Remaking Literacy

Melissa Banks and Elizabeth Simmons
Office of Elementary Education and Reading

2022 MLA Conference
To create a world-class educational system that gives students the knowledge and skills to be successful in college and the workforce, and to flourish as parents and citizens.

To provide leadership through the development of policy and accountability systems so that all students are prepared to compete in the global community.
State Board of Education  STRATEGIC PLAN GOALS

1. **ALL** Students Proficient and Showing Growth in All Assessed Areas

2. **EVERY** Student Graduates from High School and is Ready for College and Career

3. **EVERY** Child Has Access to a High-Quality Early Childhood Program

4. **EVERY** School Has Effective Teachers and Leaders

5. **EVERY** Community Effectively Uses a World-Class Data System to Improve Student Outcomes

6. **EVERY** School and District is Rated “C” or Higher
Maker Learning
WE remember WHAT WE DO
What is a learning experience you remember from school that required you to "make" something?

What activities do you use in your classroom that require students to "make" something?
Reading is an active, imaginative act; it takes work.

Increase student understanding by adding tasks that allow for “making” and “doing.”
Research for Hands-on Experiences

Improves student understanding, communication, and creates more interest in learning

*Blikstein, 2014*

Improves vocabulary and increases dialogue increases when students collaborate

*Blikstein, 2014*

Fosters speaking and listening skills and provides opportunities for teacher and peer feedback

*Peppler, 2013*

Activates the sensorimotor part of the brain, which helps reinforce what students are learning

*Kontra, et. al, 2015*

Gives all students opportunities to be successful and motivates reluctant learners

*Fleming & Krakower, 2016; Blumenfield & Stotelo, 2017*
Building Materials
Markers
Multimedia
Digital Tools
Robots
Creativity
Critical Thinking
Collaboration
Communication
Voice & Choice
## Connected Learning Experiences

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Skills</th>
<th>Dispositions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>Communication</td>
<td>Perseverance</td>
</tr>
<tr>
<td>Design process</td>
<td>Problem solving</td>
<td>Flexibility</td>
</tr>
<tr>
<td>Data analysis</td>
<td>Listening</td>
<td>Risk taking</td>
</tr>
<tr>
<td>Computer science</td>
<td>Questioning</td>
<td>Empathy</td>
</tr>
<tr>
<td>Architecture</td>
<td>Organization</td>
<td>Motivation</td>
</tr>
<tr>
<td>Scientific method</td>
<td>Planning</td>
<td>Curiosity</td>
</tr>
</tbody>
</table>

*Remaking Literacy, p. 15*
Tinkering
Exploring with different materials; discovering how something works

Designing
Completing the processes of thinking, planning, sketching, doing

Building
Creating a physical representation of ideas

Prototyping
Working through the engineering and design process (i.e., wonder, plan, create, test, improve)
IS IS NOT
<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening a kit</td>
<td>Being passive</td>
</tr>
<tr>
<td>Following the teacher’s manual</td>
<td>Working in isolation</td>
</tr>
<tr>
<td>Filling out worksheets</td>
<td>Completing predictable tasks</td>
</tr>
<tr>
<td>Using a checklist</td>
<td>Engaging in one-size-fits all instruction</td>
</tr>
</tbody>
</table>
### Maker Learning IS…

<table>
<thead>
<tr>
<th>Connecting</th>
<th>Investigating</th>
<th>Trying</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborating</td>
<td>Reflecting</td>
<td></td>
</tr>
<tr>
<td>Building</td>
<td>Exploring</td>
<td></td>
</tr>
<tr>
<td>Connecting</td>
<td>Engaging</td>
<td></td>
</tr>
<tr>
<td>Inspiring interests</td>
<td>Creating</td>
<td></td>
</tr>
<tr>
<td>Open-ended assignments</td>
<td>Imagining</td>
<td></td>
</tr>
<tr>
<td>Making learning accessible</td>
<td>Having fun</td>
<td></td>
</tr>
<tr>
<td>Personalized learning</td>
<td>Critical thinking</td>
<td></td>
</tr>
</tbody>
</table>
What equipment comes to mind when you hear **MAKER SPACE**?
How do you feel about remaking literacy in your classroom?
Sample Activities

- Interesting quotes
- Examples of figurative language
- Connections to the book
- Creation options:
  - Digital (Adobe Express)
  - Paper and markers

YOU CAN ONLY MAKE A DIFFERENCE BY BEING DIFFERENT.

