



JCPS GRADUATE PROFILE:

1. PREPARED & RESILIENT LEARNER

2. GLOBALLY AND CULTURALLY COMPETENT CITIZEN

3. EMERGING INNOVATOR

4. EFFECTIVE COMMUNICATOR

5. PRODUCTIVE COLLABORATOR

1

Prepared and Resilient Learner

DEFINITION

1. Demonstrates knowledge of content skills and standards
2. Applies content knowledge to real-world contexts and in interdisciplinary ways
3. Reflects on successes and challenges, and makes appropriate adjustments in order to meet academic, personal and professional goals
4. Employs organizational and project management skills to achieve academic, personal and professional growth
5. Sets personal goals for transition readiness, explores postsecondary options and takes actionable steps towards realizing both

1

Prepared And Resilient Learner

CASE STUDY 1A

Olmsted North Middle School –
Soapbox Derby Car Project



Olmsted North's Soapbox Derby is a 6th grade cross-curricular project involving 200 students and 11 teachers (from science, math, LA, SS, ECE, ESL & engineering). Students were organized into teams of four, called pit crews. Each pit crew was assigned or chose a country to research and create presentations in SS and LA classes. In math and science, pit crews made scale models of their box car, then moved onto building with plywood. Over three days, pit crews built, painted and decorated their cars to represent their countries. Then, pit crews participated in a cultural fair. Using a scavenger hunt format, two pit crew members visited other teams to seek information, while the other two pit crew members remained with the car to present.

After a period of time, the pairs flipped, so all students presented and visited other teams. Races took place on the last two days of school. Each team chose one driver, two pushers and a statistician. Data from our statisticians was compiled to be used in math and engineering courses for next year's 6th graders. Although this project could serve as evidence for multiple Success Skills, it provided students with many opportunities to grow as Prepared and Resilient Learners. Students had to demonstrate knowledge from various content areas and apply that knowledge in multiple and interdisciplinary ways. They continually had to reflect when faced with challenges during the process. In addition, students had to manage their time effectively in order to complete the car on time.

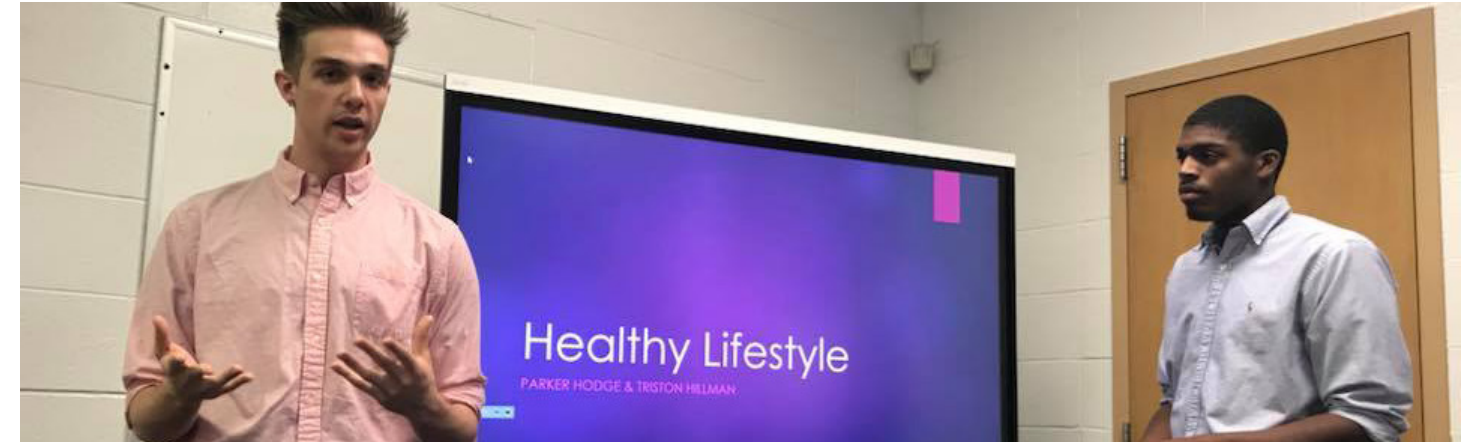
REFERENCE LINKS*

1. VIDEO - Olmsted North Students Build Soap Box Cars!
2. VIDEO - Project Introduction Video

*JCPS will send digital PDF with hyperlinks.

