



**BUILDING TOMORROW'S**  
MATHEMATICIANS, ENGINEERS AND SCIENTISTS...TODAY



**2013 ANNUAL REPORT**

# Ya'at'eeh (hello)

I am pleased to share the NM MESA 2013 annual report with you. 2012 – 2013 was our 30th year as a nonprofit organization. MESA has impacted thousands of students and teachers in its 30 year history. From its humble beginning of 150 students from five Albuquerque high schools and Bernalillo High School to 4,006 students and 92 schools today, MESA has come a long way! We are proud to be a part of the impressive journey of our students. Our longitudinal study shows our alumni succeeded in obtaining degrees and careers as professionals in the workforce. Our current student data show 8% of MESA alumni, as college freshman, needing remedial coursework compared to 47% of New Mexico entering freshman. These statistics indicate we are doing the right thing.

The 2012 – 2013 year produced recognition for MESA as one of several Nonprofit of the Year honorees from Albuquerque Business First. This recognition is a reminder to us that we are making a difference. MESA's financial status is on the increase after several lean years of funding cuts and economic downturn. We are on track to be at the level before the financial slump.

We are thankful to our students, schools, state legislators, corporate partners, federal congressional delegation and staff, universities, colleges, volunteers, individual donors and others for supporting our mission to "Empower and motivate New Mexico's culturally diverse students with science, technology, engineering, and math (STEM) enrichment."

NM MESA is the oldest pre-college STEM enrichment education program in New Mexico and we strive to maintain this standing, serve our customers, and engage our partners and other supporters to assist in the achievement of the state and national goal of growing the workforce and citizens of the future.



**Toney Begay**  
**Executive Director**

# HOST INSTITUTION

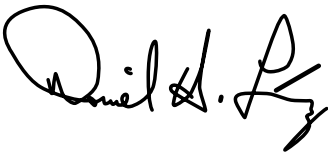
I am very pleased to extend my sincere thanks and appreciation to the New Mexico Mathematics, Engineering, Science Achievement (MESA) program, for your contributions toward providing opportunities to our state's most promising middle school and high school students. From the board of directors to the staff, MESA stands as a vanguard in educational enrichment.

New Mexico Tech is proud of its continuing partnership with MESA as we both work to ensure that future generations of New Mexicans are prepared for leadership roles in high-tech careers. In doing so, we encourage a strong academic foundation in the critical areas of mathematics, science and engineering. The global workforce is showing a lack of new graduates who are capable and qualified in technical areas. We hope that MESA and New Mexico Tech can continue to educate the next generation of scientists and engineers to fill this growing gap.

Earlier this year, MESA teams from New Mexico qualified for the national competition, proving both that New Mexico students are among the tops in the nation and that MESA fosters innovative thinking. The Socorro High School team (again) and the Red Mountain Middle School team from Deming carried the Zia flag to Portland, Oregon for the national event.

We are especially proud of our affiliation with MESA because our state needs more scientists and engineers to meet the technological needs of the modern age. New Mexico can only continue to be a leader in innovation if we educate our youngsters in these fields. MESA has provided our state universities and colleges with some of the brightest students New Mexico has to offer. The seeds planted by MESA have propelled thousands of underserved students into productive careers and personal enrichment.

Once again, I commend the Mathematics, Engineering, Science Achievement program for standing as a beacon of achievement in the vital educational areas.



**Daniel H. López, Ph.D.**  
**President**



# WHO WE ARE

## MISSION STATEMENT

Empower and motivate New Mexico's culturally diverse students with science, technology, engineering, and math (STEM) enrichment.

## VISION

Diverse, well educated, professionals who reach their full potential as leaders through Math, Engineering, Science and technology Achievement (MESA)

## NEW MEXICO MESA ACTIVITIES

NM MESA provides the following educational outreach and activities:

- Tutoring/study skills
- Advanced studies
- College and career guidance
- Field trips, speakers and workshops
- Academic STEM related competitions
- Leadership development
- Summer programs
- Scholarship incentives
- Teacher professional development
- Parent support
- Community service
- Business collaboration/outreach



# PROGRAM DESCRIPTION AND HISTORY

New Mexico Mathematics, Engineering, Science Achievement (NM MESA), Inc., is a year-round, multi-year program working directly with school districts, colleges, and universities to:

