English | Math | Science | Social Studies

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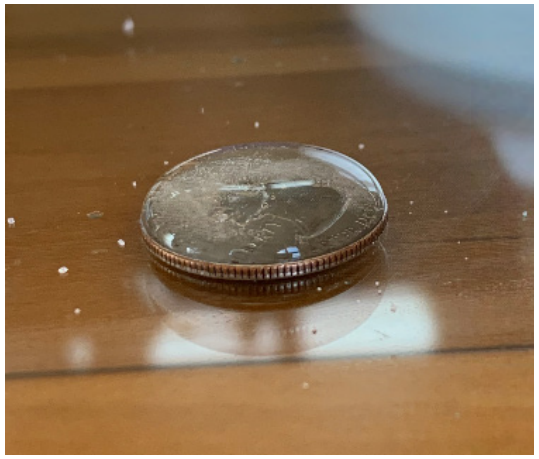
SCIENCE

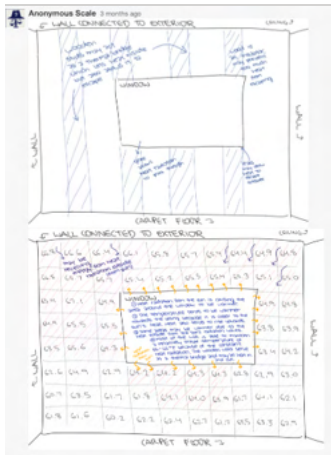
Physics/Chemistry

The order in which students take science classes is just one area where d.tech is unique. Traditionally, most schools have their students take biology, chemistry, physics, and finally an advanced class in their senior year. However, students at d.tech start their science journey with physics, then chemistry, and then biology in junior year. For senior year, many students took environmental science, while some students took Advanced Physics, which was a new class offering this year.

Ms. Alice Pevyhouse taught both Physics and the new Advanced Physics Honors class. In Physics, students dove into the topics of energy and motion, while in Advanced Honors Physics, students explored Newton's Laws and the magnetic force. In both classes, students utilized PhET simulations, which allowed them to visually understand the concepts covered in class.

Mr. Greg Fenner tried to make chemistry a fun and engaging online class for his students. They studied the periodic table, energy in food, and the structure of an atom. Chemistry can be a challenging subject, so Mr. Fenner put in extra effort to make sure that students could have an exciting experience exploring chemistry. Students researched and discovered more about chemistry by experimenting with hands-on labs. Clarissa Gamez ('23) commented, "I like the labs that we get to do in chemistry."





Biology/Environmental Science

In Mr. Neal Addicott's Biology class, students focused on five big questions:

1. "what does 'you are what you eat' actually look like at a chemical level?"
2. "What sort of things do cells do with their parts?"
3. "How are traits passed on from one generation to the next and why do two (non-twin) brothers or sisters look a little alike but also different?"
4. "What can we do with DNA once we know its structure, and ow do all living things use it to repair/replicate and perform virtually every other important life function?" And,
5. "What does our DNA tell us about our relationship to other humans and other species?"

To complete assignments and explore topics, students were assigned interactive simulations. Jade Lau ('22) said, "I like how we usually have different activities and assignments every cycle," and added that "the interactive simulations are pretty interesting." Will Loudermilk ('22) said he liked Biology as the life sciences are his favorite subject. In Mr. Addicott's Biology class, Loudermilk had the opportunity to explore the life sciences in-depth. Loudermilk liked how "Mr. Addicott used videos to teach."

Environmental Science may have been online, but Ms. Fannie Hsieh made sure students could still have fun and be engaged in the material. Madison Shem ('21) said, "Fannie created these little experiment kits for everyone to take home. It made the class really fun, and it helped me gain a better understanding of the concepts." Shem said that in Environmental Science she "learned about local initiatives that are being taken to help our earth" and how she can take action to help the environment. Students in Environmental Science were able to do hands-on group projects. Nico Noravian ('24) said his "favorite thing about Environmental Science was the science magazine group project," and added that Environmental Science stood out to him as a class, as although the class was online, he was able to take part in hands-on experiments, which "were really fun to do."

