

*Bridging the Gap with AIMS² – Enhancing Student
Success with a Multi-Institutional Collaborative Program*



S. K. Ramesh (CSUN), Amy Foote (CoC) and Mary Rees (Moorpark)



Disclaimer

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AGENDA

- Panelists

Ramesh



*Director and Lead PI AIMS²
Professor of ECE
CSU, Northridge*
s.ramesh@csun.edu

Amy



*Director, MESA Program
College of the Canyons*
amy.foote@canyons.edu

Mary



*Dean, Student Learning
Moorpark College*
Mrees@vccd.edu



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- Overview of the AIMS² grant program – Ramesh
- Partnership with College of the Canyons– Amy Foote
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- Q & A and discussion with Panelists



- Cohort based model
- Collaboration between CSUN and CCC's
- High Transfer Achievement
- GPA, Persistence, and Graduation
- Served over 250 transfer students (approximately 67 % Latino/a) with 2011 grant
- Presently serving over 300 freshmen and transfer students with 2016 grant



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For more information

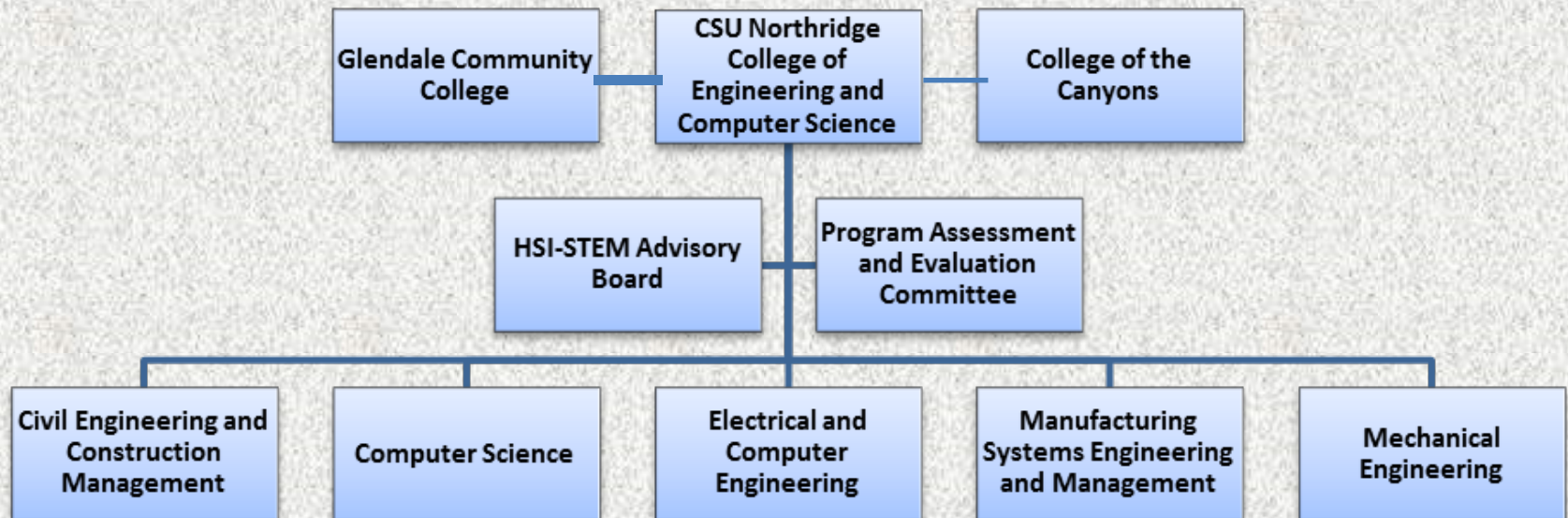
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AIMS²

Attract, Inspire, Mentor and Support Students

www.ecs.csun.edu/aims2





Support Model

- Collaboration CSUN and CC faculty:
 - Facilitating a channel for face to face discussion on curriculum issues among CSUN and CC faculty teaching transferable courses.
 - Promote discussion on learning outcomes, resources, and best practices
 - Build trust to create further collaboration
 - Challenges to overcome



