

Appendix 4.5: A Day in the Life of Ipso Students and Teachers

A Day in the Life of a Student

Olivia - 10th Grade

8:30am - 10:00am - Olivia arrives at her Core class with other 9th- and 10th-grade students. Having consulted her Google calendar, she knows that for the first two hours she will be working on a lab in science where she designed an experiment to test the rate of infiltration of water in different soils. The class is learning about the California Drought and she is developing a mathematical model to predict how long it will take groundwater to recharge in different soil substrates. After her group conducts their experiment, they make next steps for their investigation, and take a 15 minute break.

10:00am - Through previous work and assessment, Olivia's teachers are aware that she struggles to understand surface area and volume. She has been scheduled into a 30 minute tutorial period with nine other students so that the teacher can give them the support they need to master these concepts.

10:30am - Project time. This session's project integrates science, social studies, math and English. Students are preparing a museum exhibit for the local library that explains that science behind the drought and how the lack of water is influencing our communities. Olivia's English teacher is helping students learn to write in narrative form. As part of her background research, Olivia has a "Google Hangout" conversation with a student in the San Joaquin Valley. After conducting her interviews, she will write a story that weaves several voices and perspectives on the drought.

11:30am - Lunch. Olivia meets friends for lunch, and joins her friends in the Audubon Club for a walking tour of our local estuary.

12:15pm - Advisory. Olivia uses Google calendar and her personalized learning plan to organize her afternoon schedules for the week. She chats with her teacher and also reviews the organization of her portfolio. She will use her portfolio to share with potential mentors in the next month.

1:05pm - Innovate Lab. Olivia is excited to explore genetics during Innovate Lab. Through her previous project in her core class, she and a classmate have been intrigued by genetics. Olivia is adopted and is interested in learning more about her genetic history so that she may be aware of genetic diseases that may run in her family. Today, she and her friend are meeting with with a representative from 23andMe, to learn more about the possibility of doing genetic screening.

2:25pm - Olivia is interested in guitar and through a community program, she takes a weekly lesson at the community center from a local artist.

4:00pm - Olivia stays at the community center where she works with her teacher to teach a group music class to local elementary school children.

Jesse - 9th grade student - English Learner - CELDT level 2

8:00am - Jesse arrives at school for a meeting with his 12th-grade mentor named Mark. Mark and Jesse meet for breakfast twice a week, once a week holding conversations in Spanish to help Mark hone his skills, and once a week holding conversations in English to help Jesse with his skills.

8:30am - Jesse is excited to get to his core class. The project they are working on is designing solar ovens for refugee camps. They are working on understanding the needs in refugee camps, and are also learning the science behind how solar ovens work. They learn concepts relating to heat transfer, rate of change, and how various angles and

materials influence reflection, refraction, and transmittance of light. Each project group has a community mentor through whom they vet their ideas and get feedback. The final demonstration will be a solar oven food festival for the community that will also include the mentors.

Today, they are continuing to build their ovens. At one point during the project time, Jesse is called to a table by his teacher. There are four other students there, and the teacher has determined through formative assessments that this group has a high degree of understanding of specific heat capacity. She has pulled these students together to check in on their extension assignments. Jesse designed an additional experiment to explore which materials served as the best insulators for the solar ovens.

10:30am - Jesse goes to his English seminar. He is with a group of 12 students who are reading *Zeitoun*. He is interested in the themes that relate to social justice. Jesse has read the Spanish version of the novel first, following the recommendation of his English Language Arts teacher, and is now working through the novel in English. Jesse has the audiobook on his devices, which he listens to as he reads. The teacher helps him understand the vocabulary by including visuals, pointing out cognates, and using graphic organizers. Today's seminar is a discussion surrounding cross cultural understanding. Jesse is prepared to discuss the source of bias and how we can be more culturally aware citizens.

11:30am - Lunch. Jesse joins the Robotics Club meeting in his science teacher's classroom.

12:15pm Jesse has been intrigued by robotics, and wants to build a robot that modify its movement using light and sonic receptors. He has a partner who is interested in applying what she knows about echolocation to design the robot. They have conducted an inquiry project and with their science teacher's guidance, have researched what they will need to understand and do to create the robot. Today they are signed up for the Makerspace so that they can begin to build the robot.

2:30 - Jesse heads to his ELD class where he is getting support on his narrative essay. His English teacher helps him organize his essay by using a graphic organizer and sentence starters. They do an activity together where they practice describing various scenes using all of the senses. Students actively listen to one another as they speak. Jesse begins writing his essay and submits his work through WriteLab to get quick feedback. In addition to helping him identify grammatical and spelling errors, he learns to better organize his ideas. He meets with his teacher to discuss his feedback and she provides him with additional ideas to improve his writing.

