

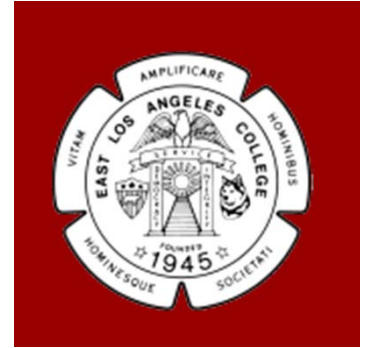


GANAS and ASSIST

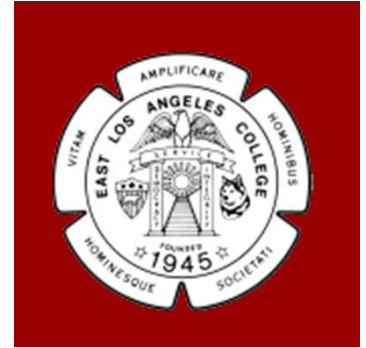
East Los Angeles College
Monterey Park, CA 91754
Armando M Rivera, Ph.D.

Motivation

- Gap between number of students enrolled in STEM and students progressing through sciences programs
- Time to attain STEM degree or transfer
- Math continually acting as a “Gate Keeper”

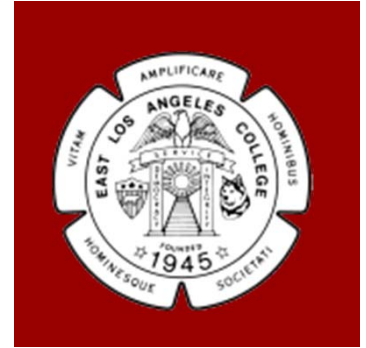


GANAS – Goals And Needs to Accelerate STEM



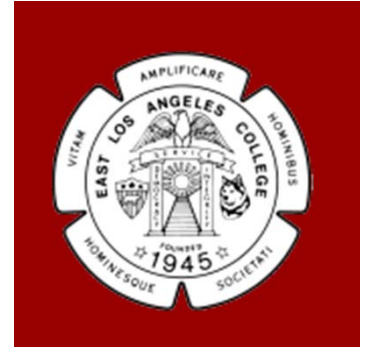
- Armando Rivera, Project Director
- Funded by the US Department of Education (HSI)
 - P031C110092
- Funding amount of ~\$6M
- Funding period 2011 – 2016
- Coop Project with USC

GANAS – Goals And Needs to Accelerate STEM



- Goal 1 – Increase the success rates of ELAC students enrolled in Math 125 (transfer Math)
- Goal 2 – Decrease average time to complete STEM degrees or transfer requirements.
- Goal 3 – Increase the number of students awarded STEM degrees or certificates.
- Goal 4 – Increase the number of STEM transfers to four year institutions.
- Goal 5 – Develop new STEM transfer programs and develop articulation agreements with private universities and colleges.

ASSIST – Academic and Student Support to Improve STEM Transfer



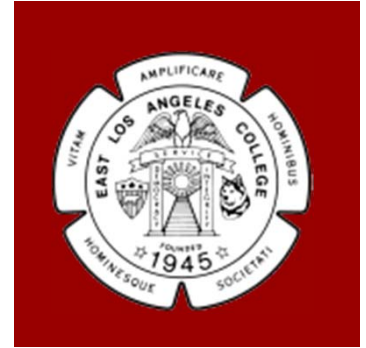
- Karen Daar, Principal Investigator
- Armando Rivera, Co-Principal Investigator and Project Director
- Funded by National Science Foundation (NSF) – STEP Solicitation
 - DUE – 1068483
- Funding of ~\$2M for up to 5 years
- Funding period 2011 – 2015, and a 5th additional year based in progress

ASSIST – Academic and Student Support to Improve STEM Transfer



- Goal –
 - Increase the number of STEM graduates and transfers, reaching 200 students in five years (the project's goal), with 90 STEM added graduates and transfers by Year Three.

