

Maker Lesson: Storytelling with Sticker Circuits

<p>Instructional Framework:</p> <ol style="list-style-type: none"> 1. Problem or Need: Students need to write narratives to convey a theme through character development, imagery, figurative language, mood, and tone. 2. Real World Performance: Students will publish original works to effectively communicate their ideas. 3. Instructional Objectives: Collaboratively write narratives to convey a theme and publish narratives in a book with 3 illuminated illustrations conveying major points in the story. 4. A Set of Essential Content: Students need background in author's techniques such as character development, imagery, figurative language, mood, and tone. Students need to learn the writing process including components of a narrative. Students will need time to tinker with the sticker circuits via the Sticker Circuit Sketchbook. 5. An Evaluation of a Test or Observation: Prewriting graphic organizers, informal observations of collaboration, and the creation of the final narrative published in the form of a book with illuminated illustrations will serve as the assessment. 6. A Method to Help Participants Learn: Video clips, shared writing, modeling, and collaborative tinkering will be used to support learning. 	
<p>Common Core Standards:</p>	<p>CCSS.W.6-8.3: Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.</p> <p style="padding-left: 40px;">3.A: Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.</p> <p style="padding-left: 40px;">3.B: Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.</p> <p>CCSS.W.6-8.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>
<p>Next Generation Science Standards:</p>	<p>NGSS.MS-ETS1-1: Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution</p>
<p>Science and Engineering Practices:</p>	<p>Develop and use models</p> <p>Obtain, evaluate and communicate information</p>
<p>P21 Partnership for 21st Century Learning:</p>	<p>Use a wide range of idea creation techniques (such as brainstorming)</p>

	<p>Develop, implement and communicate new ideas to others effectively</p> <p>Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal</p>
Materials:	<p>Narrative Writing Graphic Organizer</p> <p>Book: "Last Stop on Market Street" by Matt de la Peña</p> <p>Chitronics 3 rolls of copper tape</p> <p>Chitronics led lights (3 per student/group)</p> <p>Coin batteries (3 per student/group)</p> <p>Binder clips (3 per student/ group)</p> <p>Construction paper</p> <p>Prebound books for story telling</p> <p>Color Pencils, markers, and/or crayons</p> <p>BrainPop Account</p> <p>Computer</p> <p>Projector</p>

Assessment Strategies: *How will you assess the learning outcomes?*

___ Formative X Summative ___ Diagnostic

The following rubric will be used to determine if students can create an original narrative. Also, observations of illuminated images will determine if students were able to successfully build a circuit.

Criteria for Narrative Writing	Emerging Student work does not achieve most of the "Meeting" criteria	Developing Student work does not achieve some of the "Meeting" criteria	Meeting Student achieves all of the "Meeting" criteria	Exceeding Student exceeds some of the "Meeting" criteria
Development and Elaboration				
Opening: The writer orients the reader by establishing a situation and introducing a narrator and/or characters. (W.5.3a)	<input type="checkbox"/> No opening	<input type="checkbox"/> Weak opening	<input type="checkbox"/> Credible opening	<input type="checkbox"/> Compelling opening
Development: The writer uses narrative techniques, such as dialogue, description, and pacing to develop experiences and events or show the responses of characters to situations. (W.5.3b)	<input type="checkbox"/> No development	<input type="checkbox"/> Unclear development	<input type="checkbox"/> Sufficient development	<input type="checkbox"/> Ample development
Organization and Focus				
Coherence: The writer organizes an event sequence that unfolds naturally. (W.5.3c)	<input type="checkbox"/> Little or no sequencing	<input type="checkbox"/> Inconsistent sequencing	<input type="checkbox"/> Offers sufficient sequencing	<input type="checkbox"/> Offers purposeful sequencing
Conclusion: The writer provides a conclusion that follows from the narrated experiences or events. (W.5.3d)	<input type="checkbox"/> No recognizable conclusion	<input type="checkbox"/> Underdeveloped or ineffective conclusion	<input type="checkbox"/> Well-developed conclusion	<input type="checkbox"/> Compelling conclusion
Language and Clarity				
Vocabulary: The writer uses concrete words and phrases and sensory details to convey experiences and events precisely. (W.5.3e)	<input type="checkbox"/> Use of imprecise language and weak vocabulary	<input type="checkbox"/> Ineffective use of precise language and vocabulary	<input type="checkbox"/> Clear use of precise language and vocabulary	<input type="checkbox"/> Compelling use of precise language and vocabulary
Transitions: The writer uses a variety of transitional words, phrases, and clauses to signal event order/manage the sequence of events. (W.5.3f)	<input type="checkbox"/> Little or no transitions	<input type="checkbox"/> Occasional transitions	<input type="checkbox"/> Sufficient transitions	<input type="checkbox"/> Outstanding transitions
Conventions				
Conventions: The writer demonstrates a command of grade-appropriate grammatical English and mechanical conventions. (L.5.1-3)	<input type="checkbox"/> Numerous errors	<input type="checkbox"/> Several errors	<input type="checkbox"/> Some errors	<input type="checkbox"/> Few if any errors
<small>Please Note: It is at the teacher's discretion to quantify criteria such as most, some, adequate, consistent versus inconsistent, etc., but students should know these expectations in advance. The determining factor distinguishing the meeting versus exceeding categories is the depth and quality of the response in the areas noted above.</small>				

(Rubric was provided by Network 13 Literacy Instructional Coaches)

Essential Questions:	How do author's convey meaning through imagery?
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How does an author convey theme through plot, setting, and characters?

How can illustrations help convey the theme of a story?

What are features of a great story?

