

Classroom Newsletter

CAREN & JACK & EVERETT

Adolescent Program | 2018-19



Bee Boxes

By Molly Jordan

In late March, Brenda, our beekeeping mentor, assigned us the task of assembling and painting new apiary boxes for our growing colonies of honeybees. The state of Connecticut granted us money for our supplies, including a honey extractor, hive tools, bee suits, and the wooden parts for the new hive boxes that we assembled with nails and wood glue. After we assembled the boxes, we painted them with a coat of primer. Once that dried, we put two layers of white paint on top. Next, each student will get to paint a box decoratively. Each box will be personalized.

While the new bee boxes are being set up, Beyonce, one of our queen bees, is starting to lay eggs. Her workers have already collected lots of pollen and nectar from early flowering trees, and the hive is quite heavy with honey. The other big hive also over-wintered well and seems to be in good health. We still have lots to do to make sure our bees are thriving.



Geography Class

By Jack Bourdeaux



This year, the Adolescent Program tried a new class, a class on world geography. The issue of geography was originally brought up by a couple students who felt that their knowledge in that particular area was lacking and sought to fix it. So the students made the time to have the class - an hour every Wednesday morning, in which they could practice their geography. The way it worked is that every week the whole class would focus on a continent. During the week, everyone would independently learn all the countries on that continent (or in the case of the Middle East, the whole region). Then, when Wednesday rolled around, everyone would be quizzed on the portion of the world they had focused on. If they were able to correctly label every country, they would focus on another continent or region the next week. If not, they would use the

next week to try and get better at their region.

But the class wasn't just about learning where stuff was. It was also about learning what was going on in the places we studied. Every week, each of the students would pick a country from the region studied that week, learn everything about one facet of that country and then present to the class about it. There were presentations on everything from the political history of Burkina Faso, to Spanish and Egyptian cuisine, to music in Oman. Each presentation was scintillating and offered new and interesting perspectives on the places we were learning about. All in all, I'd say that everyone really enjoyed the geography course. It offered a lot of new information that people wouldn't have bothered seeking out if not for the class, and it greatly improved the geographical knowledge of the class as a whole. I'm glad we did it, and I think that we're a better class for it.

Neurology Occupation

By Nadine Stetzelberg

Every semester, we study several topics in our science occupations. In our most recent occupation, we studied the brain, specifically the teenage brain. Every week we read up to three chapters of *The Teenage Brain* by Frances E. Jensen. We looked at and memorized the form and function of various parts of the brain. To help us memorize, we illustrated drawings of the brain and neuron that were updated with new terms as we learned them. We also studied a bit of psychology. We learned about Sigmund Freud's theory of the id, superego, and ego. We found ways to relate what we were learning to the psychological state of the boys in *Lord of the Flies*, which we were reading in our literature sessions.



At the end of our occupation, we wrote a formal essay on a neurology topic that we were most interested in. I studied the sleep cycles of teenagers, and how a lack of sleep affects our brains. I learned that as the teenage body goes through puberty, our circadian rhythm shifts back two hours due to the new surge of hormones. Studies around the world show that teenage brains start releasing the sleep hormone, melatonin, at 11 p.m., later than most adults. It's quite like jet lag, but for every night. This melatonin continues to pump through the body until well after sunrise. We are two hours out of sync with the adult world that dictates the schedule we have to live by. Sleep deprivation puts teenage brains in a haze, which negatively affects the ability to react, think, regulate emotions, learn, and get along with peers and adults. Sleep deprivation also causes aggression and impulsivity.

My peers presented on other topics, including the effects of laughter, creativity, anxiety and music on different parts of the brain. I really enjoyed their presentations and the occupation overall.

Martial Arts

By Jonathan Sullivan



In the last couple months, the class has been going for martial arts at *YU Martial Arts*. Our instructor's name is Grandmaster Yu. Master Yu trains students in Judo, Taekwondo, and Hapkido. He opened his first location in Bloomfield, Connecticut back 1976 and he teaches kids of all ages.

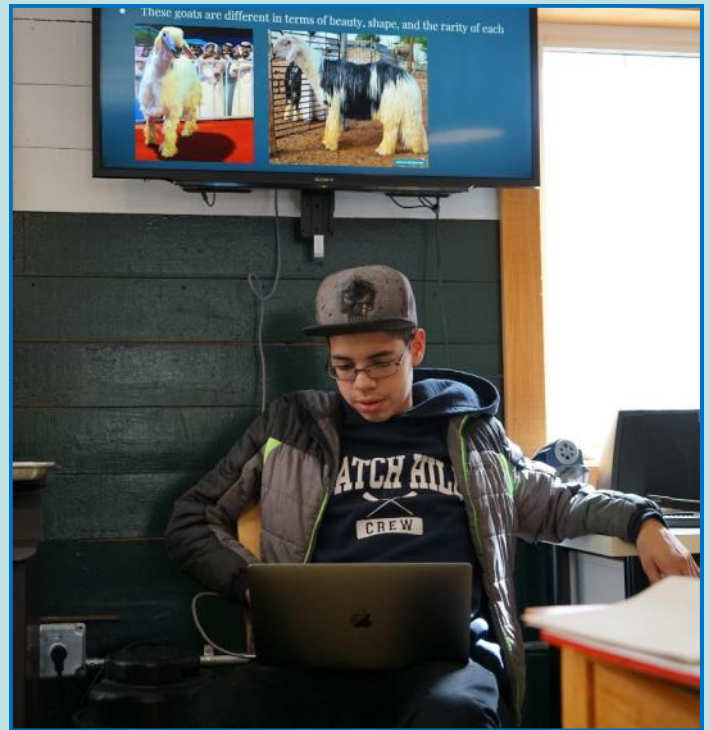
The martial arts class was scheduled on Wednesdays in the afternoon. The class pushed me personally, and I'm guessing other people, out of their comfort zone. I learned a lot of kicks, punches, and self-defense techniques that I never would have thought I would need in the real world. It was an enjoyable experience for me. In the end I think I would go for more classes with Grandmaster Yu.