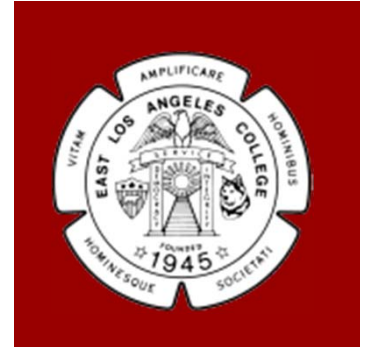
ASSIST – Academic and Student Support to Improve STEM Transfer



■ Objectives –

- 30 of 180 high school students (17%) enrolled in summer bridge programs for STEM matriculation at ELAC will successfully graduate or transfer as STEM majors.
- 50 of 200 ELAC STEM students (25%) engaged in mentoring programs, and/or paired with a faculty advisor, and actively use MentorNet will successfully graduate or transfer as STEM majors.
- 125 of 500 ELAC STEM students (25%) who meet with a STEM counselor for two hours twice per term, and create detailed AA/AS or BA/BS degree plans will successfully graduate or transfer as STEM majors.

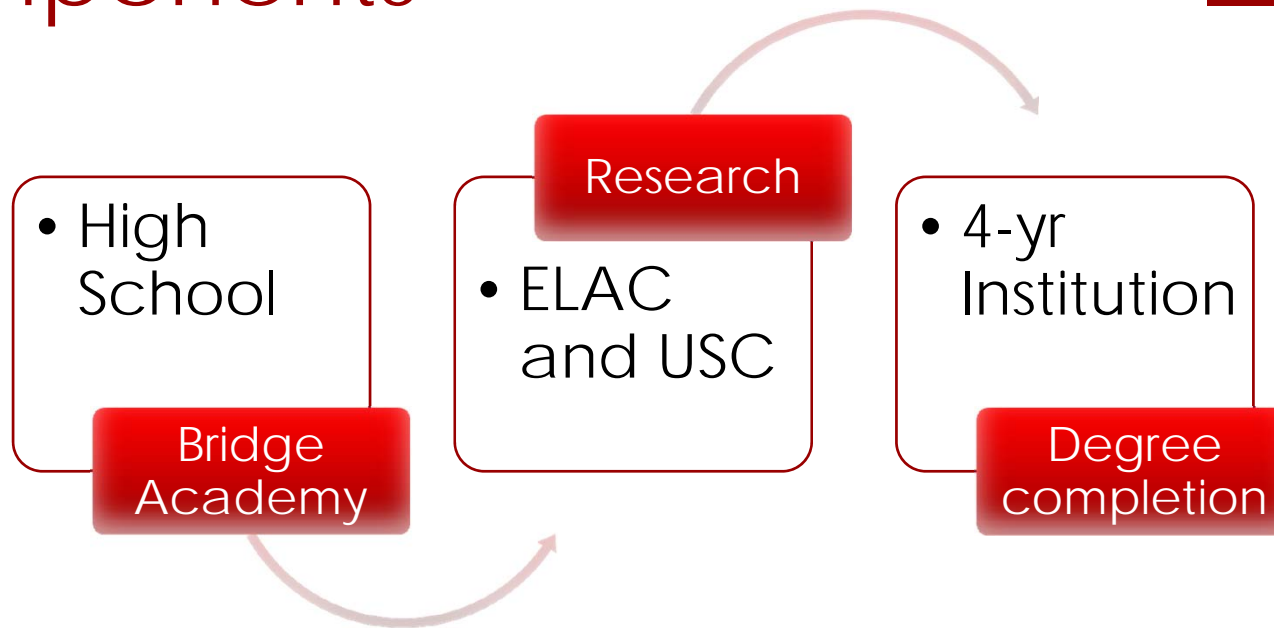
ASSIST – Academic and Student Support to Improve STEM Transfer