**Fig. Language**
- "His pajamaed feet padding as soft as kittens." Page 45
- "Clouds scudded frantically across the sky." Page 7
- "Her pencil flew over the paper." Page 49
- "I'm blind as a bat without them." Page 64
- "He was like the white rabbit." Page 455

**Q & A**
- What is the progression of Meg's self-esteem in the story and how are her differences important to the theme?
- Meg was very insecure and felt unworthy in the beginning until her confidence grew. She realized her differences are what help her save the people she loves.
- How would you feel in the situation of Mr. Murry's family when he is gone?
- If I were somewhere in his family, I would feel very concerned and try to hope for the best.

**Conclusions**
- I could relate to Meg's feeling uneasy toward the darkness because there has been a darkness in my life that was a major distraction.
- I could relate to Calvin's feeling forgotten in his family because sometimes I am left out of my friends' conversations.
- I could relate to Charles's feeling independent because at times I have acted arrogantly and got myself in trouble.

**Poem**
- Lungs hopelessly gasp,
- Cold, thick, gloomy dense, black air,
- Treading through space

**Quotes**
- "Love. That was what she had that IT did not have." Page 328
- "It must be a very limited thing this seeing."- Aunt Somewhat Page 305
- "Maybe I don't like being different, but I don't want to be like everybody else either."- Meg page 455

One Pager
Sample Activities

- Write the vocabulary word and illustrate the meaning
- **Creation options:**
  - Digital (Canva, Google Slides)
  - 3-D (Legos, pipe cleaners)
  - Paper and markers
Sample Activities

Alice
- Can be very shy
- Enjoys a good adventure
- Can be clumsy at times, which causes her to become flustered
- Is quite curious and uses her imagination in creative ways

- Teacher provides general profile for characters
- Students design a solution for the character
- Create Cards:
  - Digital, 3-D, or Paper and markers
Sample Activities

- Picture of a page from a book
- Annotate important quotes, ask questions, give opinions, diagram plot, etc.
- **Creation options:**
  - Digital (Seesaw, Book Creator)

http://www.tarammartin.com/booksnaps-snapping-for-learning/
Implementation
Implementing Maker Learning

Start by selecting a book.

Build experiences around books by:

- Immerse readers in the theme or content of the story.
- Bring in artifacts or materials connected to the story.
- Make the learning cross-disciplinary and connecting the content to social studies, math, science, the arts, health, or computer science.
- Use technology to explore the topic of the book more deeply.

Offer maker tools and strategies as learning experiences within the lesson.

Remaking Literacy, pp. 43-44
Start by selecting a book.

**CONTENT**
Subject-area topics (easiest to connect!)
Reading about a garden? Plant something and write about it.

**THEME**
Inspiration for artistic styles or materials
Students use craft sticks to make their own illustrations and write sentences to describe their creations
*Not a Stick* (Portis, 2008)

**CHARACTER DISPOSITIONS**
Books that support character traits such as grit, curiosity, or empathy
Discuss how students need grit to complete maker activities
## Implementing Maker Learning

**Start by selecting a book. Then...**

<table>
<thead>
<tr>
<th>Task</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep student outcomes in mind.</td>
<td>What is the end goal?</td>
</tr>
<tr>
<td>Select literacy skill or strategy to focus on.</td>
<td>What skills will the students use?</td>
</tr>
<tr>
<td>Decide what maker experience you will incorporate.</td>
<td>What will students do or create?</td>
</tr>
<tr>
<td>Determine tools or materials students will need.</td>
<td>What will students need?</td>
</tr>
<tr>
<td>Develop a rubric.</td>
<td>What does success look like?</td>
</tr>
<tr>
<td>Consider ways to share the finished product with others.</td>
<td>Who is the audience?</td>
</tr>
</tbody>
</table>
Include opportunities for student reflection, whether written or through video or audio.

