VISION

New Mexico MESA, Inc.

"Building Tomorrow's Mathematicians, Engineers and Scientists Today!"

http://www.nmmesa.org

Spring Issue, 2017

Chaparral MS Wins MESA Day; Heads to MESA USA in PA in June

Deming HS Repeats as State Champ, Seeks to Defend National Title

Rick Cole

CO Regional Coordinator

For the members of Chaparral Middle School Team #4, earning a MESA Day state championship was the culmination of a systematic, thorough approach to project mastery.

The three seventh-graders who comprise the team – Kevin Ramos, Alfredo Sepulveda and Luis Jimenez – did not do anything especially complicated or unusual. They simply committed themselves to work every school day and several Saturdays for 2 ½

months to become the best team at the March 17 event at the University of New

Mexico Campus in Albuquerque.

"The students were very committed," explained Chaparral Advisor Rena Viramontes. who also had a state champion team in 2015. "For students to get ready for ME-SA Day, I asked that they have no other commitments. They then worked every day after school on the prosthetic arm and on Saturdays they worked on their posters and presenta-



Photo by Rick Cole tions."

Kevin Romero, Alfredo Sepulveda and Luis Jimenez win MESA Day.

See Chaparral—p.2

Executive Director's Welcome

Toney BegayNM MESA Executive Director

Hello, NM MESA advisors, students and supporters. Greetings also to those who happen to be reading this spring issue of our newsletter. Spring brings new growth and renewal. We are fortunate to have a new staff member onboard

as the Deputy Director. Some of you have met Ling Faith-Heuertz during our ME-SA Day



competition on March 17 & 18 in Albuquerque. In the short time she has been with NM MESA, Ling has already contributed enormously to our organization. She is a quick learner and doesn't shy away from a challenge. She will be instrumental in moving NM MESA forward.

As we publish this edition of the NM MESA newsletter, there is some uncertainty in the state of New Mexico about fiscal stability, particularly when it comes to public education and related initiatives. Numerous schools and

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CHAPARRAL MS DOMINATES 2017 MESA DAY RESULTS

scored 367.75 points to beat 57 other Alfredo. "We didn't have to change teams to clinch the title. The runner-up things very much. We just kept practicwas also from Chaparral – Team #5 – which tal-lied 348points. Chaparral Middle School dominated the competition as all five of its teams placed in the top 14 slots, including four of the top 10. Five other schools placed two teams in the top 15

Redming MoCatashad Intermediate, Lynn (Las Cruces) John Belen and Adams (Albuquerque). The Southwest Region's dominance of

the event continues for the third consecutive year as nine of the top 15 teams (17 actual teams because of two ties) came from the region. The Central Outer Region followed with four placers and the Southeast region landed three squads among the elite.

"I am very proud of my students," added Viramontes, who, along with her teams was honored April 20 at a Gadsden Independent Schools Board meeting. "They do not have a whole lot in terms of things. The entire school is Title I and gets free lunches. Ninety percent of the students' first language is Spanish. But circumstances do not limit these students. They achieve because of their commitment and ambition."

Ramos, Sepulveda and Jimenez have been close friends since they were in sixth grade. They share a mutual love for STEM as all three aspire to be engineers. Kevin is focused on architectural engineering while Alfredo eyes aeronautical engineering and Luis longs for mechanical engineering.

The trio explained their success.

"This was the first year of coding for us," noted Ramos. "We learned the coding in January and also built the arm in January."

"It (the prosthetic arm) kind of

As a result, Chaparral Team #4 worked well from the beginning," added and were able to do well." ing to get better."

> Best Robotics," piped Luis. "We made it pionship. Deming High School Team #1, to regionals in October and went to na- the NM high school state champion, will tionals in Dallas in December. We didn't also compete at the event. Deming is the win, but we were one of only four middle defending state and national champion.

"Now, the girls pay attention to us." - Luis Jimenez

> school teams among 72 teams at nationals. It taught us a lot about electronics and how to work as a team. It helped us get ready for MESA Day."

> Amazingly, the team actually did very little to directly prepare for MESA Day in the fall semester. Virtually all of their efforts were concentrated into the first 2

> > ½ months of 2017 and yet the team won the object relocation contest and poster presentation event enoverall championship.

> > > "Building the arm was easv." said Kevin. "Troubleshooting the Arduino

code was more difficult, but we finally got it

Now, the team is bound for Philadelphia, Pennsylvania where they will compete at Temple University June 21-24 to "We also competed in the fall with represent NM in the MESA USA Cham-

> Red Mountain MS, also of Deming, is the defending state and national champion but was beaten by Chaparral this year.

"I've never been to Philadelphia," Alfredo said. "It makes me want to work harder, knowing that we get to go and try to win nationals."

Both Chaparral and Deming participated in a MESA USA boot camp April 28-29 at New Mexico State University, where they were coached on the fine details of what is required to be a national champion by both NM MESA staff and NMSU engineering professionals. Both teams will also showcase their prosthetic arms and their ability to present before more than 400 science educators at the 2017 NM PED STEM Symposium June 2 at the Embassy Suites Hotel in Albuquerque.

"The school and the community is route to the very supportive of our MESA program," added Viramontes. "We even have sponsors from the local area and California that help make possible the many activities we do. This helps make it possible to get our supplies and pay for travel to the events we attend."

> For the most part, Chaparral MS Team #4 takes the success in stride. They acknowledge that learning how to solve problems and working hard are crucial to their achievements. But there are other benefits to success.

"Now the girls pay attention to us," smiled Luis.



Photo by Rick Cole

Alfredo Sepulveda of Chaparral MS prepares for the distance accuracv toss.



Defending their state title and earning a return trip to MESA USA is Deming HS Team #1: (from left to right—Adriana Darrow, Antoni Varela, Advisor David Jaramillo, David Velez, Adrian Luna). The team won seven of eight categories to claim the title.