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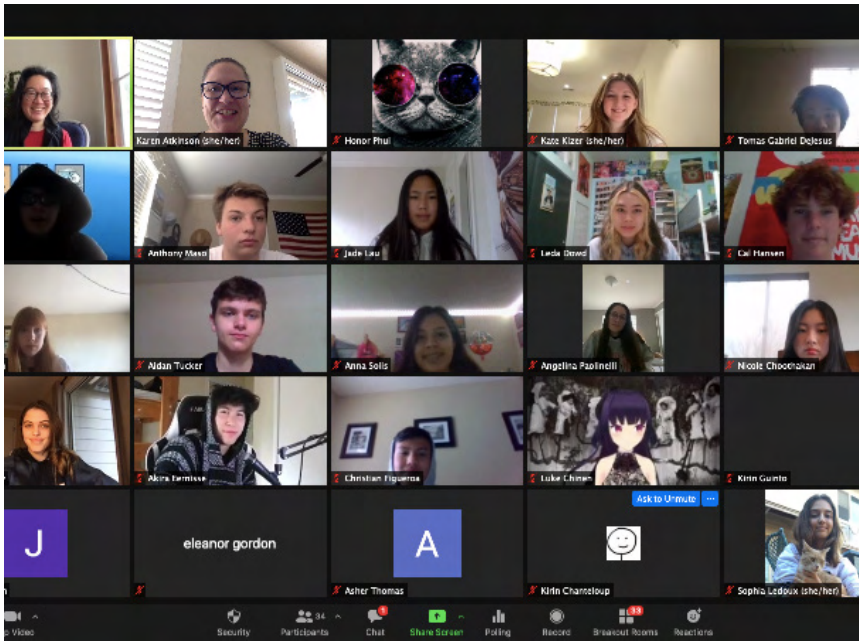
MATH

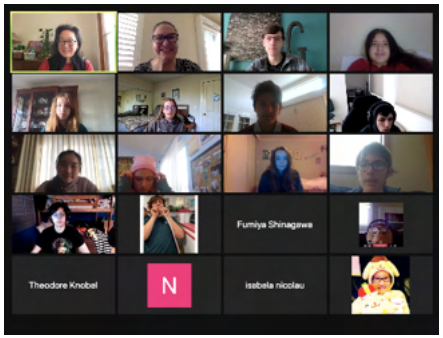
Virtual Calculations

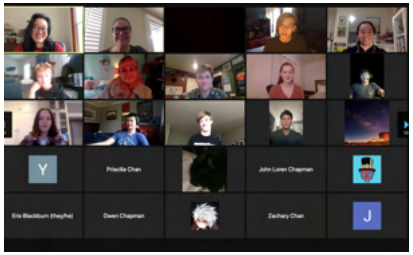
As with all subjects, mathematics was fully online this year. However, d.tech math teachers were still able to create unique curriculums and projects for their students. Math at d.tech starts at Algebra 1 and goes until Calculus 1, but there is also Advanced statistics for students interested in broadening their math knowledge.

Algebra 1, taught by Ms. Aruna Murthy, proved to be an engaging class for many students. Ms. Murthy said she tried to involve more students "by using the real-time math website demos," adding that "students even got to do a Socratic seminar on systems of equations." In the first few cycles, students took an in-depth look at linear equations, inequalities, and functions; then, they learned how to solve them, graph them, and apply them to systems. Later in the year, students were able to use their new knowledge to answer real-life questions, such as whether it is worth it to buy a reusable cup at Starbucks, and which vendor should be chosen for their student club based on different pricing models.

Geometry, a class primarily taken by freshmen and sophomores, was taught by Mx. Karen Atkinson and Ms. Cynthia Dy. It presented students with geometric and visual mathematical concepts that play an important role in their future studies in math. One of the projects this year was designing a "Selling Geometry" presentation that was supposed to "sell" high school students on geometry's usefulness. Apparently, many students surpassed expectations for their projects — Mx. Atkinson said that one 9th-grade student even wrote a rap for his presentation.







