Makerspace Stories and Social Media: Leveraging the Learning
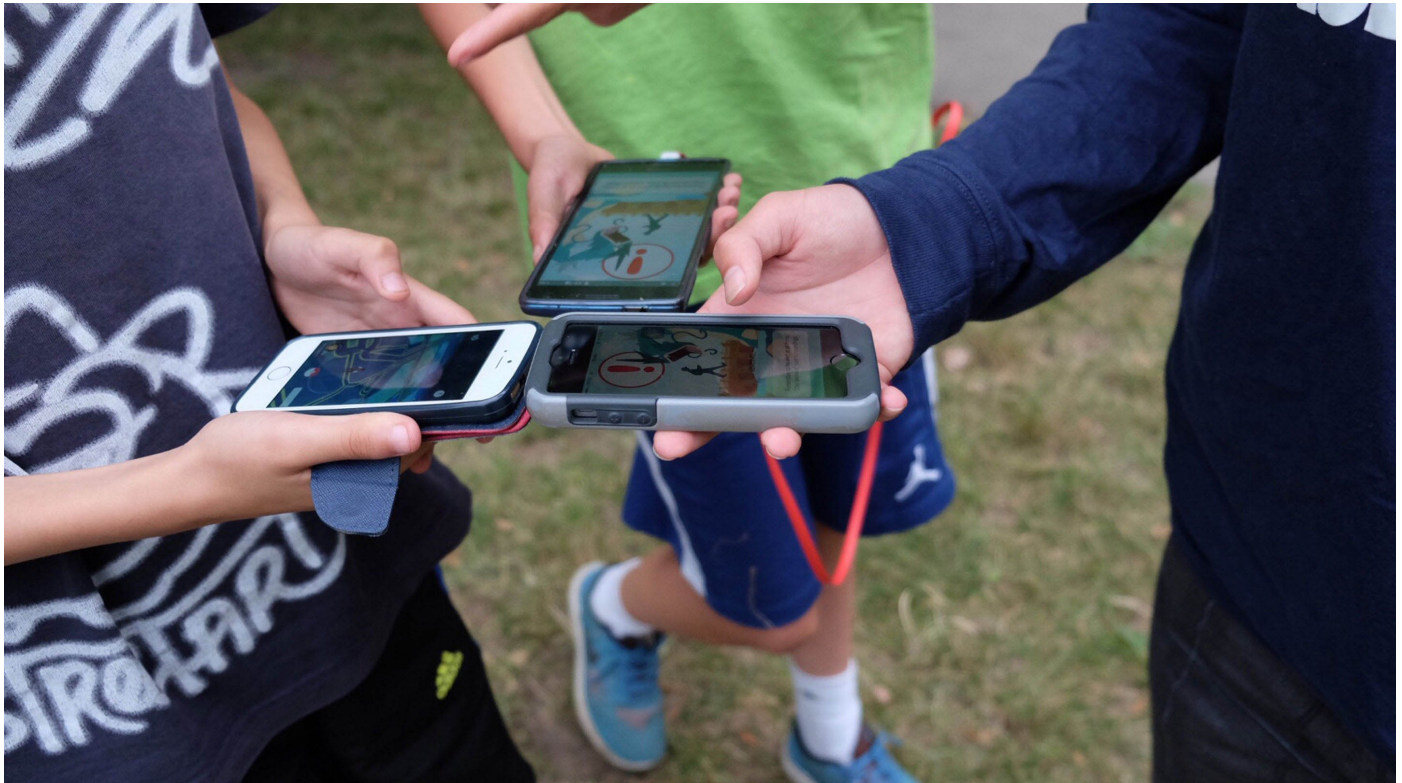

The **maker movement** is built upon a constructivist philosophy that views learning as a highly personal and social process. In this philosophy, teachers facilitate inquiry-based learning, student development of knowledge and thinking processes, and student interaction and sharing of ideas.

> We do not learn from experience. . . We learn from reflection on experience." *John Dewey*

Reflection and sharing are core components of inquiry, which should be pervasive in all makerspaces. (According to the **Buck Institute**, reflection is one of the seven essential elements of project-based learning, which falls under the umbrella of inquiry-based learning.) As educators, we can build student capacity to reflect upon the making process, and then be intentional about finding and creating opportunities for students to reflect, share, and celebrate their experiences. Reflection skills and strategies can turn inquiry into a natural part of the making process, as opposed to simply tacking on reflection after the fact because "we were told it's important."

Learning that endures should transcend a makerspace. Adding social media tools such as **Snapchat** and **Instagram** to the context of making can give students a channel for displaying their experiences by communicating what they have accomplished with a large,

diverse audience. **Social media platforms enable many engaging classroom activities**, including "communities of practice" where learners can interact and share ideas. Reflection with video on these platforms, as well as peer feedback, can highlight the making process in a way that builds student voice and agency in an online environment.