CASE STUDY 1B

Graham Brown School –
Student Advocacy Project



Ms. Elizabeth Todd Byron, a United States history teacher at the J. Graham Brown School, created an advocacy project designed to make civic engagement part of her senior students' everyday lifestyle. She challenged them to understand the issues in society and do something about them. She had them create a list of things they were passionate about and then research their respective topics to fully educate and immerse themselves. Once up to speed, they visited the County Clerk's office and registered to vote. They were required to do five hours of advocacy work by submitting evidence and a reflection paper. The evidence was anything from a poster, website, photographs, signatures, essays, etc. Then, Ms. Byron challenged her students to use their knowledge to educate the community on their civic issues.

Some students chose to work at the school level and teach lessons to younger children on topics like access to healthcare. Others took the project to a local level and held rallies or went to speak to politicians or business representatives about topics like DACA or comprehensive sex education. Others took the project to a global level by creating websites and social media pages for topics like mountaintop removal or positive body talk. In May, each senior was required to present their research to a panel and provide evidence of five hours of work on their passion civic project. The panel was comprised of faculty members, a junior student from the school, school administrators and an outside local community member with a vested interest in the topic. This allowed students to share their work beyond the classroom and reach a live audience. This project engaged seniors to become lifelong learners and build resiliency to understand how they fit into the larger world.

REFERENCE LINKS*

1. VIDEO - J. Graham Brown School Student Advocacy Project: Amelia

*JCPS will send digital PDF with hyperlinks.

2

Globally & Culturally Competent Citizen

DEFINITION

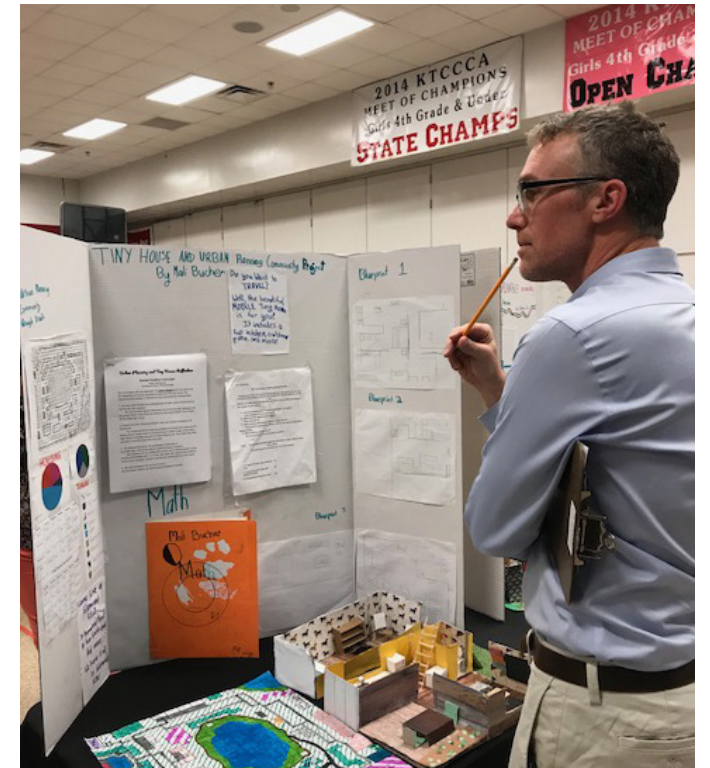
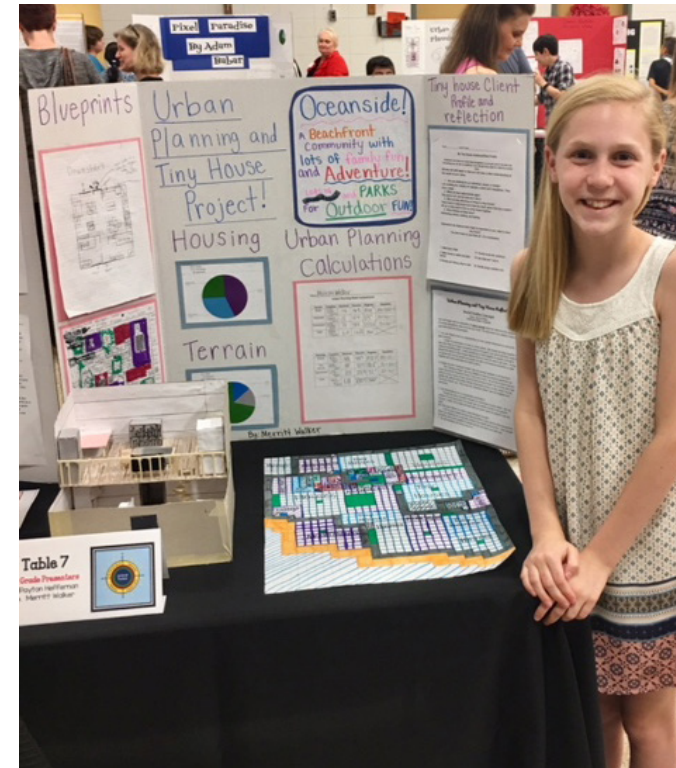
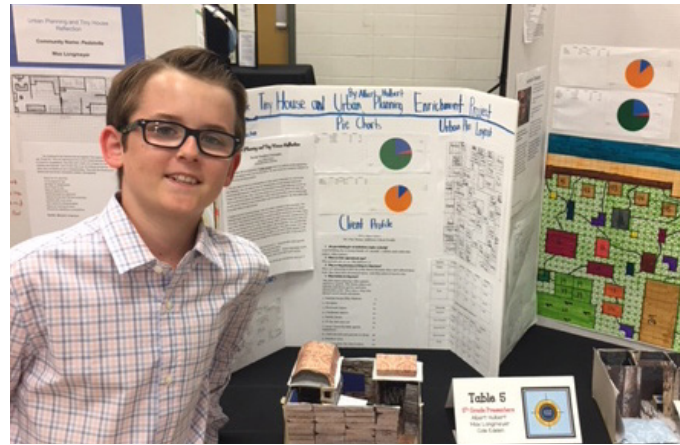
1. Explores community and global issues from the perspectives of those most impacted and creates actionable solutions
2. Employs democratic processes to come to decisions and solutions
3. Compassionate and empathetic toward others
4. Promotes a sense of belonging for others
5. Respects different cultures, perspectives and beliefs