2017 MESA Day Highlights Montage (Photos by Rick Cole)





(Left) Seventh-grader Destiny Montoya of John Adams Middle School uses her teeth to activate her prosthetic arm. Montoya led JAMS Team #10 to a second-place showing in physical performance. (Right) Demonstrating innovation, Cibola High School freshman Matt Rawson uses an eyepiece to activate his prosthetic arm at MESA Day.

EXEC. DIRECTOR

higher education institutions are establishing processes in place to address the funding shortage. NM MESA is no different. This uncertainty has placed us in a position to evaluate our programs and services. We have a commitment to provide excellent educational enrichment to our schools throughout the state based on our mission and vision. It may be stressful and frustrating, but we will keep our eye on the target of develop-

ing the best precollege students in the Science, Technology, Engineering



and Mathematics (STEM)-related areas as they pursue these majors in college and obtain employment in the workforce. We seek to instill in these students the value of giving back to their communities, being role models to upcoming students who are now in the shoes they were in several years ago and become engaging and productive professionals.

We are proud of all our MESA students and celebrate their many achievements this school year. CONGRATULATIONS!!

I also extend a special "thank you" to all the NM MESA advisors, school administrators, parents, corporations, the NM Governor's Office, State Legislators, individuals giving personal donations, the NM MESA Board of Directors and the staff of NM MESA for making this a successful school year and diligently planning for another year.

2017 MESA Day Produces High Scores on Scientific

Posters, Technical Papers and Oral Presentations

Shawndeana Smith

West Coordinator

The 2017 MESA Day at UNM was

definitely one of the challenging most events for our students this year! However, we did have some excellent work submitted by teams from across the state. Along with our prosthetic arm challenge which included the physical performance tasks, there was Technical Paper, Poster Board and Presentation compo-

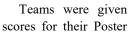




Photo by Rick Cole

A team from Nex Gen Academy poses before their oral presen-

Display, the Technical Paper, and their Second place was Chaparral Middle Presentation individually. Potentially, School Team 4 with 63 points and third they could have earned 75 points maxi-

> Display, 100 points maximum for their Technical Paper, and 75 points maximum on their Presentation.

Mid-School Scores

The middle school scores for the Poster Display indicated that the top team, Carls-Intermediate bad Team 1 worked very hard on their Poster. They were only six points from achieving a perfect score for the poster with 69 points.

place was Chaparral Middle School mum for their Poster Team 2 with 60.67 points.

> The scores for the Technical Paper actually tell a different story. It appears to have been a very close race in this category. The first place team from Carlsbad Intermediate Team 1 was only 7 points from a perfect score with 93.33 points. However, first and second place scores were less than a point from each other. Two teams, Red Mountain Team 2 and Chaparral Team 3 tied for second with a 92.67 point score.

> The scores for the Presentation were superb! Three teams, Red Mountain MS Team 1, Chaparral MS Team 4, and Chaparral MS Team 5 all tied with perfect scores of 75 points. See MESA Day Scores—p. 5

> > **Technical Paper Points**

/100

Descentation Daints

Paper

PLACE

93.33

92.67

92.67

90.00

87.67 87.33

85.33

85.33

85.00

77.33

MIDDLE SCHOOL ADVANCE JUDGING	Poster/Display	•	
School-Team	Points /75		ACE
Carlsbad Intermediate 1	69	.33	1
Chaparral Middle School 4	63	.00	2
Chaparral Middle School 2	60	.67	3
Red Mountain 1	60	.33	4
Red Mountain 2	58	3.00	5
Chaparral Middle School 1	57	.67	6
Memorial Middle School 1	56	.67	7
Chaparral Middle School 5	55	.67	8
Ernie Pyle Middle School 1	52	.00	9
Carlsbad Intermediate 2	50	.00	10

roster/ Display		
Points	Pos	ster
/75	PLACE	
	69.33	
	63.00	
	60.67	- 4
	60.33	4
	58.00	į
	57.67	(
	56.67	
	55.67	
	52.00	
	50.00	10
	Points	Points Pos /75 PLA 69.33 63.00 60.67 60.33 58.00 57.67 56.67 55.67

MIDDLE SCHOOL	
ORAL PRESENTATION	

	Presentation P	oints	
School-Team	/75		PLACE
Red Mountain 1		75.00	1
Chaparral Middle School 4		75.00	1
Chaparral Middle School 5		75.00	1
Lynn Middle School 1		74.50	4
Belen Middle School 1		74.50	4
Red Mountain 2		74.00	6
Chaparral Middle School 2	5 2	74.00	6
Deming Intermediate 2	38 8	74.00	6
Ernie Pyle Middle School 1	20.00	74.00	6
John Adams Middle School 2		73.00	10

10	Deming Intermediate 3						
	HIGH SCHOOL						
ORAL	ORAL PRESENTATION						

School-Team

Red Mountain 2

Red Mountain 1 Belen Middle School 1

Carlsbad Intermediate 1

Chaparral Middle School 3

Chaparral Middle School 5

Chaparral Middle School 4

Chaparral Middle School 1

Ernie Pyle Middle School 1

	Presentati		
School-Team	/75		PLACE
Deming High 1		75.00	1
NexGen Academy 1	1	73.67	2
Cibola High School 4		72.00	3
Valley High School 1)	69.67	4
Espanola Valley High School 2		69.00	5
Mayfield High School 1	T	69.00	5
NexGen Academy 2		68.67	7
West Las Vegas High School 1		68.67	7
Carlsbad High School 1		68.33	9
Navajo Prep High School 5		67.67	10

MESA Day Scores are High for MESA USA Qualifier

High School Scores

The high school scores for the Poster Display were somewhat similar to the middle school scores being that the first place team, Deming HS Team 1 scored

The scores for the Technical Paper 69 points as well. They were also only were pretty close with first and second six points from a perfect score. Second place being within a point of each other. Team 1 won with a perfect score of 75!

place went to Espanola Valley HS First place honors went to Valley HS Team 2 which scored a 66.33. In third Team 1, 91.33 points and second went place, Carlsbad HS Team 1 had 64 to Carlsbad HS Team 1, 90.33 points. NexGen HS Team 2 earned third with 87.33 points.

