



PALE BLUE DOT

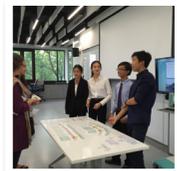
INTERDISCIPLINARY



Driving Question: How do we justly endure on a finite planet?

Project Description:

Students investigated issues connected to sustainability in the world at large, and more especially, China, in order to come up with real-world solutions to pressing environmental and social issues. Students examined human behavior, social media, web-design, policy, government, modernization, and environmental science to determine what issue they felt compelled to address as part of a social media campaign. The purpose of their campaign was to raise awareness of a targeted audience, to advocate for their ideas, and to inspire action amongst their peers as well as to learn how to work collaboratively on a complex problem. Their final products included a variety of communication media from brochures to web-sites to word-of-mouth campaigns and were presented at a gala exhibition to parents, educators, community members, and government officials.



Student Products

- Produce a website that addresses a pressing environmental or social issue facing your peer group in contemporary Chinese society.
- Create additional visual materials such as posters, flyers, brochures, and/or social media campaigns.

Student Reflection

“Working in a team, the best parts were that you always had someone to talk to and rely on when things start to get tough. As the stress became more visible, my team made sure that if someone stepped out of the group norms they were reminded.”

– Student

“We changed our project completely halfway through the process because we were going in a direction that wouldn’t be do-able. We used to target politicians, and we thought that they might listen to us, and perhaps follow our plan. However, we were shown that this would basically impossible, so we changed it so that we could do something more local and possible.”

– Student

“The best parts of working on our team was that we were all able to work together, and split up the work. I felt like I was able to count on my group members if I accidentally slipped up. I knew that they knew their stuff pretty well, and that I could count on them. This was especially evident today when during the gallery walk, I couldn’t answer a question.”

– Student

“I was quite overwhelmed in the beginning, but then I now think that focusing on one aspect made it a lot easier. In turn, when you think small you can apply it to bigger things. We started with something very simple, which is overpopulation. Then we applied it to female education, and then we were able to apply that to the driving question. After we did this, it made a lot more sense.”

– Student



MEMORIAL DESIGN

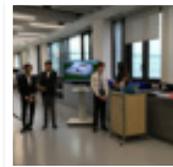
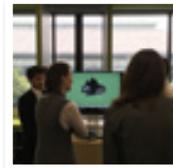
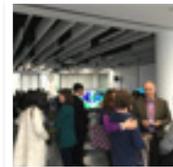
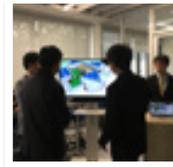
INTERDISCIPLINARY



Driving Question: How can space and design be used to construct a meaningful and appropriate narrative about the human capacity for good and/or evil?

Project Description:

Students were challenged to redesign, or add an annex to, the Nanjing Massacre Memorial, one of the gravest human rights tragedies of the Second World War. The student teams took into consideration the historical, emotional, and political aspects of the event as they incorporated multiple disciplines into their projects. In addition, the final designs synthesized metaphor, motif, history, and the science of green building materials to provide a creative and thoughtful solution to the driving question. Ultimately, an exhibition night was held where the teams formally presented their designs to an audience of parents, professionals, and educators and defended their ideas.



Student Products

- Design a memorial space
- Present designs to an audience at an exhibition.

Teachers' Reflection

“The Nanjing Massacre Memorial redesign is arguably one of the most sophisticated, highly complex projects that we do all year. Students must first understand the historical, emotional, and design components of the task. They must then propose a creative solution to the problem that contextualizes one of the gravest human rights tragedies of the Second World War with empathy. And, if this is not hard enough, many of the viewing audience still hold considerable emotional sensitivity to this event. This requires the students to understand first, design second. We have had some very impressive reflective growth from this project, not to mention historical understanding. It is one of our favorite projects of the year.”

– Patrice Parks, James Linzel, Kim Sajan, and David Wood

Student Reflection

“One of the hardest parts was the collaboration, and coming to consensus around not only the materials of the building, but also the overall ideas. We had six different buildings, while others might have one. We were initially going to divide into two groups, one exterior and one interior. Since we got six different buildings, it became difficult. We had to come together in our different buildings to settle on beautification decisions.”