2

Globally and Culturally Competent Citizen

CASE STUDY 2

Dunn Elementary School - The Urban Planning Sustainability Project



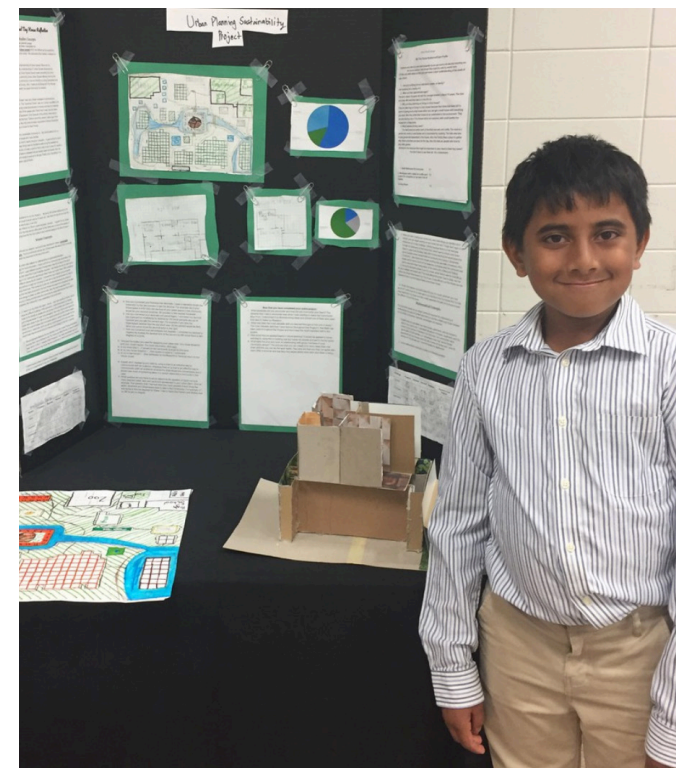
Fourth and fifth-grade students shared their designs for Urban Planning and Sustainability to an authentic audience comprised of builders, mortgage lenders, bankers/loan officers, realtors, parents and a variety of educators from JCPS. At the beginning of the project, students learned about the history of urban sprawl and its impact on the environment. They explored their own global footprint by examining their carbon dioxide usage and consumption of our natural resources. Then, students looked at ways to create a community that would reduce the negative impact on the environment.