- Choose two prompts to respond to in your Maker Notebook
- Respond to all prompts as a group
- Respond to prompts selected by the teacher
Include opportunities for peer feedback.

**Supportive:** Begin with something positive.

**Specific:** Move away from general comments.

- I like the way your design ______
- When you ______ it helped me ________

**Strategic:** Provide potential next steps.

- Have you thought about _____
- It would be useful if your design included _____
THINK
Students should be actively reading, discussing, and problem-solving

Did I provide too much guidance, walking students through every step? Or were students driving their own learning?

ENGAGE
Students deeply engaged in learning

Was every student able to access the information? Were there opportunities for all students to find their voice within the lesson?

CREATE
Students creating instead of only consuming

Were students actively involved in creation? Did students feel empowered to make decisions and create something to demonstrate their learning?
## Teacher Reflection: Remaking Literacy Checklist

<table>
<thead>
<tr>
<th>Does the learning . . .</th>
<th>👍</th>
<th>👎</th>
<th>?</th>
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<tbody>
<tr>
<td>Focus on core literacy content?</td>
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<tr>
<td>Incorporate a hands-on component?</td>
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<tr>
<td>Facilitate design thinking practices?</td>
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<tr>
<td>Include access to maker materials?</td>
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<tr>
<td>Offer students a choice in their tasks?</td>
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<tr>
<td>Involve a technology tool?</td>
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<tr>
<td>Foster creativity?</td>
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<tr>
<td>Promote collaboration?</td>
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<td></td>
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<tr>
<td>Require communication?</td>
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<tr>
<td>Engage students in critical thinking?</td>
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<tr>
<td>Embed thoughtful reflection?</td>
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</tr>
<tr>
<td>Include sharing of student work?</td>
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</table>
Low-Tech Activity
What’s Do Statues Represent?

Did you know that the Statue of Liberty was not always green? It’s true! Lady Liberty was originally brown, but her copper covering weathered over time and changed color. Dave Eggers, the author of *Her Right Foot*, informs the reader about the statue in a conversational manner. The end of the story asks readers to think about what the Statue of Liberty represents. They’ll realize Lady Liberty is so much more than a statue.

Full Lesson Plan: tinyurl.com/2liblessonplan

ELA Standards:
- RL.2.1-10
- W.2.7
- SL.2.1-3
- SL.2.6
- L.2.6
Remaking Literacy: Tasks

1. Small groups will create a statue using the materials at their makerspace.
2. Students can write or sketch their ideas using scratch paper, markers, and pencils.
3. Assign students to stations by pulling group numbers from a jar.
4. Ensure that each station contains a sample rubric to help with reflection.

Special Note: Should take 2 classes which includes time for student reflection.

Clay

Blocks

Foil

Upcycle

Full Lesson Plan: tinyurl.com/2liblessonplan
You do it!
1. **Break** into groups (K-1, 2-3, 4-5).
2. **Select** one person to serve as the Scribe.
3. **Open** the Google Doc or use the paper copy (Scribe only).
4. **Flip** through the assigned book.
5. **List** traditional activities students would complete.
6. **Transform** one traditional activity to a low-tech maker activity.
### Traditional Activities

What are some examples of traditional activities would you have students complete?  
*Ex: vocabulary, writing, or center activities*

### Low-Tech

Pick one traditional activity and turn it into a low-tech maker activity! Briefly describe the activity below and the materials students would need.

### Medium-Tech

Pick one traditional activity and turn it into a medium-tech maker activity! Briefly describe the activity below and the materials and/or digital tools students would need.

### High-Tech

Pick one traditional activity and turn it into a high-tech maker activity! Briefly describe the activity below and the materials and/or digital tools students would need.