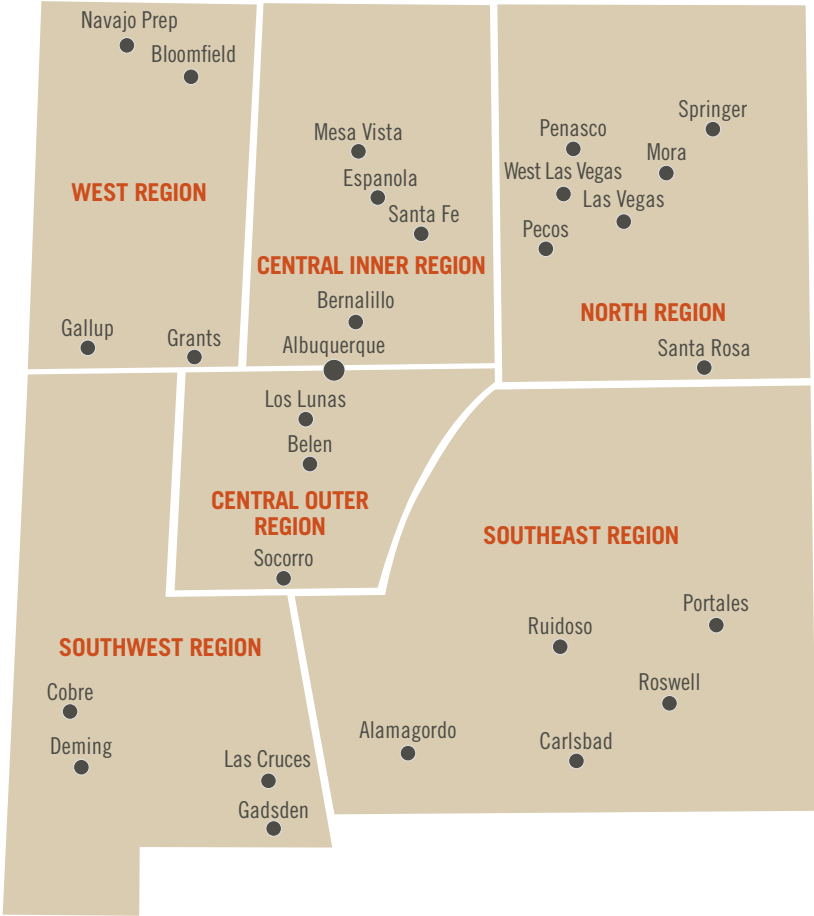
- Improve student performance in Science, Technology, Engineering and Math (STEM)
- Increase NM college enrollment in STEM disciplines
- Provide hands-on STEM related activities and competitions
- Empower and motivate NM's diverse (culture, gender, ethnic, economic) youth population

In 1981, representatives from the University of New Mexico, industry, and state and federal government met to discuss adapting the highly successful California MESA model for use in New Mexico. The NM MESA Advisory Council was formed and in 1982-83, with funding from Hewlett Packard, the NM MESA program began with 150 ninth grade students from six Albuquerque area high schools, including Bernalillo High School. The vision at that time was 'a precollege program...that works!' Since its inception, NM MESA has continued to grow, adding schools and increasing student participation throughout the state. From the first 150 students in six schools, NM MESA now counts 92 middle and high schools and 4006 students as participants. NM MESA has expanded the initial vision to better describe what we foresee for the future: Diverse, well-educated, professionals who reach their full potential as leaders through Math, Engineering, Science and technology Achievement.'



2012-2013 NEW MEXICO

# SCHOOL DISTRICTS



# NEW MEXICO SCHOOLS

## CENTRAL INNER (17)

Albuquerque HS  
Albuquerque Institute for Mathematics & Science  
Bernalillo HS  
Cleveland MS  
Del Norte HS  
East Mountain HS  
Española Valley HS  
Highland HS  
Jefferson MS  
Manzano HS  
McKinley MS  
Mesa Vista HS  
Mesa Vista MS  
Santo Domingo MS  
South Valley Academy  
Valley HS  
Van Buren MS

## CENTRAL OUTER (18)

Amy Biehl HS  
Atrisco Heritage Academy HS  
Belen HS  
Belen MS  
Capshaw MS  
Cibola HS  
Ernie Pyle MS  
Jimmy Carter MS  
Madison MS  
Polk MS  
Rio Grande HS  
Sarracino MS  
Socorro HS  
Taylor MS  
Tony Hillerman MS  
Truman MS  
Volcano Vista HS  
West Mesa HS

## NORTHERN (15)

Anton Chico MS  
Memorial MS  
Mora HS  
Mora MS  
Pecos HS  
Penasco HS  
Penasco MS  
Robertson HS  
Santa Rosa HS  
Santa Rosa MS  
Springer HS  
Springer MS  
West Las Vegas HS  
West Las Vegas MS  
West Las Vegas Valley MS

