

San Diego MESA Alliance Industry Advisory Board

April 13, 2011



STEP Partnership of San Diego (SPSD)



Welcome & Introductions



Hosted and
chaired by
Brianna Lutes
of
Infrastructure
Engineering
Company

Vice chair –
Maria Charles
of Hamilton
Sundstrand

Introductions

Please sign-in
on
attendance
roster

Review & Approval of minutes

Review past meeting minutes

Changes

Motion to approve

Second

Call to vote

MESA Community College Programs & Leadership Summit

Was held on February 11-13th at Indian Hills
Camp in Jamul

Thank you PBS&J for sponsoring and Dolores
Ventura for 'Self-Leadership' presentation

11.9. Overall Experience

	1	2	3	4	Response Total	Response Average
a. This summit covered topics I feel indicative of Leadership.	2% (1)	2% (1)	31% (15)	65% (32)	49	3.6
b. I would recommend this summit to a peer or classmate.	2% (1)	2% (1)	27% (13)	69% (33)	48	3.6
c. The material presented will help me to become a better leader.	2% (1)	6% (3)	20% (10)	71% (35)	49	3.6
d. I would attend this summit in the future.	0% (0)	6% (3)	24% (12)	69% (34)	49	3.6
					Total Respondents	49
					(skipped this question)	1

National Science Foundation

The MESA Programs at San Diego State University, San Diego City College and Southwestern College are joint-recipients of a National Science Foundation (NSF) - STEM (Science, Technology, Engineering, and Mathematics) Talent Expansion Program (STEP) award. The NSF-STEP supported project is titled the STEP Partnership of San Diego (SPSD).

The SPSD project is creating a regional partnership of educational institutions, industry, and government agencies that form a pipeline from community college to university to Science, Technology, Engineering and Mathematics (STEM) industry. SPSD incorporates the successful MESA model at each partner campus and enhances essential services that help students excel academically, develop leadership skills, and gain exposure to industry. The target population is economically and/or educationally disadvantaged students in STEM fields.

SPSD has three primary goals:

- Increase the number of students who pursue STEM academic and career pathways,
- Increase retention in STEM disciplines,
- Promote opportunities in STEM post-graduate studies.



MESA Legacy — SDSU MESA students meet NASA astronaut & MESA alumnus Jose Hernandez.

Industry partners contribute to the development of a diverse MESA pipeline of future engineers and scientists. Learn more about becoming an Industry Advisory Board member and help the San Diego MESA Alliance to develop tomorrow's leaders.

San Diego MESA Alliance — Contact:

Eric Pamintuan
MESA Engineering Program
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-1303

Phone: (619) 594-7419
Fax: (619) 594-2108
E-mail: epamintuan@projects.sdsu.edu
Website: alliance.sdccmesa.com



SAN DIEGO

MESA

Mathematics
Engineering
Science
Achievement

ALLIANCE



*San Diego's pipeline for
tomorrow's Mathematicians,
Engineers & Scientists*



Preparing Tomorrow's Mathematicians, Engineers & Scientists

Established in 2001, the **San Diego MESA Alliance** is a statewide model for intersegmental regional collaboration in STEM education for economically disadvantaged and underrepresented student populations. The Alliance serves over 2,200 students in San Diego County annually through a MESA educational "pipeline" of partner programs that includes:



- **Pre-college: MESA Schools Programs** (MSP) in San Diego and Imperial Valley assist pre-college students to succeed in math and science studies and go on to college in math-based fields.
- **Community College: MESA Community College Programs** (MCCP) at San Diego City College and Southwestern College support community college students to succeed in math, engineering and science studies so they can transfer to four-year colleges and universities in math-based fields.
- **University: MESA Engineering Program** (MEP) at San Diego State University assists engineering and computer science majors in four-year institutions so they will graduate with baccalaureate degrees.

Industry Partners

The San Diego MESA Alliance relies on the support of industry partners on the MESA Industry Advisory Board to provide industry exposure and professional development opportunities for MESA students. Examples of industry support include:

- Training academies
- Job shadows
- Internships & Scholarships
- Mentors
- Company tours
- Event volunteers & Speakers
- Donations of prizes for competitions
- Guidance to MESA Directors on program development

Signature Alliance Events

Summer Team Internships – Provide MESA students with experience in the STEM fields either in an internship with a local company or by conducting research at an institution of higher education.

Training Academies – Local companies provide 'in-house' training for MESA students to learn technical skill sets and gain professional development to enhance their employability.



