



San Diego City College ♦ Southwestern College ♦ San Diego State University

## 2009-2010 SUMMARY REPORT

The following is a report for the 2009-2010 Academic Year. The San Diego MESA Alliance wishes to thank all industry sponsors, volunteers, and donors for their generous support and contribution for the 2009-2010 Academic Year. Without this support many of the activities listed below would not have taken place. THANK YOU ALL!!!!

### ACTIVITIES

The San Diego MESA Alliance met regularly to plan the following joint activities and to evaluate program outcomes:

| Date               | Activity   | Students* | Industry & Professional Support   |
|--------------------|--|-----------|---|
| 8/7/09             | <p><b>San Diego Region Joint Planning Conference for Engineering and Science Student Chapters – sponsored by Raytheon</b><br/> <i>Purpose:</i> To bring together professional and student leaders from diversity focused engineering &amp; science organizations in the San Diego region to share expectations, goals, calendars and strategies.<br/> <i>Location:</i> Raytheon</p> <p><i>Industry Volunteers:</i> Phong Bach, Brett Balazs, Tom Dlugolecki, Joan Fisher, Eliseo Guerrero, Stephanie Love-Payne, Laura Meldrum, Jane Otero, Kristen Schalliol, Katie Urbas, Dolores Ventura, Carey Walker, Raydiance Wise, and several Raytheon Company staff.</p> | 29        | IEC, NSBE, PASE, Raytheon, SACNAS, SHPE, SWE  |
| 8/27/09<br>1/19/10 | <p><b>Academic Excellence Workshop Facilitator Training</b><br/> <i>Purpose:</i> Opportunity for all MESA programs to jointly train workshop facilitators. Other program facilitators participated.<br/> <i>Location:</i> SDSU</p>   | 12<br>9   |   |
| 10/10/09           | <p><b>Walk on Water Competition</b><br/> <i>Purpose:</i> Teams of MESA students design “buoyancy shoes” and student “shoe pilots” race across the length of the pool. Competition allows students to gain experience at applying the engineering design process; solving open-ended problems.<br/> <i>Location:</i> Southwestern College</p>   | 63        | Southwestern College MSE faculty  |
| 11/19/09           | <p><b>Shadow Day</b><br/> <i>Purpose:</i> Expose program students to professional environment by allowing them to shadow an engineer at his/her workplace for the day. Students from other MESA sites and other SDSU programs participated.<br/> <i>Location:</i> Various San Diego Company sites</p> <p><i>Industry Volunteers:</i> Please refer to the San Diego MESA Alliance website and respective company press release(s).</p>  | 64        | County of San Diego, DLT&V, Goodrich Aerostructures, Hamilton Sundstrand, IEC, Morse High School, NAVAIR, Northrop Grumman, Raytheon, Rick Engineering, Scripps Health SCORE, SDG&E, Solar Turbines |