In Oral Presentations, Deming HS

Tachnical

HIGH SCHOOL ADVANCE JUDGING School-Team	Poster/Display Points /75		Poster PLACE
Deming High 1		69.00	1
Espanola Valley High School 2		66.33	2
Carlsbad High School 1		64.00	3
Cibola High School 1		62.00	4
Valley High School 1		57.67	5
Cibola High School 6		54.67	6
NexGen Academy 1		52.33	7
NexGen Academy 3		50.67	8
Mayfield High School 1		49.67	9
Cibola High School 5		44.33	10

Cabani Tanan	Paper Points	Paper
School-Team	/100	PLACE
Valley High School 1	91.33	1
Carlsbad High School 1	90.33	2
NexGen Academy 2	87.33	3
NexGen Academy 1	83.67	4
Espanola Valley High School 2	83.00	5
Deming High 2	82.00	6
Deming High 1	81.00	7
Mesa Vista High School 1	80.00	8
Cibola High School 1	76.67	9
Mayfield High School 1	76.67	9

Deming Dominates Physical Performance at MESA Day

Terry Ramirez

SW Coordinator

Deming High School repeats as New Mexico MESA USA Champion by totally dominating the physical performance components. That was the highlight of a spirited and entertaining weekend of competition.

New Mexico MESA hosted over 335 students from MESA schools for

the New Mexico MESA Day Engineer- students had to also secure nuts onto ing Design Qualifying Competition, at bolts with a testing apparatus. the University of New Mexico campus on March 17th & 18th.

categories as determined by the MESA out the state. Performance for all teams USA focus: a prosthetic arm design was outstanding. Students cheered from with a microprocessor programming the stands and everyone was excited to component. Student teams had to pro- see the students toss bean bags, do obgram an arm to place items in and out ject relocation and the dexterity compoof a designated area, toss items into a nents. specific target zone, and high school

Students attending this academic competition represented 18 Middle Student teams competed in several Schools and 23 High Schools through-

Distance Accuracy

HIGH SCHOOL

Trial 1 Score Trial 2 Score Best Score Task Points Task School-Team /75 Place

Deming High 1	1.00	8.33	8.33	50.00	1
Carlsbad High School 1	4.77	1.50	4.77	28.60	2
Cibola High School 1	2.89	0.55	2.89	17.33	3

Object Relocation

HIGH SCHOOL

Trial 1 Trial 2 Best Points SUBTOTAL TIME (s) Score SUBTOTAL TIME (s) /75 PLACE

Deming High 1	105.00 26 4.04	115.00	17 6.76	6.76	50.00	1
Carlsbad High School 1	75.00 60 1.25	160.00	60 2.67	2.67	19.71	2
NexGen Academy 1	80.00 60 1.33	160.00	60 2.67	2.67	19.71	2



Photo by Rick Cole

Mayfield HS students & advisor use a solar telescope and observe related displays at the MESA Day Discovery Fair.

MESA Day Discovery Fair Volunteers – They are Here for the Kids!

Nicholas Kunz

NC Coordinator

Students from across New Mexico traveled to University of New Mexico (UNM) in March for competition, fun, excitement, and success at NM MESA's annual MESA Day. In addition to participation in the day's competition events, students and advisors were able to interact with a wide variety of UNM departments as well as organizations from the greater Albuquerque community, all of whom volunteered to spend their time enriching the lives of MESA students.

During Downtime, when students were not actively competing, they had the opportunity to sign up for tours and oncampus experiences. UNM's Office of Admissions provided a self-guided tour instruction sheet, as well as a fun-filled scavenger hunt for students to complete

during their tour. Student groups had the ons Youth Leadership. option of booking a tour with friendly and knowledgeable college students from the UNM student club, Advancing Women in Science. They were also given the opportunity to sign up for on-campus tours and/ or workshops at the Art Museum, Geology Museum, Meteorite Museum, Center for High Tech Materials, Popejoy Hall, Museum of Southwestern Biology, and the School of Engineering.

The Discovery Fair featured interactive demonstrations and activities from Bosque Ecosystem Monitoring Program, Timmy the Telescope Solar Astronomy Outreach, UNM School of Engineering, New Mexico Office of Archaeological Studies/Museum of New Mexico, We Help Two, UNM El Centro De La Raza, Nex+Gen Academy, Zoo Crew, Brain Hackers Association, Valle De Oro National Wildlife Refuge, and Talking Tal-

NM MESA encourages students, teachers, family and community members to support these wonderful organizations who generously offered their time for the benefit of New Mexico's brightest youth. The individuals from these groups expressed appreciation for the chance to interact with MESA students and help steer them on the path toward a bright future.

Chris Forsythe, President of Brain Hackers Association says of the MESA Day experience, "What made MESA Day stand out for me was that it provided an opportunity to engage with students from schools in many of the smaller communities across the state. There are countless STEM-related opportunities for the kids in Albuquerque and the bigger cities, but not so many activities for kids in the rural parts of the state".

North Region Students Appreciate MESA Teachers, Participate in Numerous Meaningful Endeavors

Alejandra Carmona-Cruz

North Coordinator

Part I: Teacher Appreciation

In Northern New Mexico and like in many areas of the state, NM ME-SA teachers are always taking opportunities that will enhance the learning of all their students no matter the circumstances. Many schools that make up the North Region are small, have limited resources, and fewer teachers. Therefore, teachers take on many duties, responsibilities and roles in their daily lives with their students; students who come from diverse and sometimes underrepresented backgrounds.