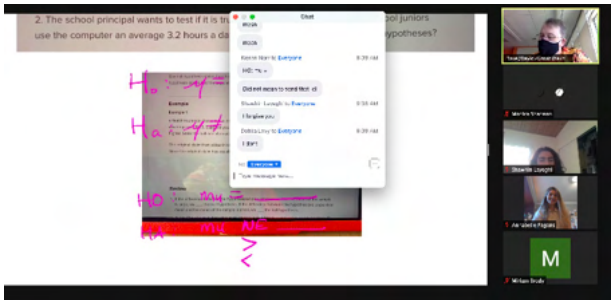
In Ms. Alexis Frost's Algebra 2 class, students worked on quadratic equations, functions, and exponential and logarithmic expressions. Clarissa Gamez ('23) said that Algebra 2 was interesting, even though it was online, because of the "efficiency of the class time." Gamez added that the quick pace of the class taught her to manage her time much more effectively.

Precalculus is a class mostly taken by Juniors and Seniors; however, this year, a number of sophomores and even freshmen took the class. It was also taught by Mx. Atkinson and Ms. Dy, who worked together to come up with innovative ways to combat the challenges of distance learning.

In Calculus taught by Mr. David Groat, students focused on diving deep into derivatives and integrals. They started with a review of functions, which then transitioned into the study of limits; then, the class segued naturally into the exploration of derivatives, and was finally wrapped up with a study of integrals, also called antiderivatives.

Advanced Statistics taught by Mr. Groat is a favorite among many students, as it offers them the opportunity to expand their math knowledge in a profound way that is unlike any other math course. Over the course of the year, students learned everything from probability concepts and normal distributions to real life statistical applications. Mr. Groat said that he hopes students come out of his statistics class with practical statistical knowledge that they can utilize in their future endeavors and everyday lives.

As Advanced Statistics is not a required class at d.tech, perhaps you may be wondering about the probability that a d.tech student takes it. I guess you will have to take the class to find out!



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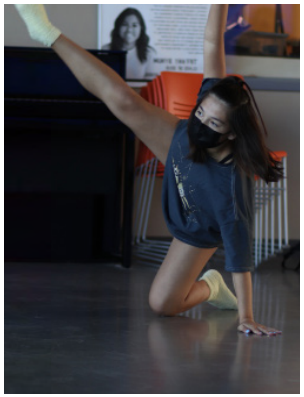
VAPA

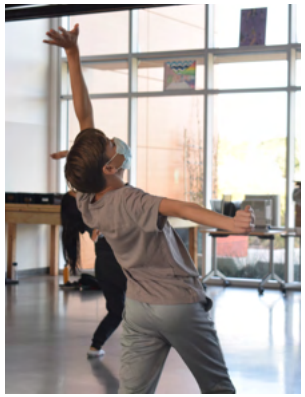
The Visual and Performing Arts

VAPA (Visual And Performing Arts) classes were offered in conjunction with other intersession classes. They are required for graduation and must be completed by sophomore year, so most students that took them were sophomores. Unlike other intersession options, VAPA classes must be taken for a full year, so once students chose a VAPA class they were locked into it for the rest of the intersessions.

The choices of VAPA classes include Film, Dance, Painting and Drawing - Murals, Photography, Theater, Visual Art (animation), Landscape and Still Life Painting, and Graphic Novels. This year, VAPA was different, because there were only three intersessions instead of the usual four. As a result, students taking a VAPA class had to produce some sort of project that used elements they had learned in the class to show their understanding of the material learned. This project was called the Capstone project, and students were able to work on it throughout the year with the guidance and supervision of teachers.

Liz Doherty ('24) said she had a good experience taking her VAPA class, which was Animation, because "it was something I actually enjoyed doing." She especially liked the assignments because it gave her the opportunity to "explore how much I could do in animation." She said that compared to "analyzing other people's animation to see what they did and trying to learn on my own," it helped having access to "an actual animation program and learning [animation] tips." For the Capstone project, she "wanted to make a whole story-built animation, [but] it was very messy and it wasn't really what I wanted." She added that she had to postpone the project in order to "allow me more time to learn, as well as help to decide if I want to do it or not."





Nico Noravian ('24) said he enjoyed his VAPA class, which was Film, but said he would have liked to be able to "take other classes besides the VAPA, like golf or something outdoorsy." Something he liked about the class was "the teacher, Mr. Annis. He was pretty funny and knew a lot about film." When asked how this course could be improved, he replied "I don't think it really needs any improvements, but maybe give people more time to work on the Capstone project during intersession." He said he personally enjoyed the Capstone project, which was shooting a short film, but for other VAPA classes, "you might make an art project, and you need about 25 to 30 hours." Working on a project for this amount of time on top of completing the regular assignments could well be pretty stressful for some students.