---

8 minutes

[tinyurl.com/RLactivity]
Medium-Tech Activities
The role of First Lady has been defined differently by each woman who’s held it, but all of them left an impact on our nation as a partner of the commander in chief. Incisive poetry by Marilyn Singer and energetic art by Nancy Carpenter provides a fascinating glimpse into the lives of women—from Martha Washington to Eleanor Roosevelt to Lady Bird Johnson—who variously embraced the position and shied away from it, craved the spotlight and fiercely guarded their privacy, took controversial stands and championed for the status quo.

ELA Standards:
RL.3.2-3; RL.3.5-6
Remaking Literacy: **Tasks**

1. Identify the elements of folk tales, fairy tales, and poems.

2. Read examples and discuss how the book matches the elements of each type of literature.

3. Break students into small groups to write and illustrate a unique folklore, fairy tale, and poem.

4. Model how to use **Scribble Press**, StoryBuddy, Book Creator, or Picture Book.

5. Students will create their own collection of stories, tales, and poems.

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**Special Note:**
Work with librarian on this activity!

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Full Lesson Plan: tinyurl.com/2liblessonplan
You do it!
<table>
<thead>
<tr>
<th>Traditional Activities</th>
<th>Low-Tech</th>
<th>Medium-Tech</th>
<th>High-Tech</th>
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<tr>
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<td>Pick one traditional activity and turn it into a medium-tech maker activity! Briefly describe the activity below and the materials and/or digital tools students would need.</td>
<td>Pick one traditional activity and turn it into a high-tech maker activity! Briefly describe the activity below and the materials and/or digital tools students would need.</td>
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tinyurl.com/RLactivity
High-Tech Activities
Anna Smith Strong was a fearless woman who acted as a spy for George Washington during the Revolutionary War. Recruited by Washington’s spymaster, Major Benjamin Tallmadge, she joined the Culper Ring, a group of American spies. Anna helped pass him important messages at a great risk to herself and her family. One of her cleverer devices was to hang laundry on the line in a planned fashion so that other spies could read the “message.”
1. Retell the story or create an alternate ending.
2. Write a script.
3. Develop a storyboard.
4. Decorate the robot as a character.
5. Create original artwork for the scene.
6. Code a robot (Ozobot or Code and Go Mouse) or an animation (Scratch Jr. or Tynker).
7. Reflect on the process.
Book Trailers

WONDER
You do it!
<table>
<thead>
<tr>
<th>Traditional Activities</th>
<th>Low-Tech</th>
<th>Medium-Tech</th>
<th>High-Tech</th>
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<td>What are some examples of traditional activities would you have students complete? Ex: vocabulary, writing, or center activities</td>
<td>Pick one traditional activity and turn it into a low-tech maker activity! Briefly describe the activity below and the materials students would need.</td>
<td>Pick one traditional activity and turn it into a medium-tech maker activity! Briefly describe the activity below and the materials and/or digital tools students would need.</td>
<td>Pick one traditional activity and turn it into a high-tech maker activity! Briefly describe the activity below and the materials and/or digital tools students would need.</td>
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[Link to activity: tinyurl.com/RLactivity]
Assessment
Traditional assessments are still necessary but consider opportunities to replace traditional with maker assessments.

<table>
<thead>
<tr>
<th>Traditional Assessments (Passive)</th>
<th>Maker Assessments (Active)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choice</strong></td>
<td></td>
</tr>
<tr>
<td>Students have little choice</td>
<td>Students can choose the way they will demonstrate their learning</td>
</tr>
<tr>
<td><strong>Format</strong></td>
<td></td>
</tr>
<tr>
<td>Format is static and determined by the teacher or curriculum</td>
<td>Format is dynamic and changes based on the needs and interests of students</td>
</tr>
<tr>
<td><strong>Goals</strong></td>
<td></td>
</tr>
<tr>
<td>Evaluation is based on a set goal or standards</td>
<td>Assessment may look at goals beyond the standards and include the skills and dispositions of the 4Cs</td>
</tr>
</tbody>
</table>
### Traditional vs. Maker Assessments