Questions the teacher must consider when implementing the lesson:
Are materials available for all students? Will students be required to work in groups due to limited materials?

Will students have enough time to implement the curriculum?

What front loading may be needed to successfully implement the lesson?

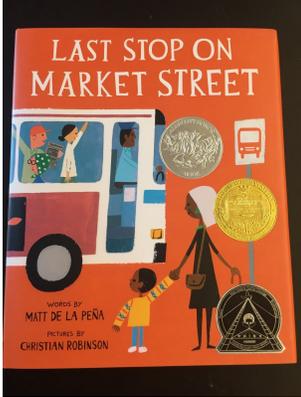
How will I support diverse learners?

What enrichment could be provided for advanced students?

I Do:

Ask: What are elements of a great story? (Answers may include: funny characters, action, stories are interesting) Emphasize that all great stories have 3 main parts: Setting, characters, and plot. Similarly to a painter who thinks carefully about the colors, the layout, the materials that are used to make a work of art, an author too carefully thinks about all aspects of their story.

Read aloud: "Last Stop on Market Street"



	<p>While reading, ask readers to think about what techniques the author used to develop the plot, setting, and the characters. (Students already have been introduced to imagery, figurative language, tone, mood, etc.) Think aloud how to identify the tone while reading. For example, read the and analyze sentence, “Sometimes when you're surrounded by dirt...you're a better witness for what's beautiful. When readers try to figure out the tone, they have to look closely at the words the author uses. Matt uses the word “beautiful” when he describes being in dirtiness. This gives a hopeful tone.”</p>
<p>We Do:</p>	<p>Day 1: Introduce the narrative writing project. Review that narratives are simply stories. Watch the video clip: https://www.brainpop.com/english/writing/typesofwriting/ Review rubric.</p> <p>Day 2: Introduce the revision process to enhance our writing. Review how to write various narrative leads and model how to write: action lead, dialogue lead, question lead, snapshot lead.</p> <p>Day 3: Ticker Day/ Writing conferences! Allow groups to tinker with creating circuits to illuminate potential images and conference in small groups with the teacher.</p> <p>Day 4/5: Model editing and publishing final products.</p>
<p>You Do:</p>	<p>Day 1: Complete brainstorming graphic organizer independently or with small groups. Begin drafting first draft of narrative.</p>

PERSONAL NARRATIVE GRAPHIC ORG.

Topic:

Setting:

Characters:

PLOT:

Exposition:

Rising Action:

Climax:

Falling Action:

Resolution:

SENSORY IMAGES:



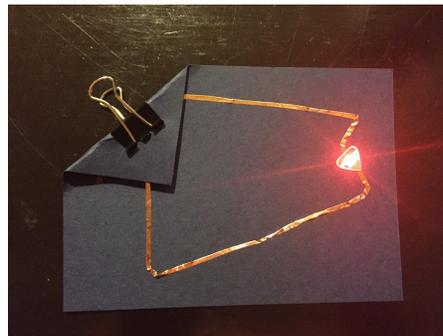
LEAD:

Mrs. Chavez

2016

Day 2: Read current leads and rewrite the lead using one of the narrative leads described in the mini-lesson.

Day 3: Tinker with sticker circuits to illuminate potential images OR conference in small groups with the teacher.



Day 4/ 5: Create sticker circuit illustrations and publish the final draft of narratives.

	
<p>Modifications:</p>	<p>If there is a limited number of maker kits available to create books, students can create three illustrations only illuminating 1 image.</p> <p>Students can work collaboratively in small groups to write and create illuminated images.</p> <p>The lesson can be modified from writing original fictional narratives to writing and creating illuminated personal narratives.</p> <p>Expert writers may not need the frontloading of the video clips and characteristics of a narrative text. They can serve as peer instructors in the form of reciprocal teaching to support emerging writers.</p> <p>Enrichment for advanced students may including designing complex circuits to light multiple light bulbs in one image.</p>

Rationale:

This lesson was designed to provide students with explicit narrative writing practice and is aligned to district learning priorities. During quarter one and quarter three, Network 13 learning priorities included writing original and personal narratives that using common core standards and Parcc style prose constructed responses. Our scope and sequence includes writing narrative continuations of literary texts, original stories, and historical accounts. Through formative assessments such as informal observations and daily writing journals, it is apparent my students have a diverse range of writing abilities. This lesson provides expert writers with the opportunity serve as peer teachers in the form of reciprocal teaching. Through reciprocal teaching, emerging writers will receive guidance from peers and peer teachers show their mastery of the content by teaching mini-lessons relating to narrative leads, dialogue, and how to enhance writing using author’s techniques.

By using Chibi Tronics Circuit Stickers, students have the opportunity to spark an interest in STEM while engaging in creative writing. The lesson reflects Dale Dougherty's (2011) Maker Ed initiative in which "every child is a maker." Through the creation of an original story, designing a circuit to illuminate an original illustration, students are able to play to learn and creatively remix a tool that was not originally intended for a literacy classroom. Students have the opportunity to practice narrative writing skills, but are able to publish their work using circuits to create illuminated images. Through this activity activity, students are able to develop writing skills, problem solving skills when tinkering with circuits, and must consider important design elements to create an illuminated image. The lesson also fosters divergent thinking as described in Mishra and the Deep Play Groups article since creative work is being explored in the discipline of writing like a writer (2012).

References:

Mishra, P. & Deep-Play Researach Group. (2012). Rethinking technology & creativity in the 21st century: Crayons are the future. *Tech Trends*, 56 (5), 13-16.

Dougherty, D. (2011, Jan). Dale Dougherty: We are makers. Retrieved from http://www.ted.com/talks/dale_dougherty_we_are_makers