Students explored examples of risk taking from personal and state history, through a variety of literary contexts. Students then selected a risk that was meaningful to them to develop into “Choose Your Own Adventure,” interactive stories that they exhibited to parents and other students. They assessed the probability of possible outcomes to make the choices in their adventure simulate a realistic risk. This project was designed to help students explore history in a manner authentic to their own lives and experiences, as well as to learn more about the motives that brought settlers to their state or country, exploring the decisions that were made and risks that were taken in the process. There was also an intentional connection to the students themselves and the risks that have been taken for them and also the risks they have taken and would like to take in the future. One of our primary goals was for students to understand risk taking, both positive and negative, and to be able to assess risks in their own lives. This conversation helped foster a culture in class where students felt comfortable taking academic and social risks.

Student Reflections
This project got me interested in learning about my family history and genealogy. I was already interested in history, but this project gave me a base to learn more and dig a little deeper. I like that we learned a lot about probability and about real life consequences that were related to our risk taking.

—Aiden Ramirez, 4th grade

One thing that I was not expecting to learn was that we got to learn about our family history. I think it was cool because I really never knew that my ancestors were pirates, so that was really interesting to find out! I learned that pretty much every day people take risks, whether they’re small, like deciding whether or not to read this book, or deciding whether or not to go to a new country to live!

—Alberto Rosas, 4th grade

Ruby Bridges was black and wanted to go to a white school, so she did and if Ruby Bridges didn’t do what she did we would probably be in separate schools now.

—Gracie Suarez, 4th grade

To learn more visit: http://dp.hightechhigh.org/~slopaz/
For this 10th Grade Humanities project, students studied the basics of psychology, reading various non-fiction texts and interacting with guest speakers, before choosing individual topics to explore in depth. Based on these topics, each student had to create an original (and ethical) experiment to perform on sixth-grade students, create and illustrate an explanatory handout so that the subjects would understand the concept that was tested, and write and illustrate an original article about the concept’s real-world applications.

Teacher Reflection
I remember how excited I was to take a psychology course during my first year of college. The discipline tapped into my adolescent curiosity, and it supplemented so much of what I had learned in my “core classes” in high school. Similarly, my high school students loved any psychological concepts I discussed in my class. So, I decided to design a project with psychology at the core. The topics that they chose, such as conformity, stereotyping, multitasking, dreams, morality, motivation, and so on, made them reflect on their own lives and on content from other subject areas. Their experiments also allowed them to creatively play with the scientific method and learn about ethical experimentation.

Student Reflections
During the Psycarnival project, the class learned about psychology and how it relates to our lives and to current events. We put on a carnival in which we conducted experiments that we created. We then collected data from our experiments and analyzed them. I looked into different mindsets and how they affect people’s motivations. I came to school every day excited to work. I learned a lot about mindsets and Carol Dweck’s theory of how they affect people’s motivation.

—Matthew Hansen

I researched a psychological theory called the Paradox of Choice. It sheds light on the issues we face when trying to pick one option from a group of many choices. To study this topic, I read a book written by Barry Schwarz, the creator of the theory and took notes on his TED talks. In the end, I was left with very useful information that I get to apply to my own life.

—Mauro Chavez
A Fly on the Wall Project was a collaborative project between 11th grade biology and English where students collected a diverse array of arthropods from their respective homes and then in English class wrote two creative pieces that incorporated facts that they had learned about their insect through their research in biology class. At the same time, students learned to identify, categorize and describe insects and arachnids and then worked to take impactful photographs of their insect that captured the uniqueness and beauty of these creatures. Ultimately, the photography and writing were displayed at Friday Night Liberty, a local arts event in the community of Point Loma.

Teacher Reflection
We wanted to push the idea of putting together a collaborative/integrated project where BOTH of our subjects were able to hit a depth of content that felt uncompromised and valuable for both of our classes. I was interested to get back to basics, to remember that feeling of being drawn to insects and spiders and fascinated by insect collections and their mechanical physiology. I also wanted students to experience a “collective work,” where they collected arthropods individually, that contributed to a larger perspective of the diversity of arthropods found in our community. Pam and I were both happy with how persistently and passionately our students worked to capture something impactful and beautiful about their arthropods through their photography and their writing—and then how we were able to display their writing in an easily accessible way.

Student Reflections
I used to be really afraid of bugs but once I started learning about them I became not so afraid of them. I liked that the whole project gave all students a way to express their interest. It seemed like it was really for us – not to just exhibit but to explore things we were interested in. We caught bugs that interested us and then used our own imaginations to see things from their perspective.

—Kaysia Stewart

I was able to take some of the things I learned about arthropods in biology and then look at an actual arthropod and visually and tactiley discover it myself. I was also able to share some of my experience with photography, which I enjoyed.

