# The QuaranTimes

## The impact of Online Learning

The Cal Poly Pomona evaluation response



Online learning can be summed up in one word: difficult. Whether that be due to an unreliable internet connection or too many people in the house, learning at home on top of living through a pandemic is nearly impossible. To understand the effect online learning and a university's pandemic response can have on students, I will be evaluating Cal Poly Pomona's response and interviewing a biology student from the university.

#### The Response

Cal Poly Pomona has made it evident that their idea of keeping students healthy and safe, means little to no students or faculty allowed on campus. According to a statement released by the university, only faculty, staff, and students with pre-approved in-person instruction and a health screening are allowed on school grounds. The issue with this is that only a small fragment of classes was approved to operate on campus for Spring 2021, roughly 23 classes that consisted of thesis research or upper-division courses. This greatly impacts freshmen and sophomore students, as they require in person-learning to fulfill their general ed laboratory requirement. Stem majors are also impacted as they likely need to take lower-level labs for them to stay on their college roadmap.

Besides this, keeping students off campus impacts the way they learn. A study by William Alpert, Kenneth Couch, and Oskar Harmon found that online-only students performed significantly worse in class. On average, the online section scored 4.2 points worse on the final exam than the inperson section and only 54% of online students finished the course, compared to 70% of the in-person students (Forbes).

Since going online, what resources has Cal Poly Pomona provided their students? The website states that laptops and hotspots can be borrowed by students to complete coursework if they do not have access to a computer and/or internet at home. Although mentioned, submitting a laptop request form does not entitle a student to a laptop and the school does not ship the equipment meaning international and out-of-state students are out of luck.

Another issue with the school's response is that they have made no mention of providing students with a place to study. Due to the pandemic everyone is at home using the internet for work or school, putting students in a difficult situation trying to balance homework with home life.

On campus there are multiple resources that could have been used as study centers for students who either have an unreliable internet connection or too many people at home making it

hard to concentrate. One of these is the computer lab. Following CSU Long Beach's lead, the school could have maintained the computer lab open for students, providing them access to desktop computers and a reliable internet, while remaining physically distanced by ensuring that no desktops are within six feet from each other. CSU Long Beach also provided disinfecting products at each sanitization station within the computer lab, so that students can clean the equipment when they finish using them, avoiding transmissions as much as possible. This recommendation came from the testimony of the biology student interviewed:

"My recommendation would be allowing at least a small group of students on campus because I have small siblings who I have to take care of, so attending a zoom meeting is full of distractions with them around. In addition, all my family is on zoom all day, so the internet is unreliable. If there are students like me at CPP I think it would be beneficial to allow students to go to an empty classroom and have their zoom class. That way they do not have to deal with the distractions that learning at home can bring. "

### Recommendations

With the school's announcement that they are planning to reopen in the fall, students and faculty have been left in the balance, as the school has not provided any information on reopening. Since there appears to not be a plan yet, I have made a list of recommendations that adhere to the CDC guidelines, as well as follow the lead of schools that have partially reopened.

1. **Hybrid Learning:** I propose that instead of being fully online next semester, the university could adopt a hybrid model where a percentage of the class is in person while the other percentage is joining the class online. This would apply to the majority of courses, except for laboratory studies, as those need to be fully in person. As we have seen hands on majors have been the most effected by the lock-down as they are not able to have a full learning experience



through zoom. This is exemplified by a biology student,

"I sit and stare at my laptop for hours at a time, trying to watch pre-recorded videos of lab experiments. It's hard to remain interested, especially when you're expecting a hands-on approach and get a low-quality video instead."

According to the CDC, the requirements for hybrid learning

would be students, faculty, and staff participating in small, in-person classes that allow individuals to remain spaced at least 6 feet apart while always wearing masks. To further avoid transmissions, the CDC suggests staggering classes so that students and faculty do not mix with other students not in their class.

2. **Wastewater Tests:** In terms of identifying trends in SARS-CoV-2, I think our best option would be surveilling our campus's wastewater system. This would entail collecting samples of Cal Poly Pomona sewage and testing it for SARS-CoV-2. According to the CDC, this method of

testing provides an efficient pooled community sample that can be used as a method for early detection of viruses and can capture data on both asymptomatic and symptomatic infections. A study by Peccia et al. stated that, "monitoring sludge, the solids that settle during the first steps of municipal wastewater treatment, at the community scale may offer greater sensitivity and less sample variance when compared to wastewater influent



monitoring." Meaning that if Cal Poly Pomona chooses this method of wastewater surveillance,

we could monitor SARS-CoV-2 trends within the campus at a higher rate of sensitivity. Since this surveillance is meant to compliment known testing methods, I believe the school should also adopt once a week PCR tests using the polymerase chain reaction machine found in the musculoskeletal laboratory.

I believe we could take a cue from what Penn State University is doing in terms of testing, they are requiring post-arrival testing within the first two weeks of the semester for all students, ondemand testing for students and on-campus employees, and random daily surveillance testing of approximately 2% of the University's population of students and employees living, learning or working on campus, as well as those who access campus. Penn State is using antigen testing because results are available within 15 minutes, but understanding the issues with sensitivity, I believe it would be best if Cal Poly used PCR tests for a weekly surveillance to help identify asymptomatic carriers.



3. **Masks:** Following CDC guidelines, all students and faculty would be required to always wear masks on campus. We could follow Ohio State's lead and provide free reusable masks that are available at multiple campus locations including: all recreation facilities, most university libraries, and the information desk.

4. **Housing:** In terms of housing, I understand that the school cannot allow all former residence back due to social distancing, but I do believe that the school should start providing a form in which students who need housing can explain their circumstances and why it is necessary for them to return to school. Providing a form early on would allow students to have backup plans

if they cannot secure a dorm. For the students that do secure a dorm, they should quarantine for two weeks before returning to campus and provide a negative COVID-19 tests before moving in. I believe that Ohio State has provided a great housing plan and should be modified to fit Cal Poly Pomona's population. Prior to moving in, students must complete a two-part testing program, consisting of completing an at-home COVID-19 saliva test before traveling to campus and completing a COVID-19 test at the student



center directly before moving into their residence. They stagger move in times, allowing students to make a testing appointment 30 minutes before moving in and are asked to selfsequester until their results come in 24-48 hours later. They are provided with food during this time. From here, students living in residence halls are tested every week to monitor infections.

5. **Vaccinations:** Recently, Cal Poly Pomona announced that they have become a vaccination hub. This provides us with a resource to vaccinate faculty and students at our own school. I suggest that we adopt the vaccination plans of CSU Long Beach. After talking to a friend who



attends the university, she informed me that CSULB secured a shipment of the Moderna and Pfizer vaccines for their students. Upon further investigation the school has set up links for students to make appointments and they receive emails detailing when to get their second dose. Its possible for Cal Poly Pomona to secure vaccines for their students and require proof of student identification when they show up for their appointment. I understand that Cal Poly Pomona's priority is the safety and health of their students and faculty, but the way that they have responded to the pandemic has negatively impacted the students. By not allowing individuals on campus, the university sacrificed their learn by doing moto and chose zero transmissions over their students. Fall 2021 offers the university the opportunity to make up for their inaction, it is unfortunately up to the students to make our recommendations heard, and to wait for the decisions of the university's president. I am anxious to hear whether we reopen and if we do, what the school's plans would be.

#### Works Cited:

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Information on Ohio State's housing plan: https://safeandhealthy.osu.edu/spring-semester-covid-19-testing

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