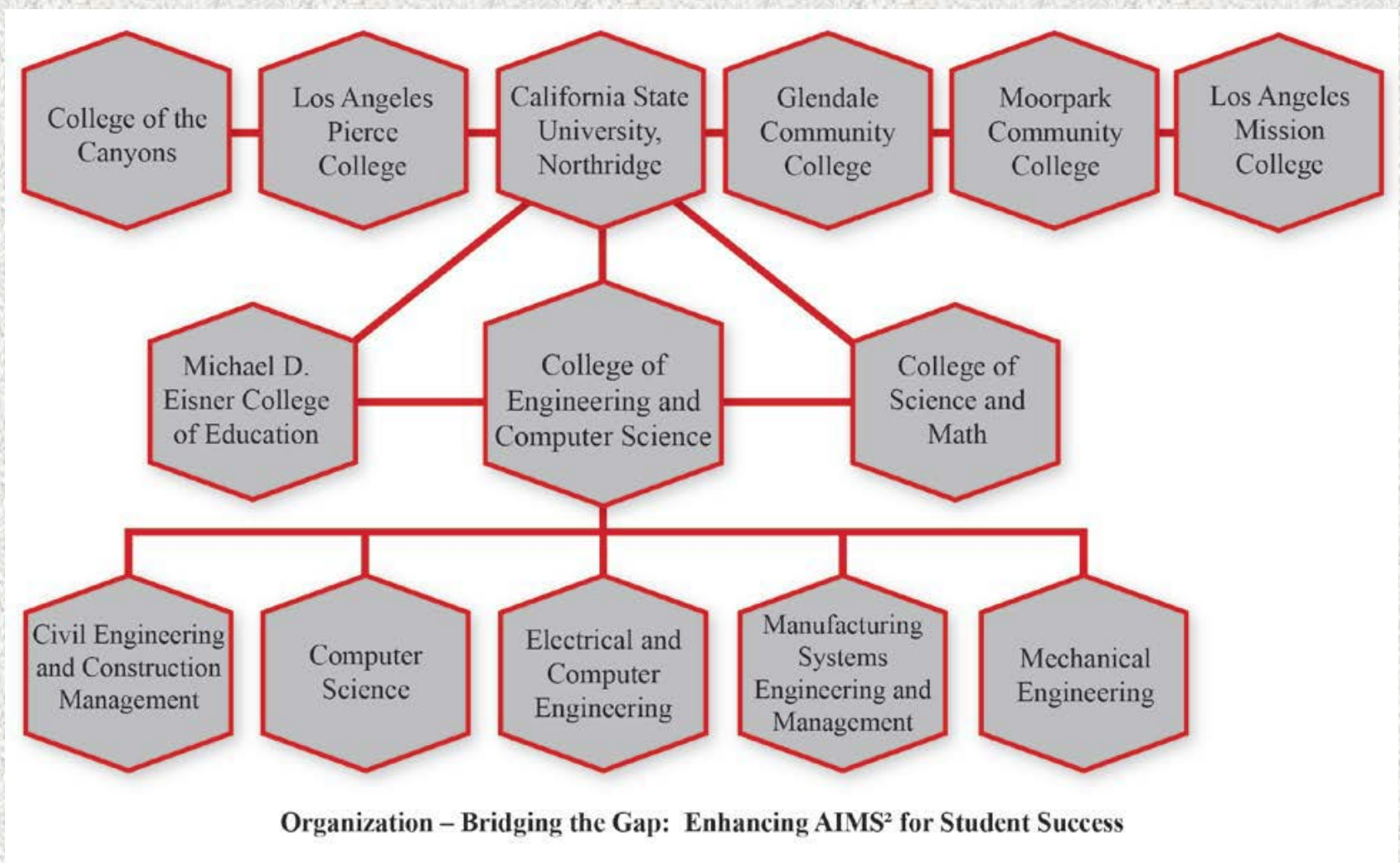


Support Model

- Collaboration with CC faculty:
 - Facilitate a channel for face to face discussion on curriculum issues among CSUN and CC faculty teaching transferable courses.
 - Success on articulation
 - Avoids waste of resources
 - Avoids confusion
 - Facilitates advising
 - Faster track to graduate