Earlier in the winter, our fitness was a yoga class, and now that it's spring we're outside again, playing games and sports in the field.

Spanish

By Alex Loudon

Spanish, being the expressive language that it is, creates a unique class dynamic: not only are the Spanish classes a series of lessons, they're a conversation. An exchange of ideas, through the lens of a new language.



Structure is still ever present, but the mold is flexible to suit the productive creativity involved in the Montessori method. This plasticity permits a certain amount of creativity that a conventional class structure would not. Ideas are allowed to fully develop and flourish when not under the pressure of a linear lesson development.

Our Spanish is especially unique in regards to fluidity but has also the advantage of small groups. A group of 3 or 4 people during a lesson, in my experience, allows for a more personal, more productive, and ultimately better class. While class size has its advantages and disadvantages, due to the speech-based nature of the class, the smaller size suits Spanish undeniably very well.

Overall, the free-flowing and almost casual nature of the class has proven itself effective in making the class more enjoyable, as well as productive.



Stock Market Class

By Anmay Suri

Some of us at the farm are studying the stock market on Tuesdays and Wednesdays. Jack McArdle teaches us about economics and the stock market, and how they work. We go over fluctuations in the stock market and discuss methods to gain money and net value. We read a book called *Basic Economics* by Thomas Sowell and we play a stock market simulator on Investopedia.com. The simulator starts us off with \$100,000 and we can use that to purchase shares of companies and sell them to gain a profit. We can manage our portfolios and track fluctuations that mimic the stock market in real time. An important thing we do is to monitor our portfolios at home and at school. We recently began another game in the simulator where we can purchase only five stocks and we cannot sell them. Before we buy them, we need to research what we want to buy. At the end of the school year, we'll see whose net value has increased the most.

Art

By Zanna Reed

Lately in art class we have been fabric painting. We all designed a pattern or sketch and then brought in white clothing, such as t-shirts and shoes, or used things from the classroom, like our aprons. We then transferred our designs onto the fabric and colored them in with fabric paints. I like cats, so my shirt is dominated by a silhouette of a black cat. Spring is coming, and soon we will be going outside to draw the goats, chickens, and sheep. Priscilla Marshall, our art teacher, is well versed in the areas of watercolors, shading, colored pencils, and much more. She has taught us much this year. A few weeks ago, she showed us how to work with ink on different backgrounds, and before that we practiced still life art. We have also done portraits of each other, have made cards for the holidays, and have drawn all the plants in the garden. Art has so many possibilities on a farm, and I will be sad to leave next year.



Math/Geometry

By Noah Cinel

Math and geometry are two of my favorite classes. My classmates and I joke and laugh with each other and with our teacher, Jack McArdle. We converse regularly and have a lot of fun while we also get a great deal of work done. Some of our classes are completely silent because we are so focused on what we are working on. On Monday, Wednesday, and Friday we work on our own math packs, which move up in difficulty as we progress. Every pack is between 11-20 pages, and we generally complete two or three pages every day in class, and several more for homework.

On Thursdays, Anmay and I have geometry. At the beginning, we studied *Euclid's Elements*, which contains 48 propositions that we finished in about a month. We worked very hard which is why we were able to finish quickly. Now we use a high school geometry textbook. Unlike *Euclid's Elements*, which had no numbers in it, the high school book is full of complex problems with tons of formulas and different types of algebra.



Micro-Economy

By Millie Foster

This year, we have been working on many different products for our small business. We started off the year by collecting the honey frames from the beehives. We had Brenda, who is a bee expert, come in and help us with extracting the honeycomb from the frame. Then she proceeded to teach us how to use a hydrometer to tell when the honey was dense enough to bottle. When we sold the honey at the parent teacher conferences, it sold out in less than four hours.

In the fall, we went into the garden and harvested tomatoes, beets, carrots and more. We also went across the street and picked grapes. We went straight to the kitchen and made tomato sauce, grape jelly, pickled beets and carrots and we even tried to make tomatillo salsa. The salsa didn't work very well and what we were expecting to be twenty jars ended up being three.

