It Takes A Village to Build A Bridge

Dr. Milena Angelova, Research Analyst Dr. Carol Rhodes, Biology Faculty and HSI-STEM Project PI Georganne Morin, STEM Center Project Director



Outline

- ≻About Cañada College
- ≻A Tale of Three Grants
- ➢Growing Pains
 - Aligning two grants to create one program
- ≻Did it Work Spoiler Alert!
 - ➢QED study reveals statistically significant gains in student success, retention and persistence for program participants vs. comparison group

Cañada College Redwood City, CA



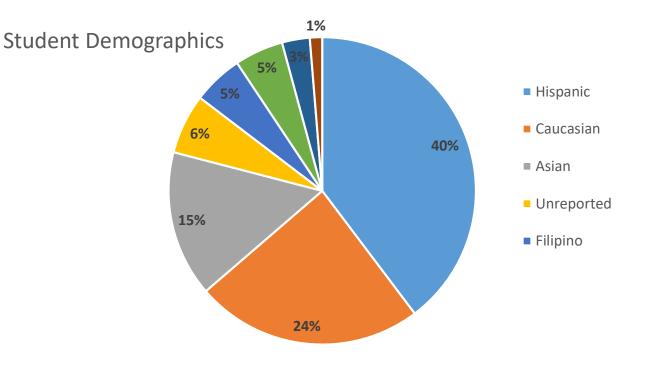


Climate Best by Government Test

About Cañada College

➢One of 112 California community colleges

One of three colleges in the San Mateo Community College District



2018-2019 Unique Headcount: 10,582

California Community College STEM Pipeline

General pipeline to 4-year schools: 31% of UC, 52% of CSU grads are CC transfers

STEM Pipeline: 48% of UC STEM grads are CC transfers

https://www.ccleague.org/sites/default/files/exhibition_type_file/league_headlines/ff2017.pdf

GANAS: Generating Access to Navigate and Achieve in STEM (Title III-Part F) Project Goals:

A) Increase the success rate for underrepresented students in foundational courses that are key to STEM pathways. (Student)

B) Decrease the time to transfer by increasing the success in STEM pre-requisite courses with pre-semester and in-semester academic and study-skill assistance for students (Student)

C) Improve STEM faculty effectiveness in the classroom through pedagogies and strategies that promote student engagement and improve learning.(Faculty)D) Strengthen relationships and articulation with 4-year universities. (Institution)

INSPIRES: <u>Implementing New Strategies for</u> <u>Improving Retention and Enhancing Success</u> (Minority Science and Engineering and Improvement Program - MSEIP)

Project Goals:

A) Improve STEM faculty effectiveness in the classroom through pedagogies and strategies that promote student engagement and improve learning.

B) Develop a comprehensive STEM student development and support infrastructure that enhances preparation, supports success, and promotes completion of STEM degrees and transfer to four-year institutions as STEM majors.

C) Develop a comprehensive recruitment and retention plan to increase the number of female students majoring in STEM, completing STEM degrees, and successfully transferring to four-year universities as STEM majors.

ESO (Title V)

Project Goals:

- Increase retention rates of Hispanic and marginalized students
- Increase persistence rates of Hispanic and marginalized students
- Increase transfer rates of Hispanic and marginalized students

Summer 2017

- GANAS STEM Explorers
 - Attendance = 6
- INSPIRES Summer Extended Orientation
 - Attendance = 11
- ESO Colts Academy
 - Attendance= 33

Summer 2018

COLTS-CON!!! (Community of Learning and Transfer Success Conference)



STEP 1: Program Alignment

- Compare goals and activities
- Create a "conference-style" program to meet all project goals
- Pool people and resources what does each grant bring to the table?

