

Case Study

Virtual Learning: Identifying Equity Gaps in Student Engagement

The District

The Foothill-De Anza Community College District consists of Foothill College and De Anza College in Silicon Valley. They serve 60,000 students.

The Question

"Is there a disproportionate impact in the new fully online learning environment?"

The Approach

"Invoke doesn't just look at biographic or demographic patterns over time, they are looking at patterns of behavior."



Ensuring the best possible outcome for each and every student through advanced analytics for higher ed.

212 W. 10th Street Suite A-400 Indianapolis, IN, 46202 562.409.4000 invokelearning.com sales@invokelearning.com

The District

The Foothill-De Anza Community College District has had a strong online presence for several years. Particurly true for Foothill College, they have been offering 350 online courses per quarter. As of Spring 2020,



both Foothill College and De Anza College went 100% virtual to meet the learning and safety needs of students in response to the COVID-19 Pandemic. (They have since gone back to a mix of course options.)

The Question

Using traditional metrics, the district determined there was a 4-5 percentage point achievement gap between face-to-face / hybrid and fully online courses in the 4 years leading up to COVID. What they were missing was the **why** these outcomes **might be** happening.

"When we started the project with Invoke, they presented the information in a way we could really look at the data," said Dr. Kristy Lisle, Ph.D., Executive Vice President of Instruction & Student Services. "What I thought was really significant is that Invoke doesn't just look at biographic or demographic patterns over time, they are looking at patterns of behavior."

The Analysis

Like many institutions during COVID, Foothill-De Anza shifted all their instruction to a virtual learning modality and increased their allocation of technology resources for laptops and hotspots. For David D. Ulate, Ph.D., Executive Director of Institutional Research & Planning for the district, "the questions then became, how are students using these resources? Do we now see a disproportionate impact in this new virtual learning environment? And how engaged are they in this new learning environment?"

Foothill College





Case Study

Virtual Learning: Identifying Equity Gaps in Student Engagement

The Tool

InvokeEngagement™ provided Foothill the ability to detect student behavior that affected their engagement.

The Solution

Examining how distinct patterns of behavior related to engagement, "this is where the partnership between Foothill-De Anza and Invoke really came together. It allowed us to identify gaps."



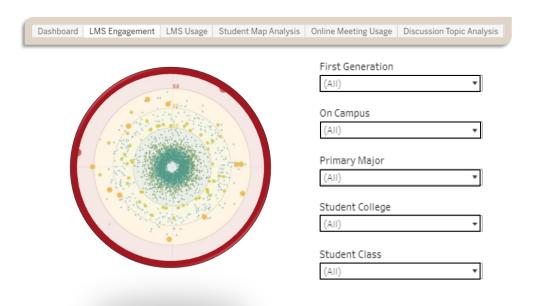
Ensuring the best possible outcome for each and every student through advanced analytics for higher ed.

212 W. 10th Street Suite A-400 Indianapolis, IN, 46202 562.409.4000 invokelearning.com sales@invokelearning.com The Foothill-De Anza team turned to Invoke Learning and co-founder Brendan Aldrich. The combined team used InvokeEngagement, as Brendan says, "to examine how distinct patterns of behavior relating to engagement might be disproportionately reflected in different student communities."

"What this tool allowed us to do for Foothill students, was to look at their engagement behavior," said David. "It provided this overview of all students, and how similar or dissimilar their engagement behavior was. It allowed us to identify gaps."

Student Engagement at a Glance

The InvokeEngagement bullseye chart reflects Foothill student engagement data across various traditional and behavioral characteristics.



The bullseye chart reflects the unique "fingerprint" for each and every student across as may as three dozen different dimensions. These engagement fingerprints allowed Foothill to compare, map, and identify highly similar and highly divergent patterns. As Brendan emphasizes, "it shows how the engagement of different student groups fare in the virtual world."



Case Study

Virtual Learning: Identifying Equity Gaps in Student Engagement

Working with Invoke Learning

"To get up and running took very little time. From the point of decision to getting some data, maybe a few weeks...what's great is that we continue to refine it...it's also an evolving process of partnership."

"InvokeEngagement is just one of many tools that we have with Invoke to capitalize on a great treasure trove of data. Now it's about trying to bring those pieces together."



Ensuring the best possible outcome for each and every student through advanced analytics for higher ed.

212 W. 10th Street Suite A-400 Indianapolis, IN, 46202 562.409.4000 invokelearning.com sales@invokelearning.com The InvokeEngagement bullseye chart shows the distribution of students across behavior metrics. Per Brendan, "with further analysis, the data showed that for Foothill College, a complete online learning environment extended gaps across various populations. Black and Latinx populations were more likely to be differently engaged compared to their peers and have lower GPAs within each engagement ring."

These findings led Foothill College to begin conversations on what actions they could take to reduce or eliminate the gaps in online learning. These conversations led to an increased focus on equality and equity.

"The data analysis gave us context for important conversations," said David. "These kinds of conversations lead to action. When we break it down even more, we can start to think about why these behaviors might be happening and what we might do to provide students additional support."

The Bottom Line

"On a daily basis we can share insights with our teams around students that are exhibiting behaviors that suggest they may need additional support to be successful," said David. "We can develop early reporting so the college can act a lot sooner." Per Brendan, "that's the kind of proactive intervention we've seen that can really make a difference for students."



David D. Ulate, Ph.D., Executive Director of Institutional Research & Planning



Dr. Kristy Lisle, Ph.D., Executive VP of Instruction & Student Services



Brendan Aldrich, Co-Founder, Invoke Learning

Connnect With Us

For more information about Invoke Learning and how you can uncover the **why** across the full student journey, visit <u>invokelearning.com</u>, or contact us to schedule a demo at <u>sales@invokelearning.com</u>.

Copyright © 2021, Invoke Learning, Inc.