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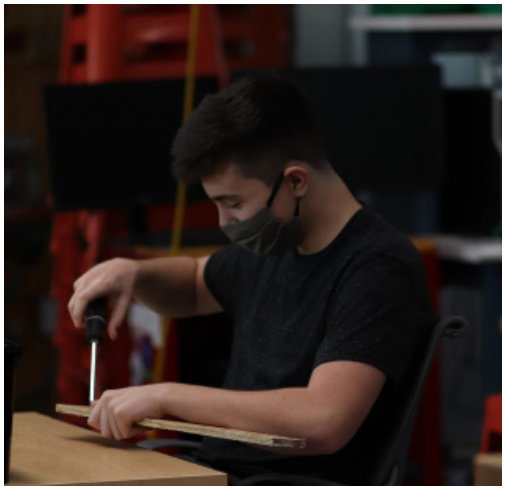
INTERSESSION

2 Weeks of Exploration

Intersession is a program unique to d.tech in which students can choose to learn about certain topics that interest them apart from their regular course load. A two-week break from normal classes, intersession was held only three times this year, one less than the usual four. During intersession, class cycles were put on hold while students took a deep dive into their chosen topics for two weeks, attending one class in the morning and one in the afternoon.

Intersession options ranged from Woodworking in the DRG and exploring the coasts of Half Moon Bay with d.hiking, to learning how to manage your own finances in Financial Literacy or Vegetarian Cooking online. When asked about her opinion on intersession, Ainsley Wong (‘24) commented that “It’s a nice break from regular classes.” She said that some of the intersession courses she’d been able to take this year were d.hiking and mural arts. In mural arts, “the teacher was really encouraging and the class was overall super fun,” although she wished that it were in person, which wasn’t really an option.



Due to Covid, the majority of intersession classes were held online this year. Fortunately, a few intersession classes were able to meet in person, such as d.hiking, dance and woodworking; as such, these classes were in high demand among students craving social interaction. Wong said she enjoyed “seeing other people in d.hiking, and the assignments were fun.” She added that “it was awesome to get out and explore different places.”

Mia Frappereau (‘24) took Theater and DRG Fashion & Sewing for intersession this year. She “enjoyed the classes very much” — especially the sewing class, in which students “made masks to donate to charity.” She voiced that she would like the class even more if she were able to learn how to make other things “besides masks, like tote bags, tops, or PJ pants.” Despite this, she still appreciated the opportunity to “practice and [acquire] knowledge on how to use my sewing machine” as well as “the satisfaction of donating something I created.”

Online courses were also a popular intersession choice among students this year. With this option, students were able to choose from a large variety of online courses offered by Coursera and EdX. The only assignments were reflections and progress check-ins, and attendance was done via a short meeting at noon. This gave students more flexibility in their daily schedules and allowed them to progress through the course at their own pace.

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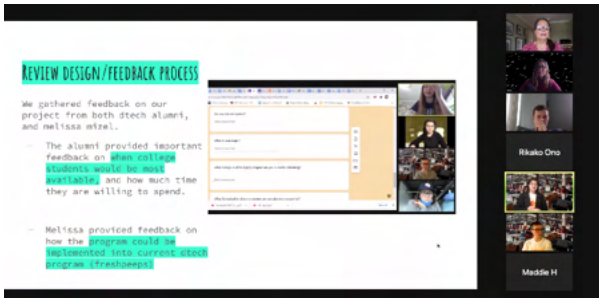
INTERNSHIPS