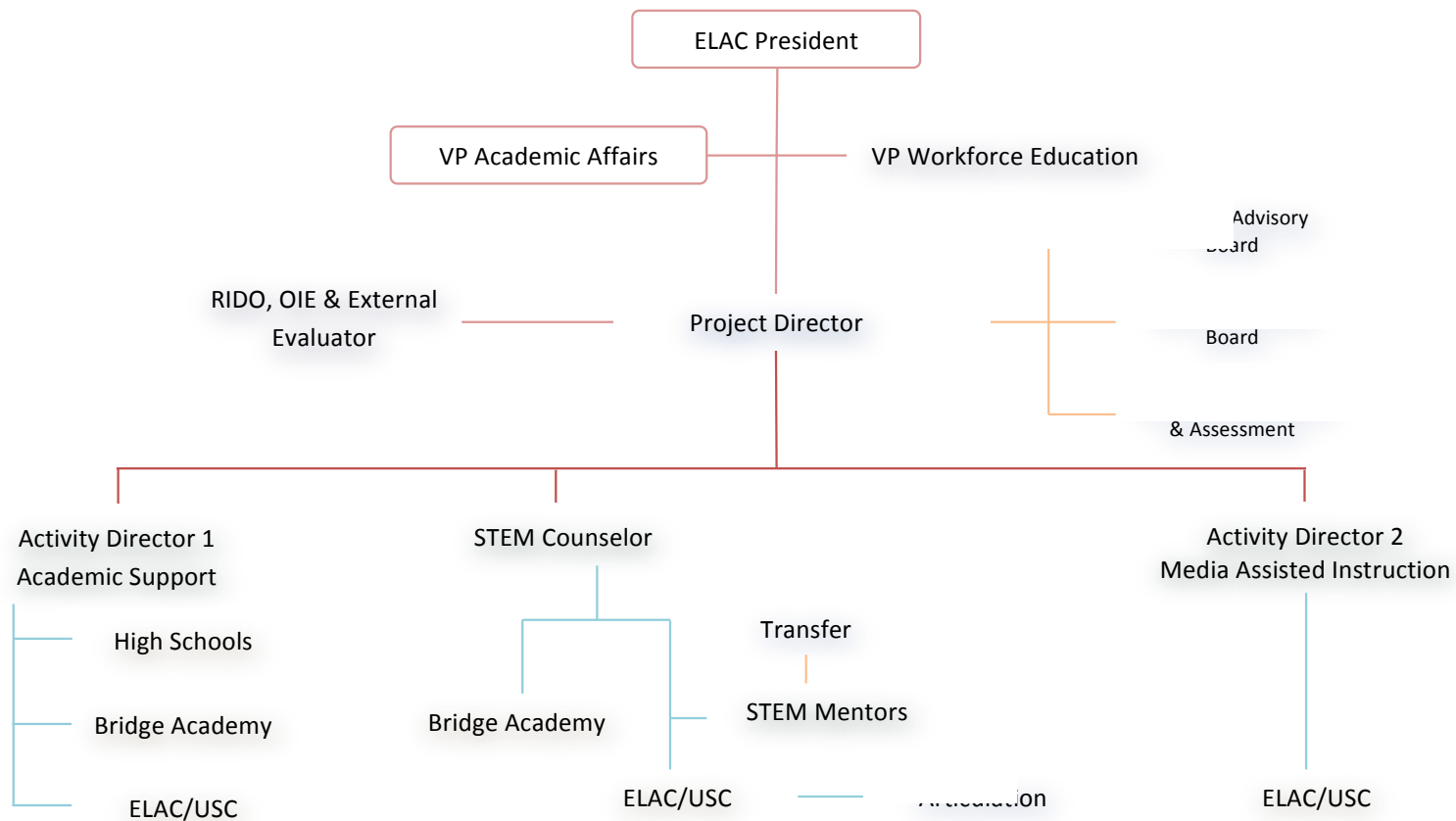
■ Objectives –

- 63 of 125 ELAC STEM students (50%) who participate in undergraduate research at nearby research universities will successfully graduate or transfer as STEM majors to B.A./B.S. level institutions.
- 80 of 160 ELAC STEM students (50%) will matriculate directly into B.A./B.S. level STEM programs as a result of robust articulation with universities.

Components



Organizational Diagram



STEM Culture

High School

- Outreach
- Math Component (Math 115)
- STEM Engagement - Robotics

Bridge Academy

- Math 125 Preparation
- STEM Engagement
- Transfer Engagement
- Academic Skills
- STEM Counseling

ELAC

- Math Readiness
- Media Assisted Instruction
- Faculty Mentors
- STEM Latino Role Model
- Tutoring and SI model
- Academic Skills
- STEM Counseling
- Textbooks, etc



STEM Culture



USC

- Research
- Math IT Component
- Educational Research

4-yr Institutions

- Research
- Articulation Agreements
- Transfer Agreements

Industry and Government

- Research
- Speakers



Some Targeted Partners



High School

- LAUSD & MUSD
- Lincoln, Garfield, Bell, Montebello, South Gate, Schurr, South East, Wilson, Roosevelt, Huntington Park, Bell Gardens

Articulation & Transfer

- UC, CSU
- USC, Loyola, Claremont, Azusa

Research

- UC, CSU, Private Universities
- EPA, Department of Defense, NASA/JPL

Ensuring Timely Transfer

- Possible Strategies
 - Acceleration
 - Cohort Model
 - Honors Program Model