| Date   | Activity  | Students*                                  | Industry & Professional Support   |
|--|---|--|---|
| 3/15/10  | <p><b>‘Interviewing for a Job’ Professional Development Workshop – presented by Northrop Grumman</b><br/> <i>Purpose:</i> Students will partake in mock interviews and resume and cover letter critiques. A presentation on all the aspects associated with interviewing for a job allowed students to prepare themselves for work at various engineering and scientific firms in San Diego. Great opportunity for practicing professional development with industry representatives.<br/> <i>Location:</i> SDSU</p>  | 20   | IEC, Northrop Grumman, SDG&E  |
| <i>Industry Volunteers:</i> Desiree Galenti, Ron Prentice, Paul Reindollar, Beilee Tracey, Dolores Ventura, and Lisa Zelkind.  |   |  |   |
| 2/19-2/21/10   | <p><b>9<sup>th</sup> Annual MESA Alliance Leadership Summit – featuring StrengthsQuest</b><br/> <i>Purpose:</i> Bring leaders and emerging leaders from all participating programs together for joint training and networking opportunities. StrengthsQuest was incorporated into this year’s summit to enhance the leadership development experience. Students were engaged to understand, develop and apply their strengths as individuals and within teams.<br/> <i>Location:</i> Indian Hills Camp, Jamul, CA</p> | 32   | Alumni, IEC, PBS&J  |
| <i>Industry Volunteers:</i> Dolores Ventura  |   |  |   |
| <p><b>SDSU</b><br/>3/6/10<br/> <b>IVC</b><br/>2/20/10<br/> <b>Regional Middle</b><br/>3/27/10<br/> <b>Regional High School Riverside</b><br/>4/17/10</p>   | <p><b>MESA Day Competitions</b><br/> <i>Purpose:</i> Pre-College students participate in designing and developing several different types of projects i.e. Trebuchet, Egg Drop and/or Mousetrap Cars. Their projects are then taken to local and regional MESA competitions where students compete against their peers. Trophies and other such prizes are awarded.<br/> <i>Location:</i> SDSU, IVC, Riverside</p>  | <p>300-350<br/>300-350<br/>500<br/>500</p> | NAVAIR, SPAWAR, Various student organizations, College student volunteers   |
| <i>Industry Volunteers:</i> Piyal Biswas, Deji Coker, Phong Do, Valerie Dobrowski, Joanne Jordan, Brianna Lutes, Denis Nunez, Michael Pfetsch, Chris Robinson, Tim Russin, Wedad Schlotte, Sophia Tang, Liza Vazquez, and Steve Vulctic. |   |  |   |
| 3/23/10  | <p><b>Science Opportunity Day</b><br/> <i>Purpose:</i> Local Companies and colleges host information booths to expose community college students to engineering and science opportunities.<br/> <i>Location:</i> Southwestern College</p>   | ~168                                       | Caltrans, Goodrich Aerostructures, IEC, Raytheon, Rick Engineering, San Diego Regional Water Quality Control Lab, SWC student organizations |
| <i>Industry Volunteers:</i> Please refer to the Southwestern Community College website and respective company press release(s).  |   |  |   |
| 3/19/10  | <p><b>Training Academy: SPAWAR</b><br/> <i>Purpose:</i> Local Companies provide ‘in-house’ training; students learn technical skill sets and gain professional development to enhance their employability.<br/> <i>Location:</i> SPAWAR</p>   | 18   | SPAWAR  |
| <i>Industry Volunteers:</i> Roger Copeland, Kenneth Everhart, Dr. Douglas Fenner, Erica Garman, Cheryl Givens-Hayes, Andrea Houck, Sarah Lauff, Joyce Loyd, Pamela Field, Alan Philpott, Ajax Ramirez, and Gary Wang.                    |   |  |   |

## San Diego MESA Alliance 2009-2010 Summary (continued)

| Date         | Activity   | Students* | Industry & Professional Support  |
|--------------|--|-----------|--|
| 4/17/10      | <p><b>MESA Olympics &amp; Robotics Challenge</b><br/> <i>Purpose:</i> Competition for all MESA program segments in problem-solving sessions and/or robotics competition designed to promote teamwork, engineering and problem solving skill development.<br/> <i>Location:</i> City College</p> <p><i>Industry Volunteers:</i> Maria Charles &amp; family, Dr. Douglas Fenner, Daisy Galeana, and Brianna Lutes.</p>   | 83        | Alumni, LG Electronics Mobile, San Diego City College faculty  |
| May 2010     | <p><b>Presentation of SDMA Graduation Sashes</b><br/> <i>Purpose:</i> Reward graduating MESA students for their dedication, achievement and participation. Stoles are to be worn during commencement ceremonies.<br/> <i>Location:</i> City College, Southwestern College, SDSU campuses, MSP San Diego, MSP Imperial Valley</p> <p><i>Industry Volunteers:</i> Please refer to respective company press releases and respective individual campus programs.</p> | 178       | Alumni, Various engineering and science firms  |
| Summer<br>10 | <p><b>STEP Summer Team Internship Program</b><br/> <i>Purpose:</i> Students will experience application and interview selection process to work at various engineering and scientific firms in San Diego. Great opportunity for career exploration, to gain first internship, or acquire additional job experience.</p> <p><i>Industry Volunteers:</i> Please refer to the San Diego MESA Alliance website and respective company press release(s).</p>          | ~54       | Assure Controls, Bridges to the Future, Caltrans, City of LA Bureau of Sanitation, Fleet Readiness Center Southwest, Fqubed, IEC, Kennedy/Jenks Consultants, NAVAIR, Naviscan, Raytheon, Rick Engineering, SDCC/SDSU/SWC faculty, San Diego Coastkeeper, Southern CA Biotechnology Center, SPAWAR,UCSD Laboratory of Sleep and Chronobiology, UCSD Howard Hughes |

\*Combined total for SDSU, SDCC and SWC campuses (also includes San Diego State University MEP/MSP, San Diego City College & Southwestern College MCCPs, and San Diego & Imperial Valley MSPs).