Maria - 12th-grade Student

8:30 - Core Time. Maria and her group are working on a project that allows her to collaborate with the staff at Marin Community Clinics. Her class is exploring how rates of asthma compare in different regions of our community. Her group is learning the chemistry of air pollution and how secondary air pollutants are generated with energy from the sun. Maria's mathematics teacher has brought an insurance actuary in as a guest speaker to explain how she predicts the probable life expectancy for people in different areas. Maria is amazed to learn that a person in south Novato is expected to live 13 years less than a resident of Ross. Maria learns the basics of probability during an in-class workshop. She will use her knowledge to create her own equation that integrates air quality to predict life expectancy.

11:30 - Lunch. Maria sits and eats her lunch with friends on the quad.

12:15 - Advisory. Maria is working on her college essay. She has received written feedback through Google Docs from a partner who is an undergraduate student at UC Berkeley and spends the time to hone and revise her essay. She has worked through the Naviance program to narrow her application choices down. She will apply to multiple schools in the UC system but also found a small liberal arts school that she is considering.

1:05 - Maria meets with her AP Calculus teacher and 21 other students who will be taking the exam with her. Today, their problem is to determine how quickly Ipso's new water catchment system will collect water for the school garden. Based on their calculations, they make recommendations to the garden club on how to modify the dimensions of their catchment system.

2:05 - Maria heads to her internship at the Marin Community Clinics. Maria loves to dance and has volunteered to lead the Zumba classes at their "Health Hubs." In addition to helping community members learn a fun way to exercise, she is gathering data for the clinics to see how their program could improve.

A Day in the Life of a Teacher

Jorge - Social Studies Teacher

7:45 - Jorge arrives at school. He meets up with a group of five students for *Desayuno y Discusión*. The group meets three mornings a week to eat breakfast and hold discussions in Spanish and English. This month they are focusing on discussing the US presidential election. Native English speaking students watch the news on Univision as another way of immersing themselves in the language. The group has two native Spanish speakers, one of whom speaks Spanish but doesn't have a lot of practice in reading and writing, and one of whom is highly literate in Spanish but just moved from Mexico and doesn't speak much English. They watch the news in English.

8:30 - Jorge starts core period facilitating a Socratic seminar on US foreign policy after the 9/11 attacks. Students independently read leveled-texts and watched videos related to the topic, and were discussing how the war on terrorism sought to improve security within the United States but also raised questions about the protection of civil liberties and human rights, a topic from the AP US History course of study.

9:15 - Jorge and Emily, the English teacher who is his partner in the current project, gather the students into project groups to support their research into post-9/11 literature and poetry. Students chose an area of study based on writing they liked, and will perform for a spoken word event later in the month. Many groups are working on peer editing each other's works today. However, one group has finished and decided that they were so moved by the poetry that they wanted to create an anthology of post-9/11 writing. They have a Skype appointment with an author who lives in Texas to discuss one of her works that they want to put in the anthology. They have worked with a local publisher to learn how to publish, and will include some of their classmates' works in their book. Jorge and Emily support the groups in organizing their own learning, and check in to ensure they all know what they need to know.

11:30 - Jorge hosts the Mock Trial club in a classroom. He eats lunch and helps as needed, but the club is run by a senior.

12:15 - Advisory. Jorge works with the juniors in his advisory to sign them up for the PSAT. The other students are using the tool to chart their progress on their Innovate Lab projects.

1:05 - Jorge is the Innovate Lab instructor for today. He checks in with students on their project planning, and helps one group determine the next step in their research. One group had a failure of their robot, and although Jorge can't help them understand the science, he can help them organize the next steps in their learning process and create questions for their science teacher for a later tutorial.

3:30 - Jorge has office hours. Three students come by for 1:1 help. One came on his own, and Jorge had scheduled the other two through their Google calendars.

Grace - Math teacher

8:00 - Grace meets with her social studies teaching partner to review their plan for the day. Grace wants students to keep each other accountable more often, so she is walking through how she plans to use the “process facilitator protocol” that her instructional coach recommended. Her teaching partner is excited to try the strategy out and promises to offer his feedback on their implementation. She and her partner greet students as they enter class and students go to the locations indicated on their Google Calendars. Today, Grace is working with a group of students to help students recognize and explain the concepts of conditional probability and independence in everyday situations. Their interdisciplinary project has been exploring the historical context of inequity in our society. During their workshop, Grace helps students compare the chance of having lung cancer based on factors such as history of smoking and prevalence of indoor air pollutants.

11:30 - Grace walks with the walking club. She holds a conversation in English with a student who is learning English as a second language. The student’s family is from Russia and she learns about his family’s history.

12:15 - Advisory. Grace’s students are using Naviance today. Each student is accessing the program where he or she needs. Grace facilitates.

1:05 - Today is Grace’s prep day. She is organizing two tutorials for later in the week, and is reviewing formative assessment results from the morning. She determines how she will organize students into various workshops to extend and support their learning based upon the assessments. She also puts in a request for potential guest speakers with the community liaison to support her next project. Grace also reviews a five minute video of herself teaching and identifies her areas of strength and areas of growth. She

jots down a few questions to discuss with her instructional coach during their weekly meetings.

3:30 - Office Hours. Grace works with a group of three students who are struggling to understand how to multiply polynomial equations. After 45 minutes the students demonstrate that they understand the steps needed to solve the equations.