Teachers, thank you for the work that you accomplish every single day and for the *extra* that you do outside of school hours! Thank you to all MESA teachers who believe in our mission and who have been with us for many years, for those who have struggled but made it happen, and for those who are new and are in the groove, you are appreciated!!! You are all a hero to your students.

Part II: North Regional Review

The North Region students ended the Fall 2016 semester finalizing research papers, posters and prosthetic arms for MESA Day competition. In addition, schools multi-tasked on other STEM projects, activities, field trips, etc. They commenced their 2017 year with leadership at the legislature, a new appreciation for competition at MESA Day, college visits and with a little bit of spring fever.

One school that demonstrated ultimate perseverance this year was Memorial Middle School. These MESA students and teachers worked endless hours preparing and perfecting their MESA Day "package." These students had a goal, and gave it their all! No matter what got in their way of completing all



Photo by Rick Cole

North Coordinator Alejandra Carmona Cruz displays a smile of satisfaction... because MESA students are achieving success.

the requirements for MESA Day competition they got through it. They attended the competition and landed a place in the overall top 10 middle school teams!

A state-wide highlight this spring is that the North Region was able to join with North Central and West Re-

Another regional highlight is the North and North Central regions coming together to make a change through Leadership and Service locally and globally. Students from both regions joined to learn about prosthetics at Highlands University. Along with gaining that knowledge, North students participated in Socktober, a LIMBS International fundraiser for Prosthetics. Students sold pairs of socks to raise funds to purchase a LIMB to give to a person in need of a prosthetic leg from a third-world country. NM MESA encourages students to be aware of social and cultural issues in which they can make a change. As a region, we hope to be more involved with organizations that work towards improving ALL human lives, whether it be in their community or elsewhere.

For the 2017- 2018 school year we will be partnering with "We Help Two" as part of service learning. "We Help Two" is a newly founded organization by Trevor Bergman. Their

mission is to facilitate fundraising for the benefit of two causes. Through the "We Help Two" socktopia campaign, organizations can raise funds for their choice of causes while also making an impact on their local community through the sock donation program to shelters. In the fall semester, schools will begin their campaigns and work towards reaching a goal by a regional deadline set up at the beginning of the school year. It may be that schools want to fundraise to help their local right to life committee, animal humane society, food bank, or raise funds for a MESA end-of-the-year field trip to another state, etc. The schools will also be meeting needs in their local community through the sock donation program. For every pack of socks that are sold, one pair of warm socks will be donated to people in the community who are lacking these essentials. .

A state-wide highlight this to join with North Central and West Regions to participate in one of our most important annual events, the Legislative Field Trip in conjunction with MESA Day at the NM Legislature while in session at the state capitol. Student ambassadors from all three regions attended to testify to Representatives and Senators of the great activities/achievements happening with MESA programs statewide. The North joined the other six MESA regions to conduct a campaign of letter writing to respective legislators. North students were happy to be present at the Legislature to personally deliver their letters to designated legislators. MESA students and teachers of the North are truly thankful for the continued support of the NM Legislature.

In retrospect, northern students have spent their time this school year creating, building, thinking, writing, and gaining various skill sets as well as new insights. For the 2017-18 school year the North plans to be more innovative in the design and outcome of chosen STEM projects and events. Stay tuned.

UNM Continuing Education Summer Class Options for MS and HS Students



Summer just got cooler! With classes like Minecraft Turtles, LEGO Galaxy, and Gemology, there is no limit to the adventures your kids will have this summer at UNM Continuing Education. It's going to be a fun-filled summer, you won't want to miss it!

Youth Summer Camps—Sign up at http://ce.unm.edu/enrichment/youth/?
utm_source=newsletter&utm_medium=email&utm_content=Youth%20Summer%20Camps&utm_campaign=youth-summer-new-topics

May

ECO Kid's Camp - Pathfinders (ages 9-12) May 30-Jun 2

June

Dendrochronology: Talking Trees, The Lords of the Rings (ages 10-17) Jun 12-16

Archaeology of Ancient Civilizations (ages 10-12) Jun 19-23

July

Sheep to Shawl: Fiber Arts Camp (ages 8-12) Jul 10-14

LEGO® Galaxy Far Away (ages 6-10) Jul 10-14

Virtual Reality: The Future is Now (ages 8-11) Jul 10-14

Virtual Reality: The Future is Now (ages 11-14) Jul 10-14

Gemology: Magma to Magic (ages 9-13) Jul 10-14

Gemology: Magma to Magic (ages 14-17) Jul 17-21

Additional Summer STEM Options for Students

Program Name	Dates	How to Apply	Contact Person:
Summer Transportation Institute	June 4-23, 2017	Link to Download Application: http://ess.unm.edu/ess-programs/ ess-summer-programs/index.html	Contact: Katherine Love Phone: (505) 277-9921 Email: katherin@unm.edu
UNITE Summer Program	June 4-30, 2017	http://www.usaeop.com/ programs/stem-enrichment- activities/unite/	Contact: Katherine Love Phone: (505) 277-9921 Email: katherin@unm.edu
High School Visits	Can be scheduled any time.	Contact Steve Peralta if you would like to have him talk to students about engineering aca- demic programs	Steven Peralta, Director, Engineering Student Services Phone: (505) 277-9921
UNM Campus Tours	Can be scheduled any time	Contact Katherine Love if you would like to arrange a visit for your students to hear about the School of Engineering and visit some of the department research labs.	Contact: Katherine Love Phone: (505) 277-9921 Email: katherin@unm.edu

Camp BioPark https://www.cabq.gov/culturalservices/biopark/camps-classes/camp-biopark/camp-biopark#Investigate Grades 7-9, Volunteers needed from grades 10-12; weekly - June 5-28, \$230 camper/week

Explora Summer Camp http://www.explora.us/summer-camp-grades-6-8/ Grades 6-8, weekly June 10-August 4, \$300 camper/week; http://www.explora.us/summer-camp-grades-9-12/ Grades 9-12, June 26-30, \$300 camper/week