Students considered environmentally friendly transportation, local food and businesses, and green energy sources in their community designs. Additionally, they learned about the practice of redlining and housing inequity that was created by discriminatory laws. They used this information to design their own communities that would provide equitable housing options to different economic demographics. When first created, the project aligned four math standards, as well as cross-curricular connections with ELA, science, social studies, music and health/physical education. However, by the end of the project, students had engaged with more than half of all math content for both fourth and fifth grade. Additionally, they transitioned into sixth and seventh grade math content. In this case, math served the project, instead of the project serving the math. The Urban Planning Sustainability Project connected to every success skill in a student's Backpack, but the students from Dunn developed and demonstrated compassion and empathy towards others, learned a great deal about different cultures, perspectives and beliefs. Students explored community issues and gained valuable perspectives while creating actionable solutions.

REFERENCE LINKS*

1. CASE STUDY & VIDEOS - Dunn's Exhibition

*JCPS will send digital PDF with hyperlinks.



3

Emerging Innovator

DEFINITION

1. Employs a sense of curiosity and inquiry; seeks to learn
2. Asks questions to extend, challenge and clarify the thinking of self and others
3. Applies a design process (e.g. research, ideation, modeling, prototyping and testing) to create new solutions, products and processes
4. Uses relevant information and feedback to continually improve solutions, products and processes
5. Takes appropriate risks, and makes adjustments based on successes and failures

CASE STUDY 3A

Crosby Middle School -
Invention Convention

Science teacher, Mr. Brian Dunkley, leads his sixth-grade students to explore science, technology, engineering and math (STEM) through an innovative day-long learning event called Invention Convention. Three months before the event, Mr. Dunkley and the teachers on his team help students conceive, design, build, advertise, and demonstrate an original invention, which they work on mostly at home. The steps students take to conceive and construct their inventions follow the same process that all inventors undertake. Before the students even consider ideas, he gives them a foundation in scientific methods, such as journaling, note-taking and making observations—"all of those basic things a scientist needs to know to work in the lab."

To inspire creative ideas, he asks students to consider their problems and needs, as well as those of their family and friends. For example, ideas for helping a disabled family member such as a lamp switch enhanced to help a grandparent with arthritis. Students research their ideas at the U.S. Patent and Trademark Office, make technical scale drawings, gather materials and build their inventions. On the day of the Invention Convention, students display their work in the school gym to over 1,000 people which helps to engage students in a personal discussion of the invention process. The Invention Convention certainly provides a sense of curiosity and the ability to innovate, as well as develops the skills to apply feedback to continually improve solutions.

REFERENCE LINKS*

1. [Crosby Middle - Invention Convention](#)

*JCPS will send digital PDF with hyperlinks.

CASE STUDY 3B

Jeffersontown High School -
Cardboard Boat Regatta

Jeffersontown High School students, in groups of 3-4, had 10 days to design, 15 days to build and 2 days to finalize documentation and presentations for the CADD Boat Regatta event. Students had to build a boat, per specifications, from cardboard and duct tape that would not only float, but carry a passenger in a highly competitive race. After reviewing specifications, the students brainstormed and sketched ideas that would meet all of the requirements. Boats could not weigh more than 25 lbs., exceed 14" tall or exceed 30 square feet in bottom surface. Once the students collaborated, negotiated, and agreed upon a boat design, they created a 3D model and analyzed it in Autodesk Inventor. Students transferred their 3D model and converted it into a set of dimensional construction drawings. Once the construction drawings were complete, students were given the material to build their design. During the build process, students documented any changes to their design. Once the construction of their boat was complete, and a set of as-built drawings were turned in, Senior CADD students inspected their boats to ensure they met specifications. If specifications were not met, students returned to the build area to make necessary revisions before the project due date. This project required students to demonstrate and practice safe work habits, apply terminology and concepts of parametric modeling and parametric sketches, and to demonstrate the ability to

apply and modify geometric constraints and dimensions. This rich and robust assignment touched many Success Skills, but students had to extend their knowledge and certainly apply a design process ranging from research, prototyping and testing. Teams were continually improving solutions and creating new processes to achieve their desired outcome.



REFERENCE LINKS*

1. [Jeffersontown High Cardboard Boat Regatta 2018](#)

*JCPS will send digital PDF with hyperlinks.