Some interesting facts FYI

- The number of students served in the seven CSUN cohorts = 138
- The number of Latino/a students in the cohorts = 67 (49 %)
- The three year transfer graduation rate for Latino/a students in the cohort = $47/67$ (**70%**)
- The average achievement gap has been more than halved since the inception of the grant (from 12.4 % to 5.1 %)







The AIMS² Project team (2016-21) Attract, Inspire, Mentor, and Support Students



Faculty and Staff from CSUN and partner Colleges

Student Outcomes

- Multidisciplinary undergraduate research



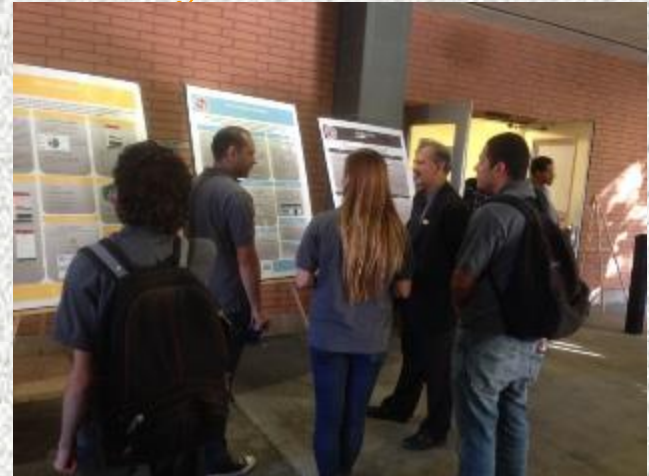
AIMS²- Attract, Inspire, Mentor and Support Students

CSU Northridge, Glendale CC, College of the Canyons,
LA Pierce College, Moorpark College





Student-Faculty Interaction



- Resume Workshops
- Tech Fest preparation
- Research Presentations
- Attending conferences
- Annual AIMS² Research Symposium

- Student mentors
- Student tutors
- Weekly/biweekly meetings
- Meetings via appointments
- Advising
- Maintain minimum requirements for scholarship

Activity Schedule for AIMS2 Skills Workshop

(9.00a.m. to 3.00p.m.– except Friday)

Day	Topics Covered
Monday, June 19	Ice Breakers, Growth Mindset, Tour of Campus & Library, What is Engineering, Careers in Engineering, Resources at CSUN for student success
Tuesday, June 20	Soft skills to succeed in Engineering, Work Life Balance, LACI, Research Skills & Class Preparation Methods
Wednesday, June 21	Team Building Skills, Systems Thinking, Holistic Understanding of Engineering Projects, Ethics in Engineering
Thursday, June 22	Visit to JPL
Friday, June 23 (9.00a.m. to 1.00p.m. only)	Final Competition, How to stay connected during 2017-18 school year, Closing Remarks,

Student Feedback collected on a daily basis





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**Bridging the Gap with AIMS² – Enhancing Student Success with a
Multi-Institutional Collaborative Program**

College of the Canyons Partnership with CSUN

June 19th, 2018

Amy Foote

MESA Program Director

College of the Canyons

COC and CSUN Partnership

- AIMS² Students
- Services for Students
- Student Opportunities



AIMS² Students

- Students – 1st generation college students, financially disadvantaged, underrepresented and STEM
- 7 years - partnered with CSUN's AIMS² Program
- 50 - COC Students participated in 6 cohorts
- 20 - Students transferred to CSUN from those cohorts
- AIMS²/COC students had a 3.35 average GPA
- Currently have 15 students involved in the AIMS² Program at COC this year

Services for Students

1. Tutorial support from both faculty and peer tutors ~96hrs/week
2. Peer Mentor Program – 1st yr. paired with 2nd yr.
3. Academic excellence workshops in which MESA facilitators, in consultation with faculty, lead weekly skill-building workshops in math, physics, engineering, computer science and chemistry.
4. Professional development workshops, guest speakers and other activities such as financial aid workshops, UC application workshops, resume workshops, Industry presentations, etc.

