

How to Increase Data Democracy and Develop a Culture of Inquiry within Faculty and Staff

Chialin Hsieh, Tracy Huang, Michael Hoffman, Anniqua
Rana, and Janet Stringer



Redwood City, CA

Purpose:

The purpose of this project was to establish data democracy and a culture of inquiry within faculty and staff at Cañada College.

Methodology:

In trying to develop a culture of inquiry at our college, we discovered that access to relevant and timely data was a major roadblock for faculty and staff. In the past, requests for data and research questions were submitted as part of the annual program review. The research office then compiled the requests for data and started working through the requests. Thus, a faculty member or department might have a robust discussion around student success in their program in February while writing their program review, but they may not receive back the needed data until that summer. By then, the robust discussion was essentially lost and the questions may have changed.

In response to the need for timely data, the research office developed a Data Dashboard tool using the ARGOS reporting system. Cañada College worked with our District Technology group to design the Dashboard system and then Ellucian was contracted to support modifications and maintenance of the system. All 3 schools in the San Mateo County Community District have access to the Data Dashboard, but Cañada College has been utilizing the system more than our sister colleges. Since initial development, the system has been modified and fine-tuned based on feedback from users.

The next step was to publicize the availability of the Data Dashboard and train faculty and staff on how to extract relevant data. We have developed 2 main levels of access to the data – one with student ID and one without student ID. Access to data with student identification is controlled quite closely with academic deans and the dean of Planning, Research, and Institutional Effectiveness, and Information Technology Office all having to agree on this level of access for the individual. Early on, we decided that all persons using the Data Dashboard had to receive training. This was accomplished by having the research office control access, by 1) being the sole trainers on campus and 2) being the sole source for permission for access. Intensive, routine, and specific trainings have been provided based on users' needs. Trainings have occurred during Flex days, professional development events, inquiry project meetings, division

meetings, program meetings, president cabinet meetings, and special arranged meetings. Training is also provided at basic and more advanced levels. Training materials are posted on the [Cañada PRIE Data Dashboard website](#), including a user manual, training handouts, and types of research questions that can be answered by the Data Dashboard. In the coming year, we plan to create short how-to videos as a refresher or quick-start for users.

To-date, there are about 90 people (including faculty, staff and administrators) with access to the Data Dashboard and all have received training. During training, the trainers not only showed faculty and staff how to access the system and the kinds of reports that could be obtained, but they also helped participants design reports that answered their research questions. By the end of each training, participants learned how to (a) access the Data Dashboard, (b) obtain the report or information needed for their specific needs, and (c) ask more questions about their project and explore additional possibilities to examine their research questions.

After almost two years from the initial launch of the Data Dashboard, it is clear that the Dashboard has a lot of potential on campus to allow faculty and staff to plan and carry out research on their own or in consultation with the research office. The research office can, in turn, focus on planning, more complex research requests, and building the capacity of faculty and staff to use data to improve programs and student success..

Findings and Value to the Field:

Research is now embedded in the college. All faculty and staff can ask questions and then immediately analyze data to improve their own practice. Faculty and staff no longer have to wait for the research office to have the time to address their question. “Research” is now a way for everyone to do their job more effectively and efficiently.

As more faculty and staff are trained in the use of the Data Dashboard, more projects are being designed and carried out in departments and grant programs. The data is being used to inform decisions about interventions and program effectiveness that impact the success of our students.

Examples of completed/ongoing projects ([Student Equity Professional Development Inquiry projects](#)) that have utilized the easy access to student data in the Data Dashboard:

- HOPE Project: Goal of this project is to identify the obstacles to ESL students as they transition to college level English and to infuse high impact strategies (pedagogical, student services delivery, student attitudes, behaviors and pathways, etc.) into all services for ESL students. The Data Dashboard was used to identify ESL students who successfully completed college level English. These students were contacted and interviewed.
- Pre-Statistics Project: Goal of this project is to increase the number of students who placed in pre-college level math, who then go on to successfully complete the transfer-level class - Math 200 Statistics. Another goal was to increase the number of faculty prepared to teach the Path to Stats course. The Data Dashboard was used to track course success for students who placed in pre-college level math and successfully completed Math 200 Statistics.
- A2B (Associate's Degrees to Bachelor's Degrees) Project: Goal of this project is to increase the number of students who have 30+ transferable units who utilize transfer services to successfully transfer to 4-year institutes. The Data Dashboard is used to extract the students' names and contact information who have 30+ transferable units. The retention specialist contact students to encourage their utilization of transfer services.
- Accelerated math programs for STEM students: Goal of this project is to increase the success rates in Fast Track to Calculus - with an emphasis on Latino students. The Data Dashboard was used to track cohort students' success from one course to the next one, especially Latino students.
- Proactive Registration Project: Goal of this project is to increase the persistence rate of basic skills students by providing an intervention designed around proactive registration. The Data Dashboard was used to identify students who were previously enrolled in any basic skills math or English class and expected to enroll in the next course in the math or English sequence. The proactive registration team then contacted these students and made sure that they registered for the next semester.
- Early Childhood Education (ECE) Course Blocker Project: Goals of this project are to understand the major academic barriers facing current ECE students, to understand who our ECE students are, and what are our ECE students' professional goals? Finally, we wish to know how long it takes our ECE students to be transfer ready? The Data

Dashboard was used to identify which ECE course is the “blocker” course (using course success rate) and then identify students’ characteristics who took this course, and plan interventions.

- Students Transitioning Out of Probation (STOP): Goal of this project is to stop the chain of events (that lead to students being placed on academic probation) before and act immediately after students find themselves on academic probation. The Data Dashboard was used to identify students who were on probation. The retention specialist contacted the students and provided personalized interventions.
- Interactive Enrollment Project: Deans are using the Interactive Enrollment Dashboard to monitor the course enrollment/FTES/WSCH/productivity each term daily before school starts to assist in making decisions about adding courses or canceling courses.

The beauty of this process is that it is faculty/staff led process. Researchers are on the side to support faculty and staff. Thus, we have “generalized” the researcher’s role by providing appropriate tools, training, and inquiries (asking questions) to increase data democracy and culture of inquiry. Ready access to data has allowed everyone to ask and answer questions about student success.

Now the word on the street is “you can find the data in the Data Dashboard” instead of “ask PRIE”! Researchers are now able to focus on higher level analysis that examine college level interventions and their impact on student success.

About the Authors:

Chialin Hsieh, Ed.D. is currently Dean of Planning, Research and Institutional Effectiveness (PRIE) at Cañada College. She received her Ed.D. from Western Michigan University in evaluation and assessment, M.A. in educational leadership, and M.M. in music therapy. She was a director of PRIE at College of Marin. She was the coordinator for the student academic assessment at Parkway School District, St. Louis, MO before moving to California.

Tracy Huang, Ed.D. is currently a Planning and Research Analyst at Cañada College. She obtained her Ed.D. in Measurement and Evaluation, M.S. in Applied Statistics, and M.A. in Developmental Psychology from Teachers College, Columbia University. She has previously conducted educational research at SRI International and City University of New York.

Michael Hoffman is currently a full-time faculty member in the Mathematics Department. He is also chair of the joint Basic Skills and Student Equity Committee (ACES). He received his M.A. in mathematics from San Francisco State University in 2007 and has been teaching community college mathematics ever since.

Anniqua Rana, Ed.D. is currently Dean of Athletics Library, Learning Center and is Co- Coordinating the Equity and Basic Skills committee. She received her Ed.D. in International and Multicultural Education, M.A. in English Literature and Composition and Certificate in TESOL. She has taught ESL, English, International Education, and has provided professional development in education in California and Pakistan.

Janet Stringer, MD., Ph.D. is currently Dean of Science and Technology at Cañada College. She received her MD and PhD from the University of Virginia and then held a faculty position at Baylor College of Medicine in Houston, TX in Pharmacology and Neuroscience before moving to California.