## San Diego MESA Alliance 2009-2010 Summary (continued)

### Monetary Support

The donations from the following table were received in the 2009-2010 academic year to support the activities mentioned in the table above:

| Monetary Support  |                          |                       |
|-------------------|--------------------------|-----------------------|
| Date              | Source                   | Amount                |
| June 2009         | PBS&J                    | \$5,000 ~ sponsorship |
| August 2009       | Raytheon                 | \$500 ~ hosting       |
| August 09-June 10 | Rick Engineering Company | \$425 ~ IAB hosting   |

### Industry Partners

The MESA Alliance relies on the active support of industry partners.

Representatives from the following companies served on the MESA Alliance Industry Advisory Board (IAB) (designated with a \*) and/or supported MESA Alliance activities.

#### IAB Officers

Chair – Edgar Camerino, Rick Engineering Company

#### Organizations

National Society of Black Engineers  
 Raytheon Asian Pacific Association  
 San Diego Architects and Engineers Recruitment Consortium  
 Society of Hispanic Professional Engineers  
 Society of Women Engineers

#### Companies

ARMA DESIGN\*  
 ASSURE CONTROLS INC.

BAE SYSTEMS\*  
 BERRYMAN & HENNIGAR  
 CALTRANS\*  
 CENTRAL INTELLIGENCE AGENCY

CITY OF LA BUREAU OF SANITATION  
 CLARK CONSTRUCTION\*  
 COUNTY OF SD-DEPT OF PUBLIC WORKS\*  
 CUBIC CORPORATION  
 CVALDO CORPORATION\*  
 FLEET READINESS CENTER SOUTHWEST  
 FQUBED  
 GOODRICH AEROSTRUCTURES\*  
 HAMILTON SUNDSTRAND\*

HEWLETT PACKARD  
 INFRASTRUCTURE ENGINEERING  
 CORP.\*

KENNEDY/JENKS CONSULTANTS\*  
 KLEINFELDER  
 KYOCERA AMERICA, INC.\*  
 LG ELECTRONICS MOBILE\*

MALCOLM PIRNIE  
 MOTOROLA\*  
 MWH  
 NASLAND ENGINEERING\*  
 NAVAIR DEPOT-NORTH ISLAND\*  
 NAVISCAN  
 NAVY HUMAN RESOURCES CENTER  
 NORTHROP GRUMMAN\*  
 PACIFIC BELL

PARSONS  
 PBS&J\*  
 PRODIGY  
 PROJECT DESIGN CONSULTANTS  
 QUALCOMM, INC.\*  
 RAYTHEON SYSTEMS\*

REMEC, INC.\*  
 RICK ENGINEERING CO.\*  
 RUDOLPH & SLETTEN\*  
 SAATCHI AND ASSOCIATES, LLC.\*  
 SAIC\*  
 SAN DIEGO COASTKEEPER  
 SAN DIEGO GAS & ELECTRIC COMPANY\*  
 SAN DIEGO NATURAL HISTORY MUSEUM  
 SAN DIEGO REGIONAL WATER QUALITY  
 CONTROL BOARD\*

SAN DIEGO ZOO  
 SANTARUS

SCORE – SCRIPPS HEALTH CLINIC\*  
 SOLAR TURBINES INC.\*  
 SONY ELECTRONICS\*  
 SOUTHERN CA BIOTECHNOLOGY  
 CENTER  
 SOUTHWEST WATER COMPANY  
 SPAWAR\*  
 SPECTRUM SCIENTIFIC  
 SSC PACIFIC SAN DIEGO  
 UNISYS CORPORATION\*