NM Museum of Natural History Summer Camp http://www.nmnaturalhistory.org/youth-and-family-programs/young-explorers-camp-programs Grades 4-8, weekly June 12-17, July 30- August 4, \$300 camper/week

National Museum of Nuclear Science and History http://www.nuclearmuseum.org/assets/uploads/general/SC%202017_inside.pdf Ages 6-15, weekly, May 30-August 11, \$275 camper/week

UNM Continuing Education http://ce.unm.edu/enrichment/youth/ Ages 12-17, weekly, May 30-Augusg 11, \$125-\$300 camper/week

Other options include Bernalillo County (free programs), NM Tech Summer Camps, the Albuquerque Jewish Community Center, the YMCA, Bosque Prep Summer Camp, Albuquerque Academy Summer Camp, Albuquerque International Balloon Museum Summer Camp, Hands on Science Camp, Maxwell Museum of Anthropology Summer Camp, Rio Grande Nature Center Summer Camp, Talking Talons Youth Summer Camp, Cottonwood Gulch Exploration Camps and many, many more that can be found with the click of a mouse through www.google.com.

Employment and Internships

USFWS Summer Employment for Youth, ages 15-19

Albuquerque BioPark, ages 15-19

NM Museum of Natural History, ages 13-19

City of Albuquerque, ages 15-19

City of Belen, ages 15-19

Village of Bosque Farms, ages 15-19

Village of Los Lunas, ages 15-19

Village of Peralta, ages 15-19

City of Socorro, ages 15-19



Photo by Rick Cole

Makenzie Sanchez of SHS interns with the USFWS.

Science Meets Artistic Tradition in the North Central Region

Nicholas Kunz

NC Coordinator

During the mid-16th Century, as Spanish explorers found their way to the land we now call Northern New Mexico, they brought with them a commodity deeply rooted in a rich and ancient tradition: The Churro Sheep. Weavings of the new settlers became an important part of their economy, as wool blankets were a valuable trade item. They provided warmth during the cold mountain nights, and their colorful beauty complimented the landscape and architecture of the region. Many of their techniques of production and artistic expression are still quite alive in northern New Mexico.

NM MESA's North Central Region Arts Center (EVFAC) and Santa Fe Botanical Garden to bring a unique experience to MESA students at Capshaw Middle School in Santa Fe. Students participated in a nine week hands-on series of workshops that explored the history, science, and creative expression that lies within fiber arts.

rations, was part of a larger vision funded by the Santa Fe Community Foundation's Birth to Career Initiative, and aimed to bring professionals to middle school content they have mastered in their ca-vested and processed?



Photo by Nicholas Kunz

has partnered with Espanola Valley Fiber Master weaver Elan Gerzon, center, demonstrates how to configure a loom to Capshaw Middle School students in a weaving workshop this spring.

reer. Elan Gerzon, an Israeli-American weaver from EVFAC, joined the students during these sessions to teach them the craft that he loves and link nicely with the students' interest in STEM content. How is natural dye produced, and from This project, called Creative Collabo- what living materials is it derived? How does dye chemically bond to fibers, and does pH affect this process? Is it possible to extract chlorophyll from a plant for use in a green dye? What is the biology of classrooms to teach students about the wool production, and how is wool har-

During their time working with Elan, the students were fully engaged in learning, and were inspired to fabricate beautiful works of art. They separated the proteins from wool and spun it, designed experiments, recorded data, built looms, and ultimately produced weavings of their own. Additionally, the group is scheduled to take a field trip to Centinela Traditional Arts in Chimayó to visit the heart of this tradition in New Mexico and to hear from the very artists and craftspeople who carry it on.

West Region MESA Students Complete Year with Eventful Semester

Shawndeana Smith

West Coordinator

It's been a busy semester for the West Region MESA students. The end of the school year definitely is fast approaching and students are anticipating their summer vacation. Our MESA schools are definitely trying to do their best in making sure students have completed all their MESA duties and requirements.



The worked through the year preparing for MESA Day. The West Region Coordinator conducted workshops pertain-

ing to the prosthetic arm and provided materials and guidance for building the arm prior to MESA Day. The RC also provided assistance to those teams needing additional help with preparing their

students oral presentations and technical papers.

There were also some other trips and activities for West Region middle school students that involved a visit to the Sandia National Laboratory. Some schools were also preparing to compete at the AFRL Challenge sponsored by Kirtland Airforce Base in Albuquerque. There is also a group of MESA high school students at Grants High School who are devoting their time to building a robot to enter a Bot Challenge in California.

Competitions Headline SE Region

Betty Chancey

SE Coordinator

DEVON ENERGY - Achievement Award

The Southeast Region is thrilled to announce the 2017 recipient of the Devon Achievement Award. This \$20,000 Scholarship is donated each year to a MESA student graduating from a high school in Eddy or Lea Counties. It is to be used over four years of college for a student seeking a career/degree related to the Oil &Gas Industry. This is the third year of this prestigious award.

The recipient for this year's Devon Achievement Award is Yoni Xiong from Carlsbad High School. This is an amazing young lady and the first female recipient of this award. Congratulations Yoni!!!!



Photos by Betty Chancey

Carlsbad senior Yoni Xiong receives the **Devon Energy Achievement Award from** Devon executive Jerry Matthews.

MESA Day 2017

The SE Region had 22 of 86 eligible middle and high school teams qualified to compete this year. The remote-controlled prosthetic arm was a complex and difficult competition and the teams who qualified to attend are to be commended!

Carlsbad High School Team #1 was the second place overall high school winner. In the Middle School division, Carlsbad Intermediate Team #1 also won second place overall, Holloman Middle School Team #6 was sixth overall and Carlsbad Intermediate Team #2 was seventh overall. I am very proud of these teams and want to commend Armijo, Tom Langowski and Tricia Rose.

them and all the teams who put so much work into preparing for this competition! Well done!

