

# CULTIVATING CREATIVITY AND PRACTICING COMPASSION THROUGH STEAM ACTIVITIES

By Christine Comas

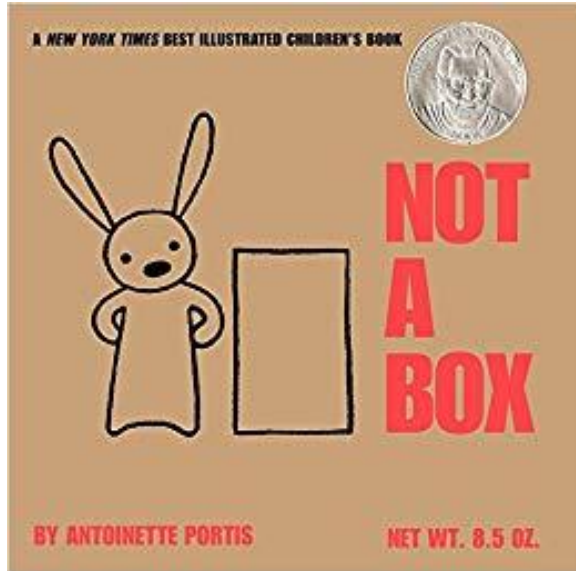
Director of Innovation / Science & Technology Teacher

Grace Episcopal Day School

**AT GRACE EPISCOPAL DAY SCHOOL,  
WE FOSTER A CULTURE OF CREATIVITY.**

While giving students the opportunity to be creative is at the heart of our large and small Makerspaces, it is the way in which our students develop a sense of empathy and compassion through their creation that is most remarkable.

# EARLY CHILDHOOD CLASSROOMS: "NOT A BOX" SETS OUR IMAGINATION FREE



Inspired by Antoinette Portis's picture book *Not a Box* -- and by our school's focus on recycling, sustainability, and thinking (you guessed it!) outside the box -- students in Preschool and Prekindergarten have come up with some wonderful creations and connections.

# WHAT CAN IT BE?

In our early childhood classrooms and Makerspace, an abandoned box ready for the recycling bin is full of rich possibilities.



# A BOX BECOMES A HOME

Recently, a Prekindergarten parent came to speak to the class about the Walia, an endangered animal found in her native country of Ethiopia.

Inspired by her stories, the students quickly ventured over to the “Not A Box” creation center to build a home for the Walia.



While building, the students discussed what the animal eats, its environment, how it moves with a herd, and where it might like to hide.





# CREATING PLAYSACES FOR OUR FURRY FRIENDS

Meanwhile, over in Preschool, our students noticed how much their pet hamster loved to move, so they looked for cardboard tubes and connected them together to create a maze for their beloved Pi to run through.



# **EARLY ELEMENTARY GRADES: PROJECT-BASED LEARNING CONNECTS CREATIVITY AND COMPASSION**

As we dive deeper into project-based learning and think about the intersections between us and the world around us, the connection between creativity and compassion remains at the forefront of our students' learning. In studies of habitats, local geography, and weather patterns, students are impelled by their findings to think in innovative ways.



# LEARNING ABOUT BUILDINGS AND HABITATS

Our Kindergarten students have been particularly interested in buildings all year long. They've been thinking about their own houses and their school, doing field work to study buildings, and then working in class with a variety of materials to try to replicate what they see.



In March, the Kindergarten class took a field trip to the National Building Museum, where they got to build using even more complex materials.

Next month in the Makerspace, our K students will extend their learning as they explore and build suitable animal habitats.



# FINDING MOTIVATION FOR CONSERVATION

In Grade 1, students have been studying invertebrates and vertebrates in different habitats. Throughout their study, they have asked themselves: Why is it important to conserve land for small creatures?





Through research,  
fieldwork,  
discussions with  
guest experts, and  
the development of  
model habitats,  
students have  
fully dedicated  
themselves to  
finding out the  
answer.



# CONNECTING WITH THE LOCAL COMMUNITY

As a part of their community study, Grade 2 students spoke with local business owners and visited buildings in our community of Kensington, MD.

After their fieldwork and sketching, the students worked in groups to create and share their models with parents and fellow students.





# CONSIDERING SMARTER BUILDINGS

Students in Grade 3 researched, designed and constructed models that could withstand hurricane winds, flooding, meteor showers, and earthquakes as a part of their weather and natural disaster study.

# **OLDER ELEMENTARY GRADES: COLLABORATIVE, COMPASSIONATE, AND INCLUSIVE DESIGN THINKING**

As our Grace students get older, they begin to incorporate elements of design thinking into their work together. With increased cross-class collaboration, their research and projects become richer, more complex, and more focused on an equitable and inclusive community.



# BUILDING A DREAM HOUSE FOR ALL PEOPLE

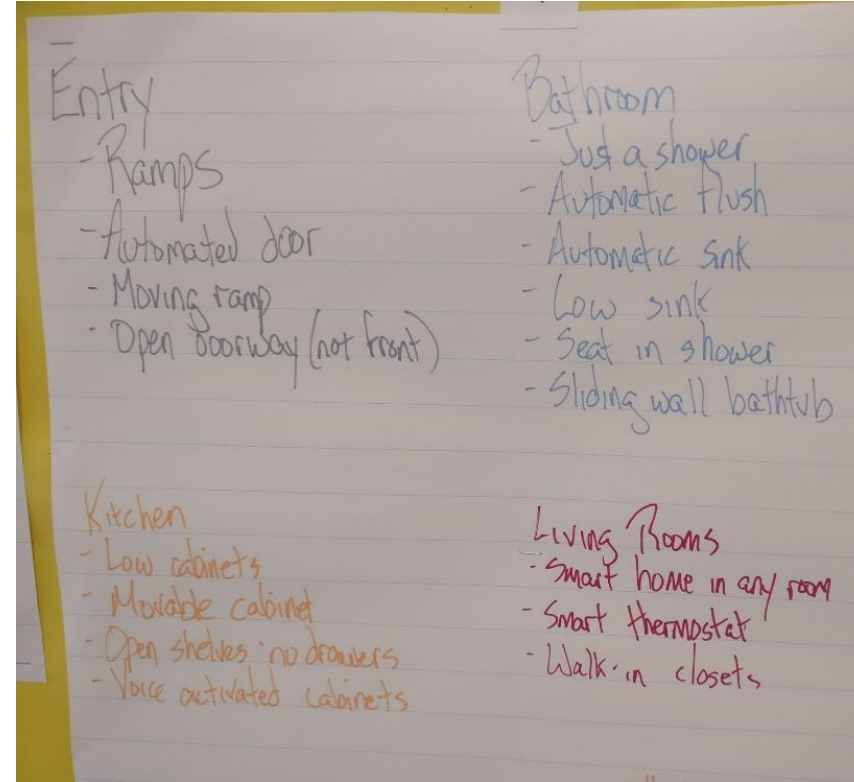
Grades 4 and 5 have been working on a design thinking project related to real estate: designing and building a model of their dream home.



First, small groups of students in Grades 4 and 5 explored real estate and “purchased” lots on the DelMar peninsula.

Then, the groups got a chance to design their dream home on the property they purchased.

They started by dreaming big. Then, they reflected on how to make their homes truly homes for all, including people with disabilities.





Students started by sketching each room of the house on grid paper, being mindful of dimensions and budget.

The final stage of their project will be to build a scale model of their house using the many recyclable materials available.