Student Opportunities

- **Conferences**

- Great Minds in STEM – HENAAC
- SHPE – Society of Hispanic Professional Engineers
- Women in Engineering

- **Symposiums and EXPOs**

- CSUN Research Symposium
- Aerospace Engineering Symposium and Expo



Student Opportunities

- **Research**

- CSUN Summer Research (10 students last summer from COC)
Present their work at Symposium

- JPL/NASA (~10 students per year)

- **Facility Tours**

- NASA Armstrong in Antelope Valley
- NASA/JPL
- CSUN Engineering and Computer Science Department



Research and Internships

Fall 2017 - 6 students were accepted to JPL/NASA's NCAS program and 3 students were nominated to the SIRI program.

Spring 2018 – 5 Students were accepted into NCAS program and 1 student doing research at CSUN.

Summer 2018 – 13 students doing research at CSUN and 2 students nominated to the SIRI program.





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MOORPARK COLLEGE ENGINEERING – AIMS²

Mary Rees
Dean of Student Learning



Why AIMS² at Moorpark?

Concur with CSUN on the need for more qualified engineers in the workforce from underrepresented populations:

- Hispanics
- Financially underprivileged
- Females



Identified obstacles to underrepresented student success

- Inadequate preparation in prerequisite courses to engineering
- Lack of support to help with difficult classes such as peer tutors or supplemental instruction
- Lack of guidance in forming an education plan
- Financial and familial responsibilities
- Lack of role models and mentors to encourage persistence in school to obtain higher education

Activities and Services offered at MC through AIMS²

- Mandatory biweekly meetings with the engineering faculty
- Peer tutoring and supplemental instruction sessions
- Designated STEM and Career counselor
- Workshops to address stress reduction, study skills, time management, resume writing, cover letter writing
- Guest speakers from industry and academia
- Undergraduate research and internship opportunities
- Participating in group engineering projects
- Tours of engineering facilities
- A modest stipend (\$200/student/semester)

Tangible benefits

- Greater success in engineering coursework
- Methodically and successfully progressing through the curriculum necessary for transfer
- Connections with industry and opportunity to participate in undergraduate research with university faculty
- Being internship ready

- Greater graduation rates
- Gainful employment in their field
- Serve as mentors to other students who will follow in their footsteps

Intangible benefits

- Sense of belonging to a community where its members know the students and truly care about their success
- Sense of security knowing that they are not alone in their academic journey and there are people willing to help them succeed
- Sense of pride and satisfaction in successfully completing their coursework and moving up to the next level

Success results

- Since January of 2017 the AIMS² program at Moorpark College has served 43 students

- 21 transferred to 4 year universities:
 - 9 to CSUN
 - 4 to UCI
 - 2 to UCLA
 - 3 to Cal Poly SLO
 - 1 to Cal State LA
 - 1 to Berkeley
 - 1 to Cal Lutheran

- 19 still at Moorpark College
 - 2 switched majors to Mathematics and Business

- 2 were dismissed from Moorpark College and 1 was placed on probation

Success results from the first cohort of students: 2016-2017 reporting

- Objective 1: Improve the academic achievement of Hispanic and low-income students in engineering and computer science fields.

Academic Standing	# Program Students Enrolled				% Program Students by Academic Standing			
	# Students	# Hispanic	# Low Income	# Low Income & Hispanic	# Students (n=25)	# Hispanic (n=14)	# Low Income (n=17)	# Low Income & Hispanic (n=10)
<i>Total Students</i>	25	14	14	9	100%	100%	93%	89%
Good Standing	22	12	13	8	88%	86%	93%	89%
Probation	1	0	0	0	4%	--	--	--
Dismissed	2	2	1	1	8%	14%	--	--

Success in Engineering Courses

- Hispanic students (75%) 2015-2016
 - Hispanic students (82%)
 - All students (84%)
 - White students (85%) 2016-2017
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- Financial Aid students (74%) 2015-2016
 - Financial Aid students (82% 2016-2017





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