2018 NM MESA Energy Education Fair

Artesia and the Southeast Region are very excited to be offering the new and improved "NM MESA Energy Education Fair" next Fall. The event is scheduled for October 23 24, 2017. The Planning Committee has already met twice and will add additional representatives in the near future. Watch for the new flyer announcing this event.

SUMO ON THE PECOS

The three Carlsbad MESA Programs (Carlsbad High School, Carlsbad Intermediate and Carlsbad 6th Grade Academy) planned and implemented a new robotics competition this year. Rules and regulations were given to the SE Region schools in the Fall and the competition was held in Carlsbad on Saturday, April 8th. This year, six SE schools worked on this project with five schools bringing teams to the final competition. It was an amazing day filled with fun and learning for all!

Two or three robots were placed in a 3 foot competition circle and tried to push the other robots out of the circle. The "Last One Standing" inside the circle won each heat. Teams worked through several heats and the final winners are pictured below: 1st Place -Andres Chappa & Abdurrahman Hamelt (not shown) 2nd Place - Emily Hervol, Hanna Kim, Samantha Vasquez 3rd Place - Tison Sullivan and Nolan Cockrum.



Carlsbad High School provided lunch and snacks to all participants. The SE Region would like to give a HUGE THANK YOU to Deb Haggerton, Leah Olivas, Damian

SW Region **Achieves Much** Amidst Much Fun

Terry Ramirez

SW Coordinator

The Southwest Region did exceptionally well at MESA Day. Chaparral Middle School Team #4 won the Middle School Division and Deming High School Team #1 clinched the high school championship for the second consecutive year.

Both teams will represent their respective schools, the Southwest Region and the state of New Mexico at the MESA USA Championships, June 21-24, in Philadelphia, Pennsylvania.

SW regional middle schools truly dominated MESA Day as they won nine of the top 15 overall spots from among 58 competing teams.



Rina Viramontes

Chaparral MS **MESA** Advisor Rina Viramontes and her **MESA** students were honored

by the

Gadsden School Board April 20 for their state championship and other accomplishments.

The regional teams going to MESA Day also enjoyed field trips to the zoo, the Museum of Natural History and Science and the Trampoline Park! We also ended the semester with a trip to Western Playland so that students can celebrate another year of being in MESA and learn first-hand some Physics concepts.

Advisors also attended a productive and eventful RAM to close out the year and get ready for 2017-2018!



Photos by Kim Allen-Scheerer

Taylor Middle School and Valley High School MESA teachers and students enjoy a beautiful day at Tent Rocks/Kashe Katuwe National Monument on pi day - March 14, 2017.

Central Inner Spring Adventures and Honors Make for Memorable Semester of Learning

Kim Scheerer

CI Coordinator

The end of winter and transition into spring has brought a bounty of Central Inner activities! Our region, known for its urban location and diverse opportunities, had MESA students and teachers experiencing STEM in a variety of ways.

Multiple schools, including Albuquerque High School, East Mountain High School Nex Gen Academy, Taylor Middle School and Valley High School, participated in the Pueblo of Cochiti Tent Rocks (or Kashe Katuwe) partnership

with the Bureau of Land Management School MESA student Parker Randolph (BLM). The BLM was able to provide worked the 'pits' to help keep students transportation through Beal Busing Com- and teams on time for battle. The VEX pany to help our students hike the slot Robotics Challenge, much like MESA canyon and enjoy lunch on the edge of programming, works to help students the world. Students that participated had focus their STEM interests on teamwork, the opportunity to learn about local geol- leadership and communication. ogy, stretch their hiking muscles and get hands on with a collection of field tools such as: binoculars, gps unites and laser thermometers.

the UNM VEX Robotics Challenge. Gar- per competition and Nex Gen teams 1 and field Middle School and Amy Biehl High 2 for their top-ten placement in the high School showed up ready to compete with school division! A special virtual high

With our state-wide MESA Days taking up much of our March activities, I would like to officially congratulate Central Inner's Valley High School team for We also had some hot competitors in their first place win in the Technical Paabout 25 other teams. Albuquerque High five to all of those CI schools that partici-



APS Outstanding STEM student, Melinda Clibon (center), and APS Outstanding STEM teacher, Sariah Bujanda (2nd from right) celebrate a special evening of recognition with Suzanne Johnson (far left), Director of Learning and Research for the NM Center for School Leadership, and two other unnamed dignitaries.

pated – it was a rigorous and challenging peers, at the Annual Einstein Gala at the History in mid-March. The award is event.

National Museum of Nuclear Science & given to teachers and students who have

Additional regional highlights involved Van Buren Middle School's top notch showing at the UNM School of Architecture & Planning's Future City Competition. Future City is a project-based learning program that works to help students recognize civic issues and explore engineering and its various career options. We would also like to congratulate South Valley Academy teacher Sariah Bujanda on her APS Outstanding STEM Teacher Award and



Outstanding STEM Student Central Inner teachers and MESA Deputy Director awardee and NexGen student Ling celebrate the peace of being an outstanding group Melinda Clibon. Both were of innovative and collaborative teachers! This land-art recognized, along with their was created by and is adjacent to East Mountain HS.

shown a commitment to STEM education and have gone above and beyond routine achievement in their quest for excellence.

Finally, the Central Inner region hosted our end-of-the-year Regional Advisory Meetings (RAM) in late April. Taking advantage of the great region and opportunity, teachers had op-Some chose the Vista Grande Community Center and our STEAM Intercultural Institute full day of professional development and some chose the half day at Explora. Either choice resulted in profession delights, collaborative sharing and community planning for the 2017-2018 school year.

Central Outer Achievement is Good, P

Rick Cole

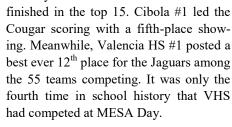
CO Regional Coordinator

Active learning and achieving has set the pace for Central Outer region students this spring. Be it academic competitions, leadership or service learning, CO is in "the know."

