# **ARCH+ED**

2015 Architecture + Education Program

# **In-Class Progress**

e would like to thank everyone for all of the hard work you have put towards this years program. It is truly shaping up to be one of our most involved programs to date, especially with all of the great fieldtrips you have been taking the children on. We would never have been able to affect so many wonderful children without all the great support and effort you have dedicated to this cause. You should all be very proud of work you are doing and we just wanted to take a moment and highlight some of the exceptional work be done in the classrooms.

### School 32 Bennett Park Montessori

Project Name: The Structure of a Community: Building a Piece of Peace Grade Level: Pre school + Pre-K + Kindergarten, Chris Koch Architects and Students: Danielle Johnson (Carmina Wood Morris), Samantha Shank + Clarisa Massey (SUNY Buffalo State)

"These young architects have been working on their observation skills as it applies to architecture through books, walking tours of downtown Buffalo, and games. Along the way they have been identifying building elements found in Buffalo's great architecture. They are learning the concepts of what makes a community in various scales and are applying all they have observed to a model community made from reusable materials."

#### Project Name: Designing a Tetrahedral Kite Grade Level: Pre school + Pre-K + Kindergarten, Pam Gay Architects and Students: Bob Palgutt (Mid-City Office Furniture), Ryan Morley + Ali Casarsa, + Jess Harris (Villa Maria College)

"We have introduced concepts of 2-dimensional shapes becoming 3-dimensional. We have also discussed patterns and structure. To tie all of these concepts together, the students are designing the "panels" for tetrahedrons. Once the panels are attached to the tetrahedrons, we will assemble the tetrahedrons together into one large form (which will hopefully be able to fly as a kite)."

### School 198 International Preparatory School

#### Project Name: Second Chance Silo Grade Level: 9th grade, Erin Kaminski Architects and Students: Timothy Ung (Architectural Resources), Christopher Gomez (UB)

"Our goal is to first prepare students for the challenges that come with designing a reuse space. Through Exploration, students will have to design around existing conditions and criteria. Students will work within silo like structures, trying to implement both tensile and compressive structures, so that they can get a feel for the difficulty and awkwardness of designing within a grain silo. Students will then draw they're creating in plan, section and elevation so that they begin to relate their 3D creations in two dimensional drawings. Students will then have to design both a public and private program that they must fit within the silo structure and the tensile/ compressive structure that they built. "

### Gallery Opening!

Don't forget to spread the word about our gallery opening which will be on January 8th from 5 p.m. to 7:30 p.m. at CEPA Gallery









### School 192 BAVPA

Project Name: Paper Lanterns + Wearable Architecture Grade Level: 9th grade, Rachel Lyons + Elizabeth Larrabee Architects and Students: Nellie Niespodzinski (Trautman), Darcy Engle (SUNY Buffalo State)

"9<sup>th</sup> grade art majors at Buffalo Academy for Visual and Performing Arts are working on paper lanterns, and will also be constructing wearables. Students worked with their teachers, Ms. Lyons and Mrs. Larrabee , and with Architect Nellie Niespodzinski and Buffalo State student Darcy Engle to develop abstract paper lanterns based on pieces of architecture. They will then be combining forms from the first project and working in groups to create wearable sculptures."

# School 33 Bilingual Center

Project Name: Home away from Home Grade Level: 3rd grade, Justin Ostrowski + Tina Shareno Architects and Students: Daryl Ryan (University at Buffalo), Allysa Gozdziak (UB)

Grade 3 students are studying animal habitats within specific biomes and how modern zoos try to simulate these habitats. Students visited the Buffalo Zoo to collect information from zoo educational staff and observational data about zoo habitat design as they toured the various animal habitats in the zoo. Teams of students will design a habitat for a specific animal that will include an enrichment design that will meet the needs of their animal "client" to help make their zoo home a "Home away from Home".

#### Project Name: New Zoo Review Grade Level: 3rd grade, Samantha Edwards Architects and Students: Phillip Gusmano (CannonDesign), Noor Alwan (UB)

"Grade 3 students are studying animal habitats within specific biomes, and how modern zoos try to simulate these habitats. Students visited the Buffalo Zoo to collect information from zoo educational staff and observational data about zoo habitat design as they toured the various animal habitats in the zoo. Teams of students will design a future habitat for a specific animal and design a new habitat for that animal "client" to envision how zoos can become even better caretakers of the animals."