## SOUTHEASTERN (15)

Alamogordo HS  
Alta Vista MS  
Berrendo MS  
Carlsbad HS  
Goddard HS  
Holloman MS  
Mt. View (Alamogordo) MS  
Mt. View (Roswell) MS  
Portales HS  
Portales Junior High  
PR Leyva MS  
Roswell HS  
Ruidoso HS  
Ruidoso MS  
Sierra (Roswell) MS

## SOUTHWESTERN (13)

CC Snell MS  
Centennial HS  
Chaparral MS  
Cobre HS  
Deming HS  
Deming Intermediate  
Gadsden HS  
Gadsden MS  
Las Cruces HS  
Lynn MS  
Oñate HS  
Red Mountain MS  
Vista MS

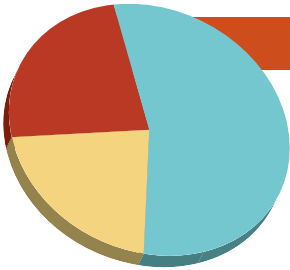
## WESTERN (14)

Chief Manuelito MS  
Crownpoint HS  
Crownpoint MS  
Gallup HS  
Grants HS  
Laguna Acoma HS  
Laguna Acoma MS  
Los Alamos MS  
Mesa Alia JHS  
Miyamura HS  
Navajo Preparatory High School  
Thoreau HS  
Thoreau MS  
Tohatchi HS

# STATISTICS

## 2012 ACT REPORT SCORES

NM MESA	21
New Mexico	20
National	21

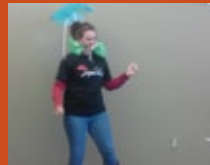
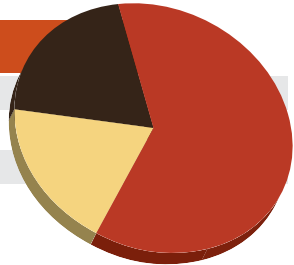


## ATTEND COLLEGE

NM MESA	78%
National	68%
New Mexico	35%

## BS OR HIGHER DEGREE

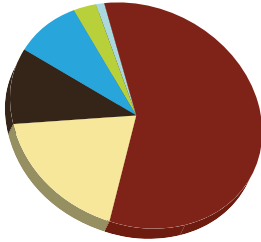
NM MESA	86%
New Mexico	26%
National	29%





# MESA'S DIVERSITY

## ETHNICITY



DIVERSITY	#	%
Hispanic (Spanish culture of origin)	2135	53.29%
Anglo (not Hispanic origin)	797	19.90%
American Indian or Alaskan Origin	437	10.91%
Undeclared	467	11.66%
Asian or Pacific Islander	109	2.72%
Black (not Hispanic origin)	61	1.52%
<b>TOTALS</b>	<b>4006</b>	<b>100.00%</b>

GENDER	COUNT	PERCENTAGE
Male	2070	51.67%
Female	1936	48.33%
<b>TOTALS</b>	<b>4006</b>	<b>100.00%</b>

## ETHNICITY BY GRADE AND GENDER

GRADE LEVELS		6	7	8	9	10	11	12	TOTALS
<b>American Indian or Alaskan origin</b>	Female	29	38	51	24	27	43	16	228
	Male	31	30	36	34	29	33	16	209
<b>Anglo</b> (not Hispanic origin)	Female	47	54	82	37	46	51	15	332
	Male	75	75	120	54	52	47	42	465
<b>Asian or Pacific Islander</b>	Female	7	3	8	9	6	9	2	44
	Male	6	8	10	9	10	12	10	65
<b>Black</b> (not Hispanic origin)	Female	7	4	6	6	2	4	5	34
	Male	0	12	7	5	2	1	0	27
<b>Hispanic</b> (Spanish culture of origin)	Female	185	193	228	96	126	124	127	1079
	Male	171	202	237	116	129	110	91	1056
<b>Undeclared</b>	Female	78	43	43	16	13	17	9	219
	Male	91	37	56	16	18	19	11	248
<b>TOTALS</b>		<b>727</b>	<b>699</b>	<b>884</b>	<b>422</b>	<b>460</b>	<b>470</b>	<b>344</b>	<b>4006</b>

# SENIOR STATISTICS

## ACT SCORES

Average ACT Score	NM = 19.9	MESA = 21.4
Average SAT Score	NM = 1498	MESA= 1981

**Average Cumulative GPA = 3.52**

**Average years in MESA = 3.23**

GENDER	COUNT	PERCENTAGE
Male	174	50.58%
Female	170	49.42%
<b>Totals</b>	<b>344</b>	<b>100%</b>