Most of the winter, we focused on knitting with the wool from our sheep Snoopy and Casper, and we did some woodworking. Once the day's temperature reached above freezing and the night's temperature went below freezing, we tapped our maple trees. We collected sap even on the coldest of days and we boiled it down to maple syrup. The ratio of sap to syrup is forty to one which meant that forty cups of sap only made one cup of syrup. We had a giant fifty-gallon barrel and in total we collected two almost full barrels of sap over the course of the season.

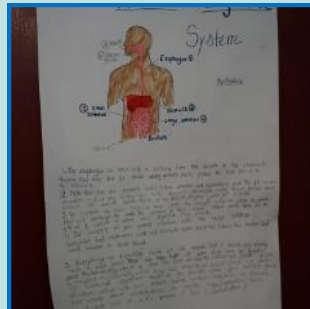
Currently we are working on planting in our garden. We each were assigned two garden beds in the beginning of the year and in the fall we harvested and weeded our beds. Now, we are working on figuring out which beds get which seeds. Later, we will plant our seeds and watch them grow and look forward to harvesting them next year.

Taiko Drumming

By Dakota Dugan-Lieberman

We get to partake in an amazing music class. Colleen, our music teacher, brought in beautiful drums, called taiko, which are ancient traditional drums originating from Japan. These drums are made from hollow wooden barrels with animal skin stretched over the top. The skin is held on by beads nailed into the drum. Since Colleen didn't have twelve drums, one for each of us, she used makeshift ones with trash cans and tires. Colleen put tape over the opening of her homemade drums, making a surface to play on.





Colleen showed us a video of professional players. She told us that they live in the mountains near Mount Fuji, and that they run 30 miles every day. Colleen taught us patterns on the drum, and the stances that we needed to stand in. Later on in the classes, she showed us a video of elementary students performing the taiko. She told us we were going to learn the routine, and we all doubted that we could. Fifteen minutes later we had it memorized.

Feeling the loud beat of the drum was exhilarating. Knowing that I was making that sound was so cool!

Colleen read us a story about the history of the drums. There was a war, and the Japanese didn't have any weapons. They used their drums to mimic the sound of thunder, stomping, and commotion, until they hit the drum so hard that it made the other side leave out of fear. Today we see the Taiko as something that saved people.

It was such a fun class that I was so happy to get to participate in.



Nature Journaling

By Elliott London

Nature journaling is an aspect of the farm program that allows us to center ourselves and feel connected with nature. We can nature journal when we feel that we need a break from the bustle of our school day. Students must pick a place to journal that is nowhere near another student, so that there is no temptation to talk. We go outside with a notebook and pencil, and find a peaceful place far away from other students to write down observations about our surroundings. After a few minutes of journaling, we start to become in tune with even the smallest movements of bugs in the grass and with the slightest ripples in the

pond. After around twenty minutes of journaling, we return to the classroom, refreshed and ready to continue working. One student was quiet enough to watch two hawks mating in a nearby tree, and once I was so still that I got within inches of one of our honeybees gathering nectar from a flower.

Theater Class

By Claire Jenkins

At the beginning of January, we started theater class with Dakota's mom, Mara, who writes, directs, and produces plays for Bated Breath, her own theater company in New York City. We started out by learning to keep eye contact with each other and doing some hand-eye coordination games, such as making a gun with the right hand and an okay sign with the left and then switching, so the left hand makes the gun and right hand makes the okay sign. This switch was hard for me but after a while I got the hang of it. We went faster and faster until all of us were experts at it. Then we played more focusing games and then we moved on to working on improvisation and scenes. The scene work was my personal favorite. We acted out scenes in front of everyone and got feedback on how we did. Then we tried it again and the next person would go. I felt like in a matter of six weeks, I had learned so much. I learned how to focus better and to be a better actor,



and at the same time it was fun and entertaining. Theater was one of the highlights of my year.



Breeding our Goats

By Elliott London

Delivering baby goats is a very important aspect of our school year, but it doesn't start in the spring. In the fall, we breed our does with bucks from neighboring farms. In science class we learn to predict what traits the babies will have based on what we know about the genetics of the buck and doe. Once we breed her, a student figures out her due date, considering a 150-day gestation period. After a long winter, her due date finally arrives and we begin watching for her mucus plug to come out. This year, our doe wasn't delivering and we had to induce labor. We called the vet, who provided the labor-inducing hormone shots that we administered ourselves. The next day, Luna went into a difficult labor.

We ended up having to don gloves and reach inside to pull out a baby that was stuck. Once Ziggy and Calypso were born, we towed them off, cut and sterilized their umbilical cords, and helped them walk and latch on to their mother. After a stressful delivery, we now get to have the responsibility of taking care of our cute new baby goats!

Service Learning Newsletter

By Anmay Suri

In my class, we have a period called service learning where we take action for the community and work to improve it. I chose to focus on other countries and what they mean to our MSGH community. I am helping to organize a "Heritage Day" potluck dinner. The dinner will be a celebration of multiculturalism where people can come to share their traditions. We will have different tables set up for different continents, and anyone may bring musical instruments, art, photographs, and any other representation of their country, as well as food. I have worked for about a month and a half planning and working to execute this plan.