Furthermore, there is tremendous value in utilizing authentic tools and platforms that are already part of students' personal (and possibly, educational) lives. According to **Superintendent Joe Sanfelippo** of Fall Creek (Wisconsin) School District, "If schools access the spaces where students and parents live virtually, we are definitely in a place that we can leverage. It gives us a common forum and meets users on their turf, not ours." In addition, rather than "locking and blocking" these tools, we should be proactively teaching students how to use them effectively and appropriately. (After all, no matter how much a school pretends that they don't exist, students *will* use them.) As Ross used to tell his fourth grade students, "In middle and high school, when all of your friends are messing around on social media, I want you to be using it to grow your own businesses!"

With these thoughts in mind, use the rest of this post to help your students reflect upon their makerspace experiences and tell their stories using Snapchat Stories -- **Makerstories** -- and Instagram (or Instagram Stories) -- **Makergrams**!

Click here for printable directions and storyboards.

Using Snapchat or Instagram, create a one-minute video in which you reflect upon your makerspace experience. Decide on the components that will best tell your story. You can use the criteria below as a starting point, but ultimately you should decide how to apply it to your own work. Do your best to keep moving toward developing your own criteria for your video reflections!

1. Essential Question (10 seconds)

What was the overarching question that you explored or the question that drove your recent work? What question formed your maker journey? Example: "How can I use aerodynamics to make my Lego car travel faster?"

2. Iterative Process (25 seconds)

We want the process, not necessarily the product, to be the main focus of our work. Here are some prompts to guide you:

- What did I make/do? (Describe your prototype.) Example: "I designed an aerodynamic hood to be 3D printed and attached to a Lego car that I built."

- What materials did I use/work with? Example: "I designed my object in Tinkercad and printed it out on our 3D printer."
- What surprised me during the process? Example: "I was surprised with how many times I had to go back and improve my prototype design."
- What frustrations did I experience? Example: "Even after a few improvements on the design of my object, I just couldn't get it right. My car wasn't traveling any faster."
- What about your initial prototype ended up being successful? Example: "Finally, after adjusting the angles of my design, I was successful because it made my Lego car travel faster."

3. Enduring understanding(s) (10 seconds)

As a result of your experience, what do you now understand/know? What are you now able to do? Example: "By using the principles of aerodynamics, I was able to increase the speed at which my Lego car traveled. I was able to see how aerodynamics increase the speed of an object by reducing drag."

4. Reflection (15 seconds)

Here are some prompts to guide you:

- Did I achieve my goal? Why or why not?
- Along the way, what changes did I have to make to meet my goal?
- What changes will I make the next time I engage in a similar process?
- Here's a call to action for my peers.
- Download **this list of reflective questions** for additional ideas.

Here's an example of a reflection: "The next time I design an object, I'll design it first on paper or cut out of cardboard, and then digitally. I feel this will decrease the number of times that I have to print out my prototype. Try that out the next time you're designing an object. And be sure to let me know what you think about what I made!"

A Few Additional Points

- In addition to having students create video reflections, consider providing them with starting points for how to respond to each other's work once it's posted on social media. (For example, how to leave **appropriate feedback** is an entire lesson in and of itself.)
- The one-minute requirement for video pushes students to a) prioritize their most pertinent information, and b) exercise their creativity within this time constraint.

- According to public speaking coach and author **Carmine Gallo**, "Great communicators reach your head and touch your heart. Most people who deliver a presentation forget the 'heart' part." If you want to reach people's minds *and* hearts, tell a story. While Makerstories and Makergrams may contain data, facts, and analysis, they also include narratives, which can get viewers emotionally invested in the learning.
- Encourage students to explore self-expression and creativity through their stories using different features of the video platforms, such as filters, emojis, drawing, and text.
- Snapchat and Instagram Stories will disappear after 24 hours, but they can be saved to the device on which they're created. (However, as of now, Instagram Stories can only be downloaded one photo or video at a time unless you use this **Chrome extension**.) For more on Snapchat, check out **A.J. Juliani**'s **Complete Guide to Snapchat for Teachers and Parents**. For more on Instagram Stories, check out the official **Instagram Help Center**.

While we've designed guidelines for creating the Makerstories and Makergrams, we'd ultimately like students to progress toward developing their own criteria for video reflections. Much like how inquiry-based learning calls for students to formulate their own questions, students should *also* generate the criteria that most effectively tell their stories. Starting with our suggested framework and gradually transferring responsibility onto your students will help them begin to make critical thinking and reflection innate components of their making process.