—Tom Dunnion
"So there are 60-some thousand flavor combinations at Chiptole..."
This simple message written on the side of a drinking cup from Chipotle started our whole investigation. Could there really be this many? Could there be more? We were determined to find out if they were right. Students studied smaller problems and created rules about combinatorics that they could use to piece together this huge problem. In the end, we came up with an answer of our own and exhibited our work as a Chipotle-esque assembly line where we explained our ideas to visitors (and, of course, served burritos).

Teacher Reflection
From my perspective, this project was a success mostly because students were doing and creating math together. The solution to the problem was exciting for all of us, but how we came to that solution was far more powerful. Students were collaborating, looking for patterns, being systematic, persisting through difficult tasks, and creating mathematical rules. This type of thinking is, at least in my opinion, what makes mathematics powerful and important.

Student Reflections
This was not only a fun project involving food, but it opened my eyes to so many similar problems we are faced with on a daily basis. We first started out by learning how to create combinations from small groups and find different patterns we see in these combinations. After working with smaller problems, we used the patterns to figure out equations that could be used to make the problems a little simpler. Our final project was looking at the Chipotle menu and trying to find how many different combinations could be made. There were so many! Everyday, I see a similar problem and it reminds me about how much I truly learned just by doing this project. —Julian Guzman

The Chipotle Challenge was a great experience. I learned so much about how to think like a mathematician. Learning how to view results and draw conclusions. This project showed me how math can be applied to real life. I will always remember this project because of the memorable connections we made our fellow students. Also, who can have a problem with a project completely centered around burritos? Seriously guys! —Desiree Lizzano
Students developed visual literacy skills to analyze historical photographs and document their own perspectives and experiences through photography. Their analyses and artistry were bolstered by workshops conducted by local artists and by photographs and curriculum developed by San Diego’s AjA Project, a photography-based youth program. The final assignment and exhibition, entitled NOW: Contemplations on Contemporary Society, included a photograph and audio excerpt of their final narrative, which captured a contemporary idea, concept, or event each student deemed to be significant. The exhibition took place during Friday Night Liberty, a night of open art galleries, cultural performances, and events at Liberty Station in Point Loma.

Teacher Reflection
Throughout the semester, students recognized the connection between one small transition and the next. However, in the end, students recognized and were excited by the big picture. For me, education is about these big picture connections. One of our connections was about communication. Effective communication, be it through photographs or prose, is an art form, and through that art form, students found they could empathize with and learn from the experience of others and share with the world their own experiences and perspectives.

Student Reflections
This project taught me how photography can be one of the most effective tools to convey ideas and feelings. Since a picture is worth 1,000 words, one picture should be able to convey as much importance as a well thought out short story or a well-constructed essay.

—Jordan Edmunds

I have learned a lot from this project, but I think it has influenced me mostly by teaching me about different people’s views on things that are important to them. This helped me to better understand others in my class and ultimately, helps our class become closer. Not many projects could have done that.

—Sophia Thomas

To learn more, visit http://lizperry.weebly.com/projects.html
This eight week project between Nick Ehlers’ junior biology class and Patrick Wilcox, a former HTHCV student, began with in-class dissections to discover the anatomy and physiology of rats, snakes, and lizards. By removing all organs we prepared organisms for our colony of flesh eating beetles. The beetles were recorded as they ate the deceased animal remains right before our eyes, leaving behind only the bones. Students then recovered the remains and reconstructed the skeletons. We wanted to answer the essential question: “How do anatomy, physiology, and skeletal structures of small mammals and reptiles compare and contrast to the human body?” Students also prepared presentations including photo displays, videos, and posters documenting the entire process for display at Dia de los Muertos (Day of the Dead) fall exhibition.

Teacher Reflection
My main goal was to stimulate all five senses of my students for long-term deeper learner. I can confidently say that this was accomplished. Warnings: your students will be disgusted at times (e.g. odor, sights), but that is an important part of the experience. You also have to take close care of your beetle colony. I would recommend a reliable offsite backup beetle colony just in case you have issues with yours. In addition, if you have the chance to partner with a local osteologist and/or beetle expert this is ideal. I did, and without Patrick’s expertise and background as a former High Tech High student, I may not have been able to complete this project. Thank you Patrick!

Student Reflections
We had three projects within one. We not only had to dissect our animals, but we had to skin them, feed them to flesh eating beetles, take apart and bleach the bones, and lastly reconstruct the skeletons. And apart from all that we had to put together our presentations which included creating posters or videos and setting up the room, which was designed to look like a haunted house that had a giant rib cage in the entrance. There was always a horrid smell of rotten snakes, lizards, and rats in the room which meant this project was the real deal.

—Marissa Boyer and Lorenz Alfiler