Walk on Water Competition – Teams of MESA students design "buoyancy shoes", and student "shoe pilots" race across the length of a pool. Competition allows students to gain experience of solving open-ended problems and applying the engineering design process.

Leadership Summit – Brings student leaders and emerging leaders from all participating MESA programs together for joint training and networking opportunities. StrengthsQuest training is provided to enhance the leadership development experience. Students are engaged to understand, develop and apply their strengths as individuals and within teams.

MESA Olympics & Robotics Challenge - Competition for all MESA program segments in problem-solving sessions and a robotics competition designed to promote teamwork, engineering and problem solving skill development.

San Diego Region Joint Planning Conference for Engineering and Science Student Chapters – Brings together professional and student leaders from diversity focused engineering & science organizations in the San Diego region to share expectations, goals, calendars and strategies.

Olympics & Robotics Challenge



Saturday, April
30, 2011

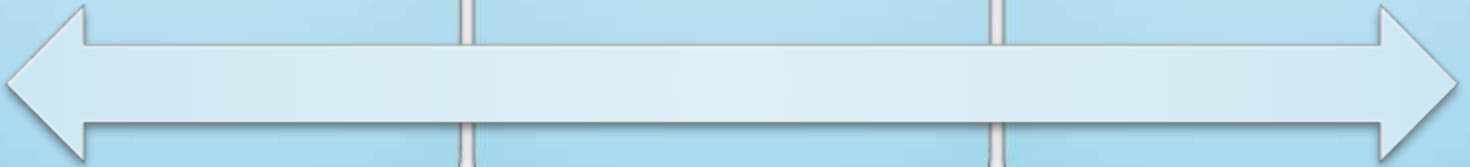


9:00 – 2:00
pm at San
Diego City
College



Industry
volunteers?

- Proctors, judges,
sponsor prizes



NSF/MESA Summer Team Internship

Still accepting industry registrations



Registration form online:
<http://alliance.sdccmesa.com>



Industry registration forms DUE to
NSFMESAInternship@gmail.com

NSF/MESA Summer Team Internship

Applications received: SDSU-60, SWC-12 & City-16

- SDSU has so many applicants due to Spring 2011 new transfer students

MESA can serve 36 students through the NSF grant

- Summer 2010: 54 students matched, 36 paid by NSF Grant

Current list of companies

- Engr: Naviscan, Spectrum Scientific, NAVAIR, Research Dr. Lee, Suburban Water Systems, Rick Engr., SPAWAR, CalTrans, Kyocera
- Sci: CA Healthcare Inst, Assure Controls, Research Prof. Camarena, Bio4Front, SD CoastKeeper, Ambient Alert

End of Year Celebrations



SAN DIEGO STATE
UNIVERSITY

SDSU MEP/MSP
Graduation &
Scholarship Reception

Thursday, May 5, 2011

4:00 – 6:00 pm

SDSU Parma Payne
Goodall Alumni
Center



End of Year Celebrations



San Diego City
College MESA
Family Open
House & Awards
Ceremony

Friday, May 20,
2011 at 2:00 pm

San Diego City
College MESA
Center, L 115

End of Year Celebrations



Southwestern
College MESA
Awards
Ceremony

Friday, May 6, 2011
at 5:00 – 7:30 pm

Southwestern
College MSE quad
and Building 330
patio

End of Year Celebrations



SAN DIEGO STATE
UNIVERSITY

San Diego MESA
Schools Program
Awards Banquet /
Senior Recognition
Ceremony

Tentative Thursday, June
2, 2011

Tentative Balboa Park
Club Ballroom



End of Year Celebrations

Imperial Valley MESA
Schools Program
Admit Reception

Thursday, April 28,
2011

5:00 pm

SDSU Imperial Valley
Campus



Science Opportunity Day



Was held on March 22nd at
Southwestern College.

Student clubs, universities,
science & engineering industries
available to inform about their
respective companies.

Caltrans Training Academy



Was held on March 18th



Transportation Engineering and the project process



Hands on exercise with CADD



Traffic Management Center tour and activity

Imperial Valley MSP



Imperial Valley MSP



MESA Programs Key Updates



Imperial Valley

Other topics

- IAB agenda building
- Company announcements



Adjournment

- Next meeting:
 - Wednesday, June 08, 2011
 - 1:00 – 3:00 pm
 - Hamilton Sundstrand
 - 4400 Ruffin Rd.
 - San Diego, CA 92123
- SDMA on the web:
 - <http://alliance.sdccmesa.com>