

Odyssey STEM Academy

Learning Beyond School Walls

LOCATION Lakewood, CA
PROFILE Public high school, Paramount Unified School District
STUDENT IMPACT 140 students, 550 at capacity

Just months into the school year, the founding freshman class at Odyssey STEM Academy has already made their mark. Against one wall in every classroom, each student has listed personal strengths, passions, and careers he or she is interested in. These student-produced profiles embody several of Odyssey’s key values: knowing learners well; teaching learners to use their minds, hearts, and hands; and learning beyond school walls.

Bordered by Long Beach and Compton in southern California, Odyssey is the newest school community in the Paramount Unified School District. The school serves 140 freshmen students from the area and will add a grade level each year until they reach capacity. Housed in a former elementary school, Odyssey’s facilities are limited compared to other STEM high schools. So without amenities like a science lab, how is this non-charter, urban public high school empowering deep learning for its students?



Partnerships and the greater community play an essential role in providing equitable access to opportunity for every student. Collaborating with organizations like Big Picture Learning helps Odyssey expose students to authentic learning experiences connected to the community beyond school. Given this focus, Altitude Learning’s partnership with Odyssey is enabling the school to continue to transcend boundaries to create exceptionally student-centered educational experiences.

“We serve a wonderfully diverse community and want to instill, in each and every child, the belief that they deserve a high-quality education and the opportunity to succeed in their own life. Our partnership with Altitude Learning is part of our commitment to make student-centered learning possible for all of our students.”

- Ruth Perez, Superintendent, Paramount Unified School District

Visible learning: Community-based internships

Derived from one of Big Picture Learning’s 10 “distinguishers”—leaving to learn—Odyssey’s internship program requires students to complete multiple internships by graduation. Beginning in freshman year, students are responsible for securing their own internships, from researching opportunities to pitching themselves to businesses. Through these experiences, students establish a professional network and develop 21st-century habits, skills, and knowledge.

Exploring their interests in the real world, students tap into powerful learning. The Altitude Learning platform helps capture the learning that happens outside the boundaries of school. It also helps facilitate deep collaboration between students and educators. Students use Goals to set their own targets across academic and social-emotional learning, including internship-based learning, while educators are able to validate these whole-child competencies and provide personalized feedback using the Assessment tools.

Odyssey students capture images and videos to document and share their progress toward key objectives. This helps make their learning more visible, both at school and in their internships. Since the start of the school year several months ago, they have been steadily documenting more than 1,000 images of their work and learning experiences each week.

This fall, after writing, recording, and refining their elevator pitches, Odyssey’s freshman class will use their scripts to request informational interviews with professionals around the country. Beginning in January, students will spend two full days a week off campus learning in the community. The duration of internships will increase incrementally each year, spanning eight to ten weeks for freshmen to the entire school year for seniors.

"Partnering with Altitude Learning has been a transformational experience for me. Moments of deep learning are captured like never before. I have a clear pathway to giving my students timely and manageable feedback."

"The Altitude Learning platform has streamlined my communication practice by allowing me to keep all of my feedback and comments in one place, aiding in scholar (and teacher) reflection practices. Gone are the days of missing worksheets and lost essays and loose sticky notes. Paper and pencil still exist in our classrooms, as do wildly productive dialogues, but now they're documented and evaluated using the platform."

- Courtney Cain, Humanities Advisor

Enabling interdisciplinary educator collaboration

The Altitude Learning platform promotes deep interdisciplinary collaboration between educators. One way Odyssey educators are leveraging this functionality is by co-creating and teaching Units across subject areas. Over the summer, six educators planned an interdisciplinary Unit on biomimicry, which the entire freshman class is studying. The Unit features Cards (learning activities) spanning diverse learning objectives.

Using Assessment, every educator can collaborate to assess student progress across subject areas spanning both academic and social-emotional learning objectives. Within this shared curriculum, Odyssey's science and ELA teachers have been co-assessing students as they write their scientific papers. The biomimicry Unit will culminate with an exhibition in which students are required to demonstrate their learning by selecting work that represents multiple learning goals.

**“Altitude Learning’s
commitment to excellence
and making learning visible
for students, families and
our staff is at the core of our
work.”**

"At Odyssey STEM Academy, we believe students' innate curiosity and passion will drive powerful learning and we are committed to a culture of achievement through equity, personalization and authentic learning experiences for each and every student."

- Keith Nuthall, Co-Founder and Principal

Making student insights actionable

Collaboration is integral to Odyssey's school culture. Educators model collaboration in and out of the classroom, and the Altitude Learning platform supports this in a number of ways. One example is Comprehensive Student Assistant Teams (CSAT), Odyssey's "early warning system," which helps identify students who need additional support. The cross-functional team includes Odyssey's principal, academic dean, social worker, and a special educator.

Using data insights from Scorebook, the team meets biweekly with teachers who share the same students to develop individualized plans, implement appropriate interventions, and monitor progress. The Altitude Learning platform works to unify this cross-functional work and translate planning into action. When a student requires additional challenge or support, the CSAT team co-designs individualized Cards to document the plan.

Every person on the team is able to make modifications to the Cards—for example, connecting objectives to a student’s needs or IEP. Although it’s still early in the year, Odyssey’s 8-person educator team has significantly expanded their platform usage, largely through personalizing Cards and sharing updates with families regularly via Stream.

"Imagine a process where educators comb through the social emotional and academic progress of each learner looking for who to empower, who to support, who to challenge, who to motivate. That's CSAT."

- Becky Perez, Co-Founder and Academic Dean

Student-driven reporting at home and school

At back-to-school night this fall, families filled the classrooms for Odyssey’s first student-led conferences. Leading conversations about their work, students shared their daily activities with Playlist; reviewed portfolio work; and demonstrated academic and non-academic progress with Goals.

Stream makes it easy for Odyssey’s educators to share individual and group updates with families every week. Within the first two months of school, eight educators had created more than 1,600 Stream posts sharing group and individual updates. This transparent communication was a stark contrast for many families who were used to waiting for progress reports in the mail several times a year. This year, families entered back-to-school night with a shared context of their child’s progress. That meant they could take advantage of the opportunity to deeply engage in meaningful conversations about learning with their child and educators.

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Odyssey is planning additional opportunities to engage families directly in the learning process. These events will take place throughout the year. In the meantime, students replicate the process of sharing their learning at home with their families weekly. Using the tools in the platform to show evidence of their work, students are deeply reflecting on their learning experiences while strengthening their support systems at home.

See how Altitude Learning is enabling educational transformation for students everywhere.