Yes, CO students know how to compete. Students from both the Socorro High School and Los Lunas High School MESA programs competed at the 2017 NM Science Olympiad, earning third and 16th overall from 25 teams qualified for

the state championship. Sarracino Middle School finished 19th of 25 squads in the middle school division.

Cibola High School had the top combined showing of any school in the 2017 NM MESA Day Championship March 18. They were the only school to qualify five teams for ME- Christopher Gallegos SA Day and four of those



John Adams MS also had a best-ever showing at the 2017 MESA Day. They were the only school to send 11 teams to the event. Two squads, #9 and #10,

placed 13th and 15th respectively, the highest overall performances ever notched by JAMS at ME-SA Day. In addition, JAMS #10 earned second place in overall physical performance, even outscoring MESA Day State Champion Chaparral #4 Abigail Zarate-Guillermo

school history.

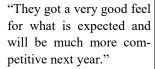
Valencia HS and Los Lunas HS both had individuals place at the state science fair in plant science and animal science respectively.

Truman and Ernie Pyle Middle School their respective MESA programs.

competed in the 2017 Innoventure. Although none of the teams placed, it is noteworthy that EPMS sent four squads in its very first Innoventure.

> "They learned a lot and we learned lot," explained EPMS Advisor drea Jackson on behalf of the students. herself and fellow advisor, An-

nette Youngren.



CO MESA students also set the pace in leadership. Atrisco Heritage Academy senior and ME-SA student Sonia Macias graduates as valedictorian

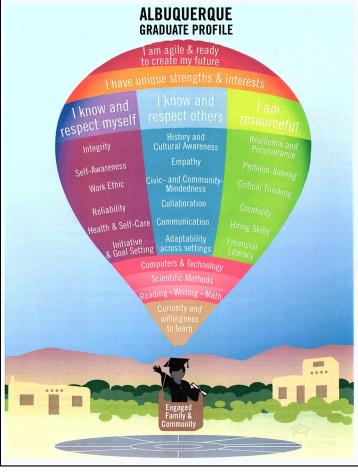
> Caitlin Baca. West Mesa senior Guadalupe Moreno is salutatorian of the Mustang

Atrisco Heritage senior Christopher Gallegos and

by four points. This is the single-best West Mesa Senior Abigail Zarateevent performance by a JAMS squad in Guillermo earned Central Outer Male and Female High School Student of the Year Honors. Gallegos is eligible for a \$798 Loyalty Award and Zarate is in line for \$708 due, in part, to their many MESA achievements. However, both clinched the honors with exemplary leadership in



of the Class of 2017. The Class of 2017.



same is true The Albuquerque Graduate Profile and Launchpad were recen Belen two years of research into what high school graduates need to MESA sen- much of what the NM MESA CO Region is striving to achieve it

> Ernie Pyle MS eighth-grader Anastacia Salas-Muñoz won the CO MS Student of the Year after leading EPMS in both MESA Day and Innoventure competitions. Anastacia, who earned an electronic tablet in conjunction with the honor, finishes middle school with a perfect 4.0

lanning for Much More in 2017-2018

GPA and will be attending Atrisco Herit- entire state of New Mexiage Academy next year.

In addition, the entire Truman MS MESA program was honored by Earth Force for the best community service project at a national wildlife refuge in the Guadalupe Moreno - mennation. As a result, the TMS MESA program received a special grant to do another service project at Valle del Oro as the WMHS

co, with 25 projects totaling more than 8,000 hours of volunteer service.

Connected to that effort, tioned above as WMHS Salutatorian - was selected

"Selfless Anastacia Salas-Munoz

Senior" by the APS Education Founfor outstanding community service to the school and community. Atrisco Heritage Academy MESA student and senior Clarizza Morales-Chacon received the same honor for her school out of a student body of 2,700+. APS Education Foundation Executive Director Phill Casaus stated in the April 17 Albuquerque Journal, "these young people represent the heart and soul of our schools." Their respective honors indicate the degree to which MEcommunity service.

CO Advisors attended an interactive Regional Advisors Meeting in April that analyzed and discussed the recently developed profile of the attributes of an Albuquerque-

area high school graduate 2017. Deborah Good of Mis-

sion:Graduate, who spearhead-

in alignment with the profile. Village of Los Lunas Economic Development Director Ralph Mims also shared with the teachers how the addition of Facebook and the adjacent industrial rail park is estimated to generate between 5,000 and 8,000 jobs over

the next ten years. The vast majority of these jobs will be "technician" with a hefty number of engineering and business professionals working in tandem with these certified personnel. The project is expected to surpass the Santa Teresa Rail Park in Dona Ana County to become New Mexico's single largest industrial and manufacturing center. Thus, the need for vocational education, internships and other careerpreparation activities are more important than ever to middle school and high school curriculums. Mims and CO Coordinator Rick Cole led interactive conversations on how the education system is changing or needs to change to meet the demands of prospective employers.

Thus, CO MESA advisors are prepar-SA students set the pace in ing for the challenges of the future in designing MESA activities to maximize preparation for post-secondary trade schools and/or liberal arts institutions. Such planning will continue to grow student achievements in addition to expanding knowledge and skills for professional careers. CO MESA students acquired much this year in their diligence to participate in a wide variety of MESA activ-

ities in the classroom and in regular meetings. What is exciting is how many of these students will continue to develop their academic, leadership and service abilities and skills through a host of summer programs. We will keep you posted of the success of those activities in the next Vision newsletter.



Graphics courtesy of Mission: Graduate

tly adopted by Albuquerque Public Schools after more than be successful in the 21st-century job market. These align with n its student participants.

NWR again next year.

Central Outer student leadership and ed the research and data analycommunity service often overlapped. The sis that went into the profile, region as a whole completed more than led the ensuing discussion on 110 community service projects during how educators can adapt their the course of the school year. West Mesa teaching to help students max-HS set the pace for the region, and the imize their personal attributes



Sonia Macias



igners.

