

Art Integration

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The art form I plan to use for my Arts Integration lesson is Visual Arts. I will be integrating art into my third grade math geometry lesson on identifying and classifying shapes and their attributes (Pennsylvania Department of Education, 2019). As identified in the National Core Arts Stands, visual arts has many possible components, including drawing, photography, painting, pottery, and printmaking (2014). My current plan is to allow students to choose from several pre-selected visual arts options to create a piece of geometric artwork. Based on supplies available, I would like to allow students to choose from drawing, painting, and printmaking. I have access to the items needed for this and believe that these three art forms lend themselves nicely to a geometry lesson with many opportunities for developing a deeper understanding of an oftentimes challenging topic for third graders.

When teaching a new math concept, I typically follow a concrete to pictorial to abstract model. It is my belief that following this method is an effective way to grow student understanding of a concept. From this Arts Integration course, I have identified that the pictorial step of this progressive model is an ideal place to institute art into math. I like to encourage students to draw pictures during this step, but I never thought to turn it into an art lesson. We are so limited for time as teachers, but this seems like a natural place to develop both mathematicians and artists.

In my years as a third grade teacher, I have seen students struggle with geometry time and time again. In particular, the concept of classifying quadrilaterals is challenging. As teachers, we have to shift them from thinking a shape can only belong to one “category” and that, in fact, they can belong to many – squares are rectangles, rectangles are parallelograms, parallelograms are quadrilaterals, it’s a lot for their eight and nine-year old brains to wrap around. I think that after allowing them to handle concrete models and looking at pictorial models of these shapes, allowing them an opportunity to *create* with these shapes is an ideal way to advance their mathematical thinking on the topic.

I would like to relate this math and art lesson to literature by reading about and studying the works of different geometric artists. In the last online session, I was particularly struck by the conversation about the lack of exposure to diversity that can inadvertently occur in STEM/STEAM lessons. I have students with different multicultural backgrounds, socio-economic statuses, and intellectual learning abilities and would like to teach them about the wide variety of individuals contributing to the artistic world.. Thus far, I have identified:

- Charley Harper, a graphic artist raised on West Virginia farm (Charley Harper Art Studio, 2019).
- Bryce Hudson, an abstract geometric Moroccan-American artist (Bryce Hudson, 2016).
- Alison Kunath, a travel-inspired artist known for her geometric murals (“Living and Working Where it Feels Right,” n.d.).
- David Krueger, a geometric-style artist at The Arts of Life, an art studio for adults with disabilities (The Arts of Life, 2019).

I look forward to continuing to develop this lesson plan and growing my students as mathematicians, artists, and inclusive learners.

## References

Arts of Life (2019). About David Krueger. Retrieved from:

<https://artsoflife.org/artists/david-krueger/>

Bryce Hudson (2106). Visual Contemporary Art of Bryce Hudson. Retrieved from:

<http://www.brycehudson.com/>

Charley Harper Art Studio. (2019). Retrieved from: <https://www.charleyharperartstudio.com/>

Commonwealth of Pennsylvania. (2019). Pennsylvania Department of Education Standards Aligned

System (PDESAS). Retrieved from: <https://www.pdesas.org/Standard/Search>

Houghton Mifflin Harcourt Publishing. (2015). *Go Math! Teacher Edition G3*. Orlando, FL:

Houghton Mifflin Harcourt Publishing.

Living and Working Where it Feels Right. (n.d.) Retrieved from:

<http://www.allisonkunath.com/about>

National Core Arts Standards. (2014). Visual Arts National Coalition for Core Art Standards.

Retrieved from: <https://nationalartstandards.org/>