STEP 1: Challenges

- Getting the right people in the room was challenging
- Decisions took a lot longer with a larger group

STEP 2: Preparation

Two Simultaneous Tasks:

- 1) Design Program
 - Choosing the workshops
 - Choosing the workshop facilitators
- 2) Recruit Participants
 - In-reach and outreach (new and continuing students)

STEP 3:Program Design

	Monday July 30	Tuesday July 31	Wednesday Aug 1	Thursday Aug 2	Friday Aug 3
	BUILDING COMMUNITY	PEER BONDING	PRACTICAL APPLICATIONS	FUTURE THOUGHTS	FIELD TRIP
:00-8:30	Registration (Grove)	Breakfast & Welcome Back! (Grove)	Breakfast & Welcome Back! (Grove)	Breakfast & Welcome Back! (Grove)	
:30-8:40	Welcome Speech by Cañada President (Grove)	Icebreaker: Connect with Peer Leaders (Grove)	Icebreaker: Connect with Peer Leaders (Grove)	Icebreaker: Connect with Peer Leaders (Grove)	
:45-10:00 Monday only :10-10:00 Tue-Thur	Keynote Address & Building Our Common Ground Activity by facilitated by Marcos Pizero (Grove)	Student Success Panel #1 by Gonzalo Arrizon/Sally Heath (Grove) Tutoring & EPIC Presentation by Julian Taylor / Josue Alcarar (2-10)	Counselor SEP Presentation by Michael West (2-10) I Test Taking Tipe by Nine (Garcia (6-103) I Health, STEM Counselor I Health, STEM Counselor I Health, STEM Counselor I Health, STEM	Financial Aid Jaopardy (Stump the financial aid director) by Jama Cerrington/Merry Dulgdia/Wasnia Merrodo (Grove) Students Posters Work Sension	MONTEREY BAY AQUARIUI & CSU MONTER FIELDTRIP
0:00-10:25 fonday only 0:30-11:00	Community Agreements by everyone (Grove) Faculty Panel facilitated by Diva Ward (Grove)	Student Success Panel #2 by Gonzalo Arrizon/Sally Heath (Grove) Tutoring & EPIC Presentation by Julian Taylor /Josue Alcaraz (2-10)	Preparing in Ernest (Canada 101) by Jonathan MacSwain Detroits and Setratis and Set	Creating Your Financial Ed Plan by Adolfo Leiva & Julie Lamson (Grove)	
1:10-12:00	Building Understand Connect Your College I ing Your Vocabulary Academic Yoursky Satus Yoursky Carlo (6-102) (6-102) (2-10) (6-102) (6-102)	Geogle Career Bedies, by Dina by James Zirdan (2-10) I (5-12) I (5-212)	Note to Self-Read your Sylabus by Gavin Townsley (6-102)	Getting Involved At Grände Kealba (2-10) (2-12) (2-	
2:00-1:00	Lunch: with the administrators	Lunch: Mentor Activity By Sally & Jonathan (or BTO PSC)	Lunch: Resource Fair (Student employee recruitment) Marisol	Lunch: STEM poster presentation	1.000
10-2:00	Campus Tour Learning by Outreach Poer Leadors (meet at Grove) Learning MacSwain (Meet at Grove) Math Minus by Surnotation (Meet at Grove) Learning Jonathan (Meet at Grove) Learning	Navigating Canves (tech workshop) by Laziee Ware, All Around Us1 by Kimberly S. Vision Hughes (5-123)	To Drop or Not to Drop by Mellssa Alcolo (2-10) (2-	Vision Board 1:10-2:30pm by Micha Kealoha (Grove)	
:10-3:00	Define Yourself, Reimagine Your Potential by Marisol Quevedo (Grove)	Stress Stretching Management Breathing & Self Care Exercises by Michael West by Nick Carr (2-10) (6-101/102)	Team building with hula hoops by Misha Kaalcha (4-101/102)	Closing Ceremony (ALL) (Grove)	

STEP 2: Challenges

- Determining staff roles and holding people accountable was difficult across departments
- Recruiting participants involved departments and staff that were not part of the planning process and had low buy-in
- Reaching high school graduates in the summer was challenging
- Splitting up the costs of the program was difficult across three budgets
- Recruiting faculty presenters for summer was difficult

STEP 3: Program Implementation

• All hands on deck! (Attendance = 93)



