

Integrated  
Curriculum  
The Iteration



# WHAT DO YOU DO WITH AN IDEA?



Written by Kobi Yamada ✍ Illustrated by Mae Besom



Why?

**Teacher & Student  
Feedback**

**Big Picture = Deliberate  
Decisions**

**Lifelong Learning**





**Personalized Learning**

**Computational and Design Thinking**

**Advanced and Structured Literacies**

**Enrichment For All**



Computational  
Thinking  
&  
The Design Thinking  
Process



*Provide Our Students With  
Future Ready Skills for the  
Computational World*

*4th Industrial Revolution  
and  
the 4 Cs*

# A Way of Thinking and Learning

*Universal Approach to  
Problem-Solving*

*Transcend Individual  
Curriculum Content/Skills*

*Natural Fit in Our Integrated Curriculum*



# MUSTANG

6

Our own engineering design process acronym

**Marvel** (Make observations) (Magnify) (Be mindful)

**Understand** “The Problem” and the audience  
(Understand the need) (Develop empathy)

**Share** Ideas

**Tinker**

**Analyze** your prototype

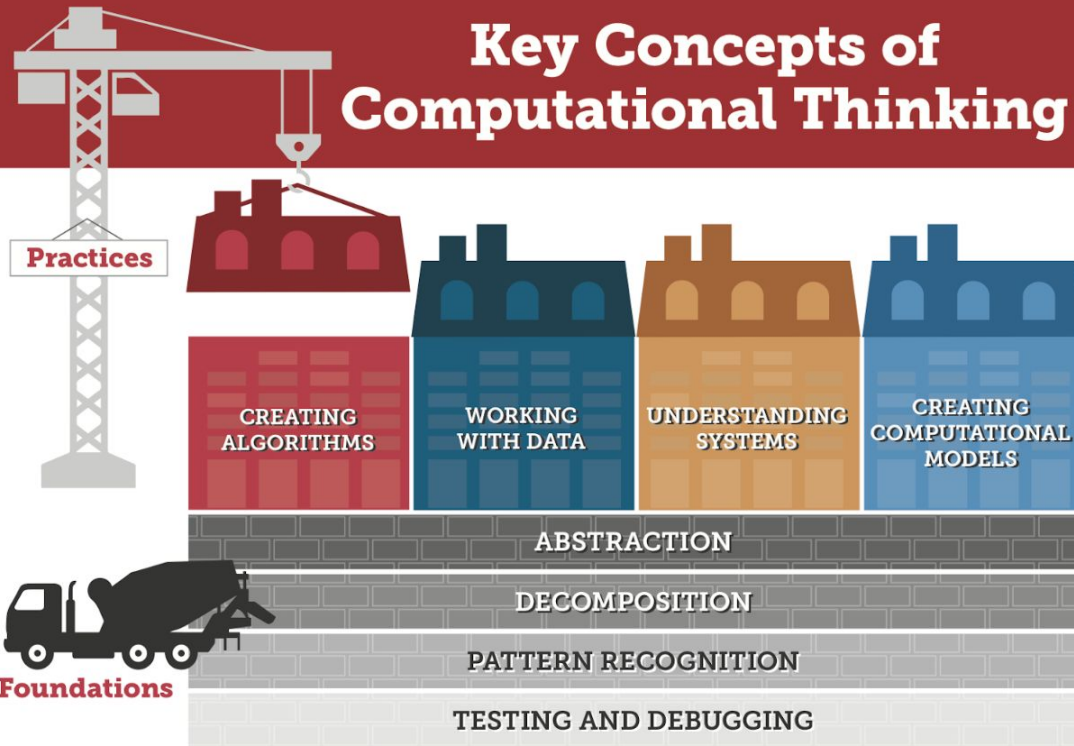
**Navigate** options for redesign

**Generate** final product

The Design  
Thinking Process



# Key Concepts of Computational Thinking



## Computational Thinking

The foundations of computational thinking are abstraction, decomposition, pattern recognition and testing and debugging. The practices of computational thinking are creating algorithms, working with data, understanding systems, and creating computational models.





...a good education must balance a prescribed curriculum with **regular systematic enrichment opportunities** that allow [students] to **develop their interests, abilities, learning styles, and preferred modes of expression.**”

-Renzulli





# Enrichment For All

## Partnered with Dr. Elissa Brown 3 Day Workshop

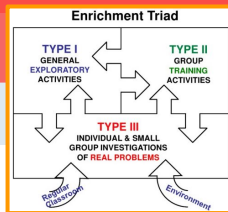
Hunter Professor and Researcher in the field of gifted and talented education led a workshop for K-7 in July

### Takeaways

- Developing year-long Concepts
- Differentiating Down using Differentiation Framework
- Enhanced AKAs with more student choice
- Enrichment for All