– Student

GRADE
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BRAVE NEW WORLD

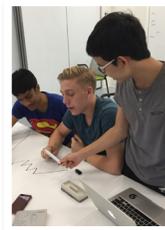
INTERDISCIPLINARY



Driving Question: To what extent do we live in a Brave New World?

Project Description:

Students worked in teams of 4 or 5 to create a 3 to 5-minute narrative film that addressed the question “To what extent do we live in a Brave New World?” Students read Brave New World in English class, studied genetics in Biology, learned about film-making in Innovation & Design, and discussed concepts such as free will, nature vs nurture and the ‘experience machine’ in AP Seminar. Student roles included director, cinematographer, editor, sound designer, and lighting designer. Students also skyped with real authors and experts in the field and prepared a 1200 word research report in which they identify an area of resonance from the book and a contemporary parallel.



Student Products

- Create a narrative film including storyboards and scripts for the film
- Participate in ongoing feedback protocols
- Write a research report

Teacher Reflections

“It is simply amazing that a group of sophomore students who have not previously been involved with film-making are able to effectively collaborate in order to create a high quality short film in only 6 weeks. The films crafted meaning not just through their stories, but through their creative choices, including camera movement, lighting, and aspects of mise-en-scene. In addition, they made a statement about a contemporary social issue that required them to use multi-disciplinary thinking.”

– Amy Foley & David Gran

“It was so exciting to see students deeply engage in the issues of Brave New World in ways that wouldn’t be feasible in a traditional program. Our schedule allowed students to continue these conversations, so the debates that began in English class carried over in Biology and AP Seminar and even Innovation and Design, and these same ideas became the seeds of the films they eventually created.”

– Tiffany Kelley

“I appreciated the exploratory process of this project, when students sat in their groups and generated possible film ideas. Through this, we teachers could really uncover what they were learning, how they were reacting to what they are learning, and what they had to say about what they were learning. My favorite incidental comment during the brainstorming process: “Maybe the perfect human is no longer human”. Place that in the context of genetic engineering, human augmentation, and looming artificial intelligence. The moral implicationsWow.”

– Tom Musk

GRADE
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GAMES, WAR AND COMPETITION

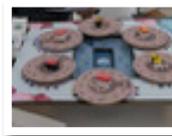
INTERDISCIPLINARY



Driving Question: To what extent do we live in a ‘war universe’, where all things are based on competition: ‘war and games’?

Project Description:

Students learned about the topics of scarcity and carrying capacity, aggression, and war, natural selection, as well as peace and stability. Each team developed their own focused question to integrate what they learned with the investigation into war, games, and competition. Students researched, created a board game using materials in the Maker-space and a Pecha Kucha style presentation to parents on a Family Game Night where they all played the games. Students also created TED-talks on their learning in response to the driving questions.



Student Products

- Research important topics from various course content areas
- Develop and present a game for a game night
- Create a TED-talk to answer driving question

Teacher Reflections

I was incredibly impressed with the persistence students showed in learning how to use our new maker space in order to create incredible board games. Students were proud of their games and were excited to share their work during Family Game Night. After all of the hard work and challenges that students faced along the way, showcasing their work to a wider audience was a wonderful way to stop and appreciate what students accomplished.

– Amy Foley

When we created this project last year the students were able to come up with sophisticated concepts using simple materials. This year, however, the maker space allowed the students to come up with professional looking games that matched their concepts in terms of their complexity. The games reflected complex interdisciplinary ideas that drew on the content and skills they developed in each of their institute classes.

– David Gran

This project proved to be a great learning experience because the students found meaningful expression at every stage of the project. They exhibited impressive thinking and reflection skills as they worked through challenging readings by complex writers. They were then able to synthesize those ideas into highly sophisticated final projects, that were impressive both conceptually and aesthetically. For two months, our students were fully engaged in a highly complex task.

– Tom Musk