Student Panel

Faculty-led Field Exploration

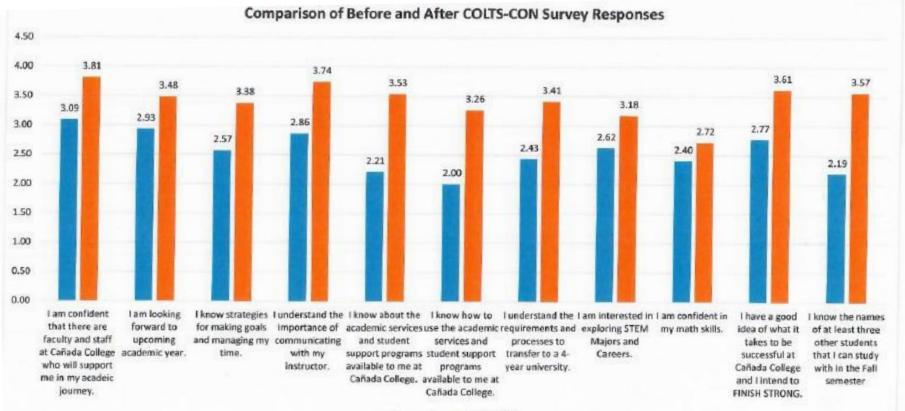
Success Workshop

Measuring Success – Within Program

- Do Colts-Con participants demonstrate growth in:
 - Knowledge of campus resources
 - Time management and study skills
 - Knowledge of transfer pathways and m
 - Sense of belonging



Measuring Success – Within Program



Mean Before Mean After

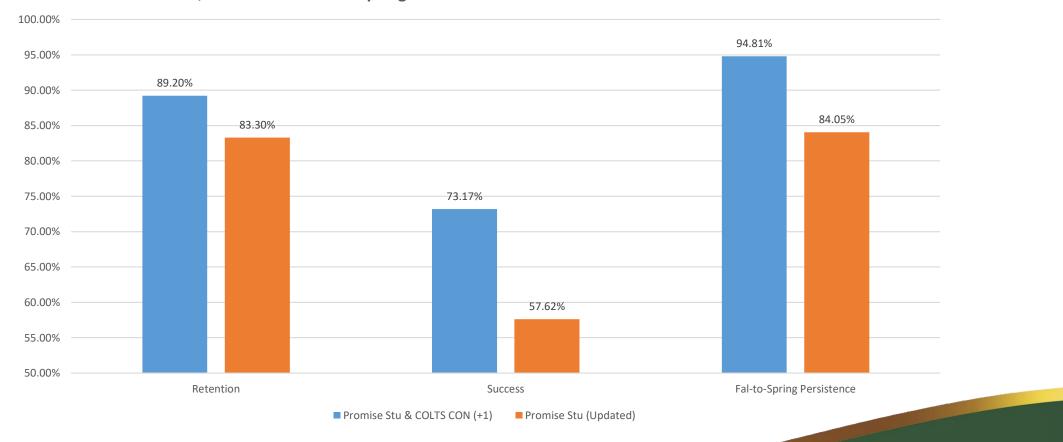
Measuring Success – Long-Term Effects

- How do Colts-Con participants compare to non-participants in terms of:
 - Success
 - Retention
 - Persistence



Measuring Success - Long-Term Effects

Retention, Success and Fall-to-Spring Persistence: Promise Stu. vs. Promise & COLTS-CON Stu.



How did COLTS-CON help students: Connect

With:

- Students
- Staff
- Faculty
- Administrators



How did COLTS-CON help students: Lead

Learning to:

- Be a leader in your academics
- Seek leadership opportunities on campus

How did COLTS-CON help students: Succeed

Reaching your goals through academic progress and developing a sense Of belonging

Where Are We Now?

- Embedded in orientation and outreach to feeder high schools
- Exploring avenues for increasing accessibility for non-traditional college students (part-time, online, working adults)
- Integrating a cultural academic wealth framework into programming
- College is looking to our programs as best-practice models for equity, first-year experience and academic success through the Guided Pathways initiative



Special Recognition



COLTS-CON at Cañada College is funded by a Department of Education Title III – Part F – HSI – STEM and Articulation Programs grant (HSI-STEM), a Title V Developing Hispanic Institutions grant (DHSI) and a Minority Science and Engineering Improvement Program(MSEIP)



Honor the Past. Transform the Future. CanadaCollege.edu/50