### Enrichment For All

- Enrichment is **exposure** and **choice** to **develop passions and life-long learning**
- Embedding **more Type 1** into curricular units to expose students
- Focused on **career paths** and **common high student interests** beyond the curriculum
- **TedEd, KidOYO** , clubs and independent studies



Grade	Unit	Type 1 Enrichment Examples
K	<p><b>Unit 2:</b> Me and My Story</p>	<p>The Five Senses:</p> <p><b>Guest Speakers: Audiologist, Optometrist and School Nurse</b></p>
Three	<p><b>Unit 2:</b> Global Education and Recreation</p>	<p>Children's Rights Study:</p> <p>-Exploring the <b>Rights of Animals on the PETA website</b> through research and video            *Type 2 and 3: <b>Courses on OYO about Meatless Mondays</b> and how that relates to Animal Rights and rights in general</p>
Four	<p><b>Unit 1:</b> New York: Getting to Know You</p>	<p>The Geography of New York:</p> <p>-Read and sing the lyrics to <b>New York State of Mind, by Billy Joel</b>  <b>-Virtual Tour of Ellis Island</b></p>
Five	<p><b>Unit 2:</b> Reading, Reaping and Roads: Interactions and Complexity</p>	<p>Study of Complex societies:</p> <p>-Video of Current day <b>excavation of Aztec and/or Inca civilization(s)</b>  <b>-Virtual Field trip to Machu Picchu</b>  <b>-Write using Inca writing system, quipus</b>  <b>-Play Aztec ball game, ullamalitztli and board game, patolli</b></p>



# Advanced & Structured Literacy

Nonie K. Lesaux, PhD & Emily Phillips Galloway, EdD; NYSED

Book Clubs

Hallmark 1:  
Engaging  
Texts

Hallmark 2:  
Rich  
Discussion

Close Reading and Student-Centered Learning Activities

Diverse AKAs and Spiraled Assessments

Hallmark 3:  
Frequent  
Writing

Hallmark 4:  
Academic  
Vocabulary  
and  
Language

Word Study



# Hallmark: Close Reading and Student-Centered Learning Activities (Grade 3)

## All Kinds of Traits

Has anyone ever told you that you look just like your (mom, dad, sister, brother, aunt, grandmother, or other relative)? That's because of something called **heredity**. Think about life cycles. Butterflies produce butterfly offspring and bean seeds produce bean offspring. Butterflies cannot produce puppies, and bean seeds cannot produce marigolds. **Heredity** means that certain **traits** are passed from parents to offspring.

All living things reproduce so that their species will continue to exist. A **species** is a group of living things that share certain traits and can produce offspring. Parents produce offspring of the same species. Dogs produce dog offspring, marigolds produce marigold offspring (seeds), and humans produce human offspring.



**Inherited traits** are passed from parents to offspring. An inherited trait can be a physical characteristic such as hair or eye color, or a **behavior** such as knowing when and where to hibernate.

What about learning how to swim? If you were a frog, that would be an inherited trait. Frogs and fish are born knowing how to swim. Humans are not. Humans need to be taught how to swim. For humans, learning how to swim is a **learned trait**.



What other learned traits can you think of?

An **acquired trait** is something that happens during an organism's life. If you have a scar from an injury, that is an acquired trait. It is unique to you. It was not inherited, and it was not something you learned (although you may have learned to be more careful). Sometimes an acquired trait can be an ability. A family member may be good at a certain sport, or may have musical ability, and you may or may not have inherited those abilities. Either way, playing a sport or being a musician is something you have to learn how to do.



Elements	Purpose	Learning Opportunities for the student/teacher	Checks for Understanding that the student does
Getting the Gist (First Read)	<ul style="list-style-type: none"> <li>to allow students to hear the text read fluently</li> <li>to facilitate students with the gist of the text as a context for in-depth study</li> </ul>	<ul style="list-style-type: none"> <li>read the text aloud, reviewing familiar terms/information and exploring new terms and ideas as you go</li> <li>Chart the text as you read and allow students to check/leave the gist of each chunk.</li> </ul>	<ul style="list-style-type: none"> <li>Partner sharing</li> <li>Listening skills</li> <li>Comprehension/Inferences</li> <li>Ability to look at the big picture</li> </ul>
Marking the Text (Second Read)	<ul style="list-style-type: none"> <li>To give students the opportunity to make sense of the text on their own</li> <li>To ask questions about sections that are unclear</li> </ul>	<ul style="list-style-type: none"> <li>Give students time to read the text independently and make a marginal note about the gist of each paragraph.</li> <li>Provide students with codes, opportunities for peer and purpose of the reading, to be referenced during text-based discussion.</li> <li>Allow students to underline words, phrases or sections that interfered with their understanding of the text.</li> </ul>	<ul style="list-style-type: none"> <li>Marginal notes</li> <li>Look for:</li> <li>General comprehension of being</li> <li>Sections of text marked as important/comprehension</li> <li>Group Discussion</li> <li>Look for:</li> <li>Accurate textual/ references</li> </ul>

**Close Reading Protocol**  
Getting the Gist  
Marking the Text  
Questions  
Critical Discussion  
Writing

# Hallmark: Diverse AKAs and Spiraled Assessments (Grade 5)

## Application of Knowledge Assessment (AKA)

End of **Unit 2**  
Choice Board

Directions:

1. Read through the activities below.
2. Choose ONE activity to demonstrate your understanding of the Unit.
3. Circle the activity that you selected.
4. Submit this paper to the teacher.