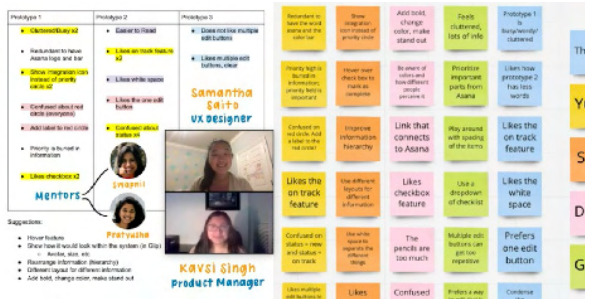
The Program

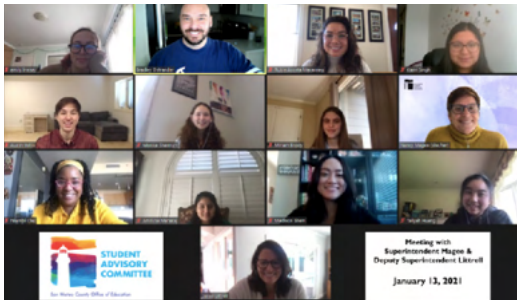
Another aspect of d.tech in addition to intersession and d.lab that sets it apart from traditional high schools is its internship program. The program, led by Mr. Klieman, is a special option available to juniors and seniors during intersession and offers many different types of internships. These range from health and wellness courses focused on self improvement like The Science of Wellbeing, to sustainability courses like Planetary Boundaries that revolve around rapidly evolving trends in global environmental changes.

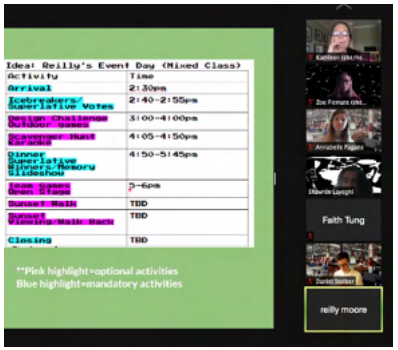
Regarding her internship at RingCentral, a company centered around cloud-based communications, Samantha Saito ('22) commented on how she "loved how she was able to learn about a field she wasn't so familiar with (UX Design)." She also enjoyed the chance she had to "talk to RingCentral employees one on one and ask them about their jobs." Saito mentioned that from this experience, she was able to improve her "presentation skills and learned a lot about UX design." The internship also helped her "feel more comfortable about joining the workforce in a few years."

Thomas Saito ('22) also spoke positively about his internship at the San Mateo County Office of Education. He said something he liked about his internship was its "impact on the community and how it relates to the environment and climate change."









For his internship, Saito put together a report on outdoor learning and climate change, as well as a spreadsheet that discussed outdoor learning's benefits, guidelines, and other information. Saito was able to learn a lot about "end users, Covid, and new skills relating to mathematics, ecology, health, and [the] safety of students."

Dahlia Levy ('21) spoke on how her internship at LifeMoves Haven Child Development Center, a homeless shelter, allowed her to "incorporate my passions into the internship." Levy stated that from this internship, she was able to get "a better understanding of what I want to do with my future."

Internships are arguably an essential part of d.tech's curriculum. As shown above, they give students a hands-on opportunity to collaborate and learn about something that interests them. Through these internships, students are more likely to connect with a certain subject, possibly even seeing it as a potential career path in the future.

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ENGLISH

English 1, 2, 3, & 4

All students take four English classes during their time at d.tech: English 1 taught by Mr. Patrick Sullivan, English 2 taught by Ms. Karissa Lecroy, English 3 taught by Mr. Kevin Groh, and English 4 taught by Mr. Nathan Pierce.

When asked if distance learning had a positive or negative impact on his teaching experience in English 1 this year, Mr. Sullivan answered, "Honestly, it's had both." He has seen greater improvements in reading and writing activities, while speaking and listening were "suffering." As for the minimal face-to-face interaction during distance learning, Mr. Sullivan said, "It's tough, but people do a good job of participating in different ways." Communication, such as emailing teachers and joining office hours, has been key in making distance learning work. Lia Santos ('24) observed it was difficult to work together on assignments and talk to classmates when their cameras were not turned on. "It's hard to get a conversation out of someone if you can't see their face," Santos noted.

In English 2, "students learned narrative writing skills, researching skills, [and] learned a lot about symbolism and motif," according to Ms. Lecroy. They read Lord of the Flies, the graphic novel Maus, and several short stories.

When asked what she hopes her students will take away from her class, Ms. Lecroy stated that her wish is for students to "gain the ability to think critically about what is happening in the world," so that they can "take that skill and apply it to forming their own opinions and perspectives on the world."