## STATEMENT OF FUNCTIONAL EXPENSES

	PROGRAM SERVICES	G&A	FUNDRAISING	TOTAL
Salaries	430,703	127,551	11,015	569,269
Taxes & Benefits	72,530	33,659	1,606	107,796
Field Trips	153,787			153,787
Professional/Consultant	47,182	81,134		128,316
Travel	44,422	24,547	742	69,711
Incentive Awards	35,885			35,885
Training & Development	750	673		1,423
Program/Event Services	10,115	2,510		12,625
Supplies	32,994	6,811		39,804
Occupancy		4,920		4,920
Meetings & Conferences	22,625	3,400		26,025
Equipment Expenses	741	7,654		8,396
Telephone	12,283	12,736		25,019
School Activities	23,905			23,905
Other	72,178	32,775	635	105,588
<b>TOTAL EXPENSES</b>	<b>960,100</b>	<b>338,370</b>	<b>13,999</b>	<b>1,312,469</b>

# MESA BOARD 2013

## 2012-2013 NM MESA OFFICERS

**Kurt Steinhaus, Ed.D.**

NM MESA Board President  
Los Alamos National Laboratory

**Andrew Salazar**

NM MESA Board Treasurer  
President Elect  
Technology Ventures Corporation

**Elena Garcia**

NM MESA Board Treasurer  
Wells Fargo Bank

**Amy Tapia**

NM MESA Board Secretary  
Sandia National Laboratories

## NM MESA MEMBERS

**Elizabeth Ratzlaff**

New Mexico Highlands University

**John P. (Jack) Jekowski**

Innovative Technology Partnerships

**Mike Kloeppe**

NM Institute of Mining and Technology

**George (Rick) Shumard Jr.**

Electric Power Research Institute (EPRI)

**Joseph Trimble**

Wells Fargo Bank

**Jon Hawkins**

PNM

**Firouz Allahdadi**

Applied Research Associates

**Tracie O'Geary**

Northrop Grumman Corporation

## ALTERNATIVE MEMBERS

**Melissa Jaramillo-Fleming**

NM Institute of Mining and Technology

**Frank Maestas**

Applied Research Associates

## MESA EMERITUS MEMBERS

**Dora Alcalá**

**Jim Tarro**

**Herb Fernandez**

**Ted Sahn**

## ADVISORY REPRESENTATIVES

**Martha Pena**

Robertson High School Advisor

**Debra Lett**

Valley High School Advisor

## CONGRESSIONAL ADVISORY COMMITTEE

**Gabe Long**

Constituent Liaison  
Office of Senator Jeff Bingaman

**Sara Cobb**

Constituent Liaison  
Office of Senator Tom Udall

**Patrick Duran**

Constituent Liaison  
Office of Congressman Ben Ray Lujan

# NM MESA'S DONORS

ALBUQUERQUE COMMUNITY FOUNDATION  
APACHE CORPORATION  
APS-RONALD V. RIOUX  
BASIC ENERGY SERVICES  
CENTRAL VALLEY ELECTRIC COOPERATIVE, INC  
CONOCOPHILLIPS COMPANY  
DEPARTMENT OF ENERGY  
ELENA GARCIA  
ENCANA OIL & GAS (USA) INC  
EASTERN NEW MEXICO UNIVERSITY- ROSWELL  
FRANK YATES, OF YATES INDUSTRIES, LLC  
GEARUP  
GREAT WESTERN DRILLING CO  
INTEL FOUNDATION  
LOS ALAMOS NATIONAL SECURITY, LLC  
MANZANO ENERGY PARTNERS, LLC  
MAXEY ENGINEERING, LLC  
MICHAEL JOHNSON AND JUDY JOHNSON  
NEW MEXICO OIL AND GAS ASSOCIATION  
NEW MEXICO HIGHLANDS UNIVERSITY  
NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY  
NEW MEXICO MILITARY INSTITUTE (NMMI)  
NEW MEXICO STATE UNIVERSITY  
RICK SHUMARD  
SANDIA FOUNDATION  
SANDIA NATIONAL LABORATORIES, COMMUNITY INVOLVEMENT  
SM ENERGY  
STATE OF NEW MEXICO  
TRACY O'GEARY-NORTHROP GRUMMAN  
UNIVERSITY OF NEW MEXICO - ALBUQUERQUE  
UNIVERSITY OF NEW MEXICO - GALLUP  
XTO ENERGY, FORT WORTH, TX  
YATES PETROLEUM CORPORATION



2808 CENTRAL AVENUE S.E., ROOM 124  
ALBUQUERQUE, NM 87106  
PHONE: 505.366.2500 • 800.544.2617  
FAX: 505.366.2529  
WWW.NMMESA.ORG