3, 2, 1, ACTION! Movie Trailer	A Work of HeART Creative Art Project	If's SHOWTIME! Play
<ol style="list-style-type: none"> <li>1. Create a storyboard using a combination of captions and drawings to outline your iMovie.</li> <li>2. Locate appropriate images that match your storyline.</li> <li>3. Produce your storyboard in iMovie.</li> <li>4. Present the iMovie to the class.</li> </ol>	<ol style="list-style-type: none"> <li>1. Create your interpretation of the novel artistically.</li> <li>2. Write the steps you took to complete your creation and how it is important to the novel.</li> <li>3. Present your creation to the class.</li> </ol>	<ol style="list-style-type: none"> <li>1. Write a script that extends the plot of the novel.</li> <li>2. Practice your lines.</li> <li>3. Gather props.</li> <li>4. Present the play to the class.</li> </ol>
Dear Diary Diary Entries	Breaking News CNN 10 News Segment	The Ultimate CHOICE Have your own idea?
<ol style="list-style-type: none"> <li>1. Write at least THREE diary entries from the perspective of one of the characters.</li> <li>2. Sketch drawings to accompany each entry.</li> <li>3. Record yourself reading the diary entries on iMovie OR do a live reading of your diary entries to the class.</li> </ol>	<ol style="list-style-type: none"> <li>1. Watch a CNN 10 News Segment.</li> <li>2. Write a script that highlights the historical setting of the novel, using the structure of the CNN 10 News segment.</li> <li>3. Produce your news segment in iMovie and present to the class OR present your news segment live to the class.</li> </ol>	<ol style="list-style-type: none"> <li>1. Write a proposal outlining your idea.</li> <li>2. Submit to the teacher for approval.</li> <li>3. Once your receive approval you may begin your choice project!</li> </ol>

**Choice Board for Literature**  
Movie Trailer  
Creative Art  
It's ShowTime  
Diary Entries  
CNN 10 News  
The Ultimate Choice

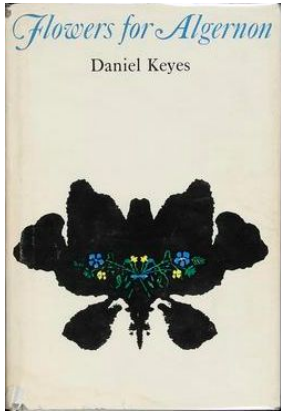
**Unit 2 AKA**  
What makes our society complex today?



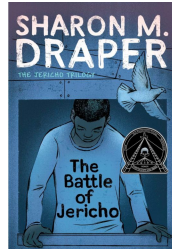
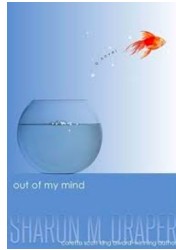
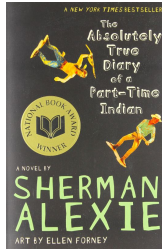


## Hallmark: Book Clubs (Grade 7 Unit 1)

- **Big Idea:** The Cost of Acceptance:  
**Essential Question:** What do you value?



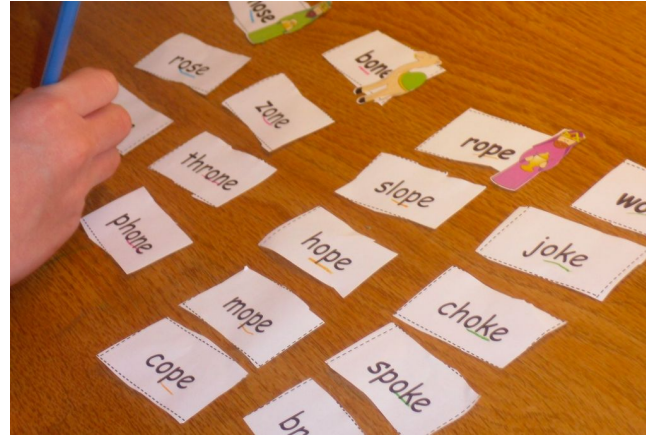
Anchor Text:  
**Flowers for  
Algernon**



## Hallmark: Word Study (Grade 3 Unit 1)

13

- Principle 1:** Prefixes re-, un-
- Principle 2:** Prefixes dis-, mis-, pre-
- Principle 3:** Prefixes ex-, non-, in-, fore-
- Principle 4:** Prefixes uni-, bi-, tri-



# Next Steps Green Curriculum