As for lack of face-to-face interaction, Ms. Lecroy said it's difficult in that it "doesn't allow casual conversation to happen" and because of this, classes "lose a little bit of their community." Nate Posner ('23) agreed, commenting that "it's harder to have collaborative work in peer reviews for narratives and essays." Posner missed connecting with peers and teachers, which distance learning made more difficult. However, he said "Ms. Lecroy has been really accommodating," which helped to make the situation less stressful. On another positive note, Ms. Lecroy was able to "make Canvas super clear" and "learn new things," such as finding more uses for EdTech. Posner said something he took away from English 2 was "things that I can do to make a difference in the world can start with identifying the problem and what's going wrong," then working on a solution by "identifying that I can make a difference and know about the problem and how to research it."

Mr. Groh, who taught English 3, echoed Mr. Sullivan's sentiment about the pros and cons of distance learning. He identified the negative impact as "not having the human connection and collaboration" and "losing the power of that social learning engine." During class, Mr. Groh felt like he was "cajoling answers out of people, because it's so hard to feel the energy and connection when you're looking and talking to a screen." Thomas Saito ('22) thought Mr. Groh did a great job of keeping the class engaged over zoom through discussions, even though some topics of conversation that are meaningful in the classroom don't have that same vibe over zoom.

As for the positives of distance learning, Mr. Groh said "students that are more self directed can learn something on their own and have time to go and do something they're passionate about." Saito agreed, saying "it's really opened up my flexibility and my schedule." He's able to utilize his time to work on different projects, whether academic or personal. Overall, he "enjoyed being able to self schedule" and likes how he can follow his impulse to learn when he's in the mood.

Mr. Groh believes it's immensely important to think critically and hopes that students in his class "will develop their critical thinking skills" while learning "how we can use literature and other perspectives to build empathy." This year Mr. Groh taught English 3 students diverse topics. They focused on the American Dream and who can achieve it, held discussions about current events like the BLM movement, social justice, and police violence, and read books pertaining to the class system like The Great Gatsby. They studied class and visual storytelling in graphic novels like American Born Chinese, and created a video essay about how to repair the social contract in America.

In English 4, taught by Mr. Pierce, students crafted a "personal statement for college applications, made a resume/cover letter, and [worked on] finding a job shadow," during the first unit. They also wrote short screenplays, studied poetry, and read novels like 1984, Handmaid's Tale and Frankenstein, and wrote an essay as well. Monica Shannon ('21) mentioned she was able to "strengthen a lot of technical writing skills" this year. When asked how lack of face to face interaction impacted learning in English 4, she spoke on how "Mr. Pierce had [the class] watch a screencast detailing our assignments for the day." This made time spent in class shorter, making English 4 a mostly independent class.

Spanish | Electives | D.lab | Student-led d.lab

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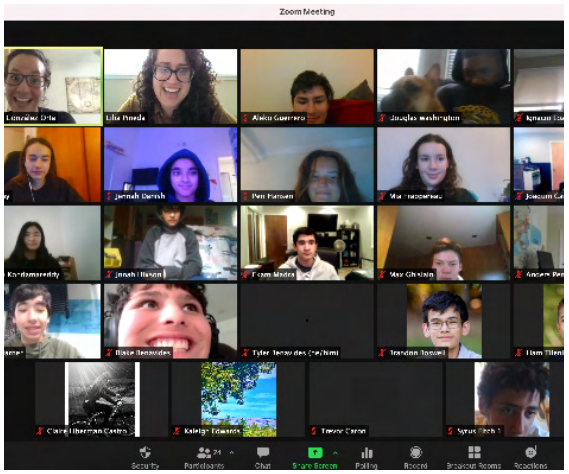
D.LAB

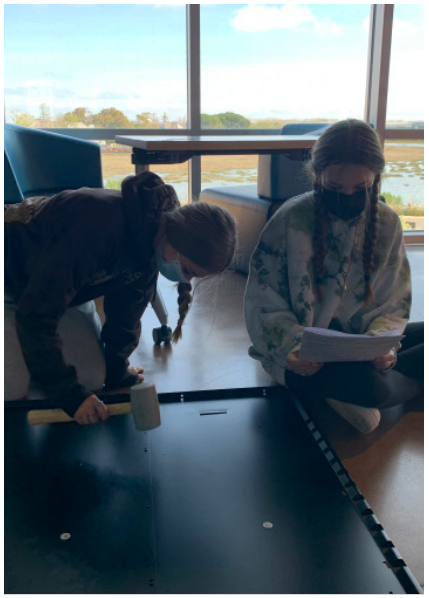
Student Impact

This year, d.lab switched from being a class offered during morning intersession to a class integrated into students' everyday schedule. Students had mixed opinions about this, with some saying d.lab was better as an intersession class, and others who liked that it was now a regular course.