4

Effective Communicator

DEFINITION

1. Uses appropriate conventions and evidence to convey ideas clearly in writing, verbally, digitally and visually
2. Adapts message to purpose and needs of the audience
3. Uses discipline-specific writing conventions, formats and vocabulary to communicate ideas
4. Uses technology effectively and responsibly

CASE STUDY 4

Olmsted South Middle School –
YAG Poetry Project

Olmsted South's poetry project was the result of a collaboration between Jennifer L. Wade Hesse, 6th Grade ELA teacher, and Jeannette Bahouth's non-profit, Young Authors' Greenhouse (YAG). Through this partnership, Olmsted established a Young Authors class to 50 students during the 2017-18 school year. The students were selected because of novice and apprentice writing scores. Each week, YAG and their volunteers (college students, retirees, professionals, stay-at-home moms) worked with the girls on a variety of writing pieces. The volunteers provided positive support and personal, collaborative feedback. They not only improved the writing skills of these young women, they transformed them into confident young authors! Forty-eight of the students were published in an anthology. Four were also published in an anthology on women and

violence. Three of the students were selected to read their writing on stage at a sold-out concert featuring Jim James of My Morning Jacket. Teddy Abrams, of the Louisville Orchestra, was at that concert and contacted Jennifer about a songwriting seminar. The two musicians spent a week with the girls, and the result was posted online by JCPS and broadcast on the news. Each of the girls contributed lines and ideas from pieces they had written throughout the year. The partnership with Young Authors Greenhouse is a model of the success possible through bringing community partners into the classroom. They have offered our students choice in their writing, opportunities to collaborate and connect with the real world, and successfully share their work through presentation and publication with a large audience. Students had to talk with one another about their writing and provide feedback. In addition, they had to make sure their purpose and message was clearly communicated to their audiences in their writing pieces.

REFERENCE LINKS*

1. [Olmsted Academy South - Poetry & Music](#)

*JCPS will send digital PDF with hyperlinks.



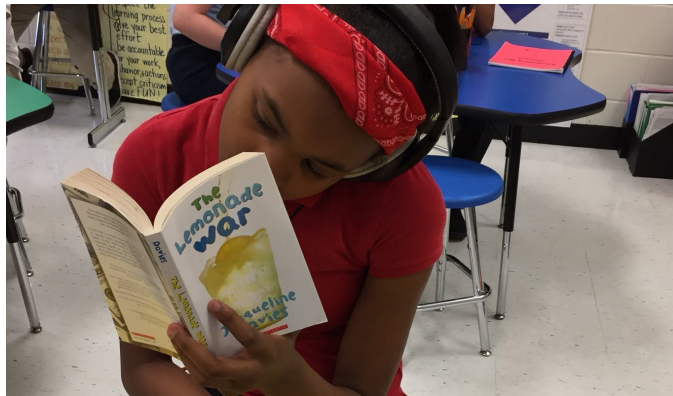
5

Productive Collaborator

— DEFINITION

1. Works effectively with diverse groups to accomplish a common goal
2. Gives and receives meaningful feedback
3. Assumes personal responsibility for team outcomes
4. Actively listens to understand others' ideas and perspectives

CASE STUDY 5A

Portland Elementary School -
Lemonade Stand

Fifth-graders became young entrepreneurs through a joint venture with students from the University of Louisville's College of Business. Fifty Portland students learned about the many aspects of starting a business and applied what they learned through the establishment of a carefully planned lemonade stand. Throughout this project, students got to be on a college campus and gained many skills like setting goals, learning how to attract customers and making a sale. One especially emphasized and applied skill was collaboration. Students had to contribute, compromise and communicate throughout the entire process in order to best build and manage their business.

REFERENCE LINKS*

1. VIDEO - [When life hands you lemons, make money!](#)
2. ARTICLE - [Lemonade Day Highlights](#)

*JCPS will send digital PDF with hyperlinks.

CASE STUDY 5B

Waggener High School -
Catapult Trajectory Activity

Students were required to research the origins of catapults, including various historical and current models. Then they were challenged to construct a catapult with whatever materials they could find. Each team had to launch a golf ball as far as possible, high as possible, and hit a target. Students created a list of needs and assumed responsibility of various parts of the project. The group activity required students to brainstorm, sketch various items for construction and collectively agree on a design. Along the way, students had to apply the parabolic arch of their catapult and create a quadratic algorithm and graphs. The excitement of launch day provided great evidence of productive collaboration and deeper learning of the physics/science of catapult trajectories, velocity and quadratics.

REFERENCE LINKS*

1. [Catapult Competition - Waggener High](#)

*JCPS will send digital PDF with hyperlinks.