<table>
<thead>
<tr>
<th><strong>Traditional Assessments (Passive)</strong></th>
<th><strong>Maker Assessments (Active)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timeline</strong></td>
<td></td>
</tr>
<tr>
<td>Assessment occurs weekly, generally on Fridays</td>
<td>Assessment can occur at anytime in the learning process</td>
</tr>
<tr>
<td><strong>Audience</strong></td>
<td></td>
</tr>
<tr>
<td>Audience include the teacher and parents</td>
<td>Audience may include self, peers, parents, teachers, school community, or global community</td>
</tr>
<tr>
<td><strong>Tools and Resources</strong></td>
<td></td>
</tr>
<tr>
<td>Tools and resources available include assessments (tests, quizzes, etc.) provided through the literacy program materials</td>
<td>Tools and resources can include a variety of options for maker materials</td>
</tr>
</tbody>
</table>

*Remaking Literacy, p. 40*
Maker Assessment: Formative

Maker formative assessments can include:

- Teacher questioning during the creation process
- Teacher feedback during different stages of the process
- Students complete Maker Notebooks to reflect throughout the process
- Students collaborating with their peers
<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reading Literature &amp; Informational Text</strong></td>
<td>(CCR.R.1-10)</td>
</tr>
<tr>
<td><strong>Speaking &amp; Listening Skills</strong></td>
<td>(CCR.SL.1-6)</td>
</tr>
<tr>
<td><strong>Computer Science</strong></td>
<td>(Computing Systems &amp; Algorithms and Programming)</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td>(Content &amp; Science and Engineering Practices)</td>
</tr>
<tr>
<td><strong>Other Content Areas</strong></td>
<td>(Library, Social Studies, Math, Health, etc.)</td>
</tr>
<tr>
<td><strong>The Arts</strong></td>
<td>(Visual, Theatre, &amp; Media Arts)</td>
</tr>
</tbody>
</table>
### Sample Rubric

<table>
<thead>
<tr>
<th></th>
<th>Approaching Target</th>
<th>On Target</th>
<th>Bullseye</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engineering design process</strong></td>
<td>Student is developing an understanding of the steps within the engineering design process.</td>
<td>Student demonstrates knowledge of the engineering design process.</td>
<td>Student understands and utilizes the engineering design process to advance his or her learning.</td>
</tr>
<tr>
<td><strong>Understanding</strong></td>
<td>Student work lacks understanding of concepts and skills.</td>
<td>Student work shows some understanding of concepts and skills.</td>
<td>Student work shows a mastery of skills and reflects a deep understanding of concepts.</td>
</tr>
<tr>
<td><strong>Materials and resources</strong></td>
<td>Student inconsistently uses materials and resources to demonstrate understanding.</td>
<td>Student is developing skills to use materials and resources for a purpose.</td>
<td>Student skillfully uses materials and resources with ease and models use for others.</td>
</tr>
<tr>
<td><strong>Craftsmanship</strong></td>
<td>Work is messy and detracts from the overall presentation.</td>
<td>Work is neat and shows thoughtfulness.</td>
<td>Work demonstrates care and precision.</td>
</tr>
<tr>
<td><strong>Effort</strong></td>
<td>Student puts forth some effort but may require assistance to persevere on tasks.</td>
<td>Student puts forth an effort and completes tasks with success.</td>
<td>Student demonstrates strong efforts and encourages others to do the same.</td>
</tr>
<tr>
<td><strong>Reflection</strong></td>
<td>Reflection is not a natural process for the student and he or she requires facilitation from the teacher or peers to reflect on his or her learning.</td>
<td>Student reflects on his or her work and can communicate this through writing or discussion.</td>
<td>Student gives ongoing consideration to his or her literacy learning and models reflective thinking and language for others.</td>
</tr>
</tbody>
</table>
Melissa Banks
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Elizabeth Simmons
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