In years prior, students were able to choose d.lab as a morning intersession class. Similar to afternoon exploration, there was a wide selection of courses for students to choose, from cooking to gardening. Savannah Meadow ('22) said she was able to take an Oracle class called Hello Wearables, which was all about "wearable technology." Another memorable option, according to Meadow, was "cultural feast, which was all about different cultures." Design thinking was the unifying theme, and each class offered its own unique spin on incorporating design thinking into its lessons.

This year, however, every student was required to take d.lab as one of six required classes. When compared to d.lab during intersession in previous years, a significant change was students were no longer allowed to choose specific topics to learn about. Students were taught how to solve problems using design thinking, how to create products/prototypes by gathering information through ethnographic interviews, learned how to empathize and how to be anti-racist, and more. However, most students still seemed to prefer the structure of d.lab last year. Ainsley Forster ('22) said she liked how she was previously able to "spend a lot of concentrated time" on a project because "it felt like I had the time to really explore." She said d.lab now "feels drawn out and hard to keep motivated."





The d.lab content taught differed by grade. Freshmen followed a more structured curriculum, learning the basics of design thinking, putting it into practice by creating a solution for a transportation problem for teens, as well as calling local businesses to interview them about how the pandemic has affected them. Sophomores chose a United Nations sustainability goal and then created a project that addressed that goal. Juniors and Seniors had the option to choose and pursue one of nine different Designer Pathways. These ranged from Graphic Design and Architecture to d.tech's weekly Koi Stream. Despite differences in class content, d.lab taught all grades how to apply the process of design thinking to many situations, no matter how seemingly insignificant.

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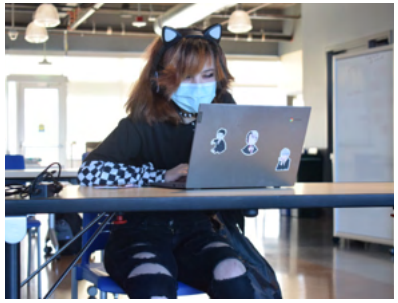
LEARNING HUBS

In-Person Interaction

Learning hubs were an opportunity that allowed students to come on campus to receive in person instruction for certain subjects. Students were either referred by their teacher or could send an email and ask if they could attend. They were the closest thing to in person instruction that students had access to this year, and students who went to learning hubs had overwhelmingly positive things to say about them.

The hosted learning hubs differed by day, such as having Spanish 1 on Wednesday and Algebra 1 on Friday. Many students enjoyed these learning hubs because they were either able to learn better in person, or they could socialize with their friends and classmates, which was difficult to do while on Zoom.



Phoebe White (‘24) commented that “it’s a lot easier to ask a question in learning hubs because you were there to ask questions,” whereas online, “[your teacher] is teaching and lecturing and stuff, and you don’t want to interrupt.” She also added that “conversations were better” during learning hubs, because you could pick up on things like body language and facial expressions. In general, White thought that “learning hubs are great” but that they would have been better if you could just sign up to attend one instead of being requested to go. Ty Gannon (‘24) also appreciated the social interaction that could be found at learning hubs. He added that he understood the material better at learning hubs than online, although he admitted that “it’s a personal preference because people learn in different ways.”

All in all, learning hubs have been very useful this year, especially in the time of distance learning. They not only allowed students to get the help they needed directly from their teacher on campus, but also provided ample time for students to connect with one another.

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INTERSESSION

Exploration cont.

Intersession was a much-needed break in between the year's regular classes. It allowed students to step back from their routines and indulge in activities that interested them for two weeks. Afterwards, students went back to their courses feeling refreshed and ready to learn again.