBILITY




Engage

Explore

Explain

Elaborate/Extend

Evaluate



Supporting Challenge


Students engaged in a productive struggle when trying to build their arrays. They had to really work hard to figure out how to build arrays top match their target number. I heard students discussing ways to compose and decompose numbers, how to count by certain numbers (like 6 or 7) until they reached their target number, and how to use the lego head array as a starting point. - *grade 3 teacher*

Strategic: students (trying to get to 84) got to 70 by doing 7×10 then added two more 7s to get to 84. - *grade 3 teacher*

Lego Arrays


Fluency, Originality, Flexibility, and Elaboration as a Strategy Supporting Creative and Strategic Behaviors

How many LEGO heads are in the array?




Create an array for the number 24.
Write as many multiplication and division equations as you can.

Explain how the multiplication and division equations represent the array of 24.



Build LEGO brick arrays for another number...
48, 60, 72, 84, 96, 108
Larger numbers increase task complexity.

Gallery Walk and Discussion
How do the equations represent the arrays?




FLUENCY

ELABORATION

FLEXIBILITY

EVALUATE




Engage

Explore

Explain

Elaborate/Extend

Evaluate



Key Takeaways

- Value of allowing exploration and encouraging students to inquire and ask questions
- Targeting attention from the point of planning to specific types of behaviors and focusing on what to do next
- Space for students AND teachers to explore new territory
- Preparing for the unexpected



“It was very difficult to let go of some of the control when it came to allowing them to explore...I was happy to see the students engaged and they appeared to feel good about how hard they worked. For the whole 90 minutes, no student complained about what they were doing.” - *grade 3 teacher*





SCAN HERE TO ACCESS
3RD GRADE MATH
LESSON
ON ARRAYS



SCAN HERE TO ACCESS
2ND GRADE READING
LESSON
ON QUESTIONING



QUESTIONS?



Elizabeth Fogarty, University of St. Thomas
Catherine Little, University of Connecticut
Janine Firmender, St. Joseph’s University

lift.uconn.edu



This project is supported under the Javits Gifted and Talented Students Education Program, PR/Award Number S206A170030, as administered by the OESE, U.S. Department of Education.