#### Project Name: Better in the Weather

Grade Level: 3rd grade, Sara Callahan + Sarah Koch Architects and Students: Willems Ransom (CannonDesign), John Whaley (Carmina Wood Morris), Chelsey Balistrieri + Michelle Muniak (SUNY Buffalo State), Dan Avilan (UB)

"Concentrating on the issue of people change their behavior based on the weather, the students will focus on how communities design structures so that people are able to access public areas in all sorts of weather. Students will be learning about the architecture of the city and be exploring ways to design structure that will help the public be able to enjoy specific areas of the city year-round, in all types of weather. One 6<sup>th</sup> grade class will design and build models of possible solutions to sever weather scenarios, and the other 6<sup>th</sup> grade class will be building an actual structure to be used to solve their identified problem."

# School 156 Frederick Law Olmsted

Project Name: Responsive Facade Prototypes Grade Level: 9th—12th, Sarah Averill Architects and Students: Dan Lamm (Kideney), Ashwini Karve (UB), Erika Foti (UB)

"Our group is focusing on dynamic and responsive architecture. After introducing the students to the topic they worked in groups to create a dynamic prototypes that could be opened and closed to control light coming out of a box. The ideas of these prototypes will be refined in the next (and final) version where arduinos, light sensors, and servo motors will be used to turn the dynamic function into a responsive one. The final installation will be a mini mock-up of a responsive facade system that will open and close depending on the amount of light directed at it. Looking over attendance for the past couple sessions, I am thinking it will most likely be 9 or 10 groups. There were a couple kids who haven't been there lately who still want to participate but have had class conflicts, since teachers are holding them back for tests and stuff. So I'm adding in a guess of 2 more groups to the 8 we already have from last class."









# School 37 Futures Academy

Project Name: Futures Park Grade Level: 4th grade, Brianna Pride Architects and Students: Michael Wysochanski (ASAP), Elizabeth Decker (SUNY Buffalo State)

"The classes were structured with core concepts and examples of architecture, landscape design, and geometry. While providing images and illustrations, we simultaneously gave them materials such as Legos, toothpicks, marshmallows, and playdough to practice constructing and drawing their interpretations of what they were taught. Working in groups of 2 or 3 they are designing a park in the site immediately north of their school. *The Futures Park* will propose a new landscape and structure (pavilion) that incorporates positive existing conditions, to create a public space for the area and the students."

#### Project Name: Building Materials and Methods Timeline Grade Level: 4th grade, Joanna Wingo Architects and Students: Chelsea Davis (Watts), Eliana Drier (UB)

"In correlation with the fourth grade social studies lessons about the history of NY, our project follows a timeline of building materials used by inhabitants of NY. The students are split up into 5 groups, each studying the history of a building material while designing and modelling one or more buildings of that type. They are researching and mimicking the building typologies of longhouses, colonial houses, grain elevators, skyscrapers, and buildings with curtain walls to understand how the materials are used for construction. The students will have a history-based knowledge about these materials, while exercising their design skills in creating a model based on what they learned."

# School 53 Community School

Project Name: "Shaping" the Community Grade Level: Kindergarten, Lisa Waters Architects and Students: Hillary Hadley (Wendel), Danielle Jones + Lindsey Smith + Melanie Daniels (Villa Maria College)

"We've been teaching the students about 2D & 3D shapes. The students are learning how to relate these shapes to the built environment and how combining shapes can create a much more interesting objects, such as a building. We have also used shapes to discussed the space they take up and the space they create around the perimeter, creating positive and negative. As the final project, we are going to use these concepts to create a community."

#### Project Name: 53's Busy Buzzing Bee Community Grade Level: 1st grade, Karen Sunderland Architects and Students: Rebecca Williams (CannonDesign), Rebecca Sturniolo (SUNY Buffalo State)

"We are learning about shapes, patterns, architectural elements and how these each tie into building design. They are learning the concept of community and how we all need to work together and rely on each other. From these two concepts, in teams, they are creating a 'bee community' that contains buildings that are essential for communities. They are learning the concept of community by working together and sharing while designing their own building from design to construction with drawings and models."

#### Project Name: Popovich Landing: A Moon Community Grade Level: 4th grade, Danielle Popovich Architects and Students: Nick Misso (CJS Architects), Elyse Skerker (UB)

"We are relating what the students have learned in science class about the Moon to Architecture and vise versa. Students are learning how to apply lessons about design for particular climatic zones to designing a shelter on the moon for a fictional community called "Popovich Landing." Students were presented with an exciting challenge to design a building type of their choosing for the moon community of "Popovich Landing" that must meet the code requirements set forth by the "Lunar Council." The Lunar Council's main mission is to make sure that the students stay on track with their designs to make sure that they are safe for human occupants on the moon given Moon's extreme weather."













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