Photos by Kim Allen-Scheerer

(Top) SIFT participants pose at the bow of a whale-watching ship off the coast of San Diego, CA. (Middle) Manzano HS MESA student Casey Haynes interacts with a robot at San Diego State University as fellow SIFTers watch. (Bottom) SIFT participants conclude their adventures with exploration of the jaw-dropping beauty and natural wonders of Torrey Pines State Park north of San Diego and above the majestic Pacific Ocean.



Exploring Adrift on the 2017 SIFT

Kim Scheerer

CI Coordinator

Four teachers and 24 MESA seniors from around New Mexico headed west... to the OCEAN! This year's Senior Incentive Field Trip (or SIFT) was focused on the learning about the ecological and technological wonders of the west coast urban wonder - San Diego.

Students, teachers and staff arrived at the San Diego airport on Wednesday, April 5th and STEMed it up through our return on Saturday, April 8th. Our trip was packed with delights, learning and fun.

After arrival, our group headed straight to the world famous San Diego Zoo. We were fortunate enough to get a behind-thescenes tour of multiple areas, including the giraffe and elephant areas. After discovering the rhinos, tigers and bears (oh my) of the Zoo, we also toured the USS Midway, and accompanying World War II memorabilia, and then took in the stars after an Astronomy lecture at the Fleet Science Center.

The next day took us out onto the water at Mission Bay – a quick kayak lesson and fish dissection helped to remind students of the value of our water resources. Keeping with the marine theme, our group visited and tromped about on the Scripps Institute of Oceanography's famous "Scripps Pier". As a trained marine biologist, this was one of my favorite experiences. Some of the top marine research in the country comes out of Scripps and we were lucky enough to meet graduate students that took us on a tour of the geology and experimental marine labs. The day ended with a quick lesson and flight at I-Fly, a premier facility to help understand and experience the joys of sky-diving.

Our final two days included a tour of San Diego State University's engineering facilities, courtesy of their current MESA students. The campus was especially beautiful with San Diego experiencing a 'super bloom' event due to a moist winter and the college student tour guides were personable and friendly with great tips for college life. After a campus lunch, we were back on the water for whale watching. We saw WHALES! Have you ever seen a whale? It's a "whale" of an experience!

Even our day of departure back to Albuquerque was an educational experience. Our final event took us to the shores of Torrey Pines State Park. The visit to the park, nestled along the seaside cliffs north of La Jolla, featured a hike through the coastal sage scrub and down to the ocean. A feat of courage and display of character got most students into the crashing, cold waves of high tide!

Predicted Changes in Education-2017

By Anthony Kim

Reprinted with permission from Education Weekly

As we move through 2017, I'd like to reflect on what this year will mean for education. In the months to come, we will face substantial shifts resulting from the elections of the past year. As the CEO of a personalized-learning company, Education Elements, I use this time of reflection to consider what changes and shifts are afoot and predict five major changes that I predict 2017 will bring:

- 1. School districts are going to face a lot more competition from charters, vouchers, and the internet. The confirmation of Betsy DeVos as U.S. secretary of education makes this prediction a near certainty. For the first time, in many cases, districts will actually need to market themselves and compete for enrollment. This will require every district to think more like a customer-centric organization. While it's going to be a painful change in mindset for some, districts that are focused on personalized learning already see increased enrollment, higher teacher satisfaction, and greater student engagement, according to an Education Elements survey of school district clients.
- 2. We will continue to struggle to address the needs of different generations working and learning in schools today if we don't make significant changes to "the system." There is a fundamental difference between the analog generations (which include the baby boomers and Generation Xers) and the digital generations (millennials and Generation Ze-

- ro). The analog generations, of which I dren and stewardship of the community's am a member, grew up with limited in-funds. The community needs to feel that formation, a greater appreciation for hier- every child is well cared for and that archy, and an acceptance of being man- budgets are used effectively. aged. Those in the digital generations are 4. We will continue to see consolidation different. They grew up in a high-speed, of companies in the ed-tech marketconnected world with access to immedi- place, as well as some companies that ate information every day. They therefore break through and provide tremendon't feel as bound or limited as older dous value to school districts. Ed-tech generations. Right now, the systems we companies need to figure out how to proput in place-including the school day, vide value to school districts, not just to the bell schedule, the teaching process, teachers and classrooms. They also need the work environment, and the organiza- to help districts figure out how to support tional culture of schools and school dis- the change needed to implement products tricts-all go against the grain of the well. This is going to happen only when younger generations and will have to be companies start integrating value-added changed to better suit today's learners.
- creased competition from vouchers and used with a writing program.
- gaps within each district.
- Diversity: There are many reasons we There is no doubt that 2017 has the poneed diversity in the classroom, and it's tential to be an exciting year, but it will not just about racial, socioeconomic, or academic diversity for its own sake. Stu- prepare for the Every Student Succeeds dents also need to learn to work collaboratively-a practice that is critical for education. My five predicted changes and preparing them for the workforce.
- levels, including stewardship of the chil- ahead.

- services into their product offerings, such 3. Measures of success will center on as helping school leaders understand how equity, diversity, and stewardship. In- a reading-comprehension program can be
- choice will likely result in increasing 5. School systems will focus more on equity gaps. We already know that simp- districtwide change, realignment of ly providing students with equal access to resources, and organizational design. technology and the internet doesn't en- Implementing change quickly and sustainably is a challenge most organizations *Equity: Every child and every school in face, and school districts are no different. a district needs equal opportunities and District leaders need to focus on learning resources to reach their full potential. It and growing while doing the implemenrequires constant work to fill opportunity tation work, rather than spending so much time on planning and evaluating.

also bring deep challenges, as districts Act and work with a new secretary of others will demand new partnerships and · Stewardship: This comes in multiple conversations for us to embrace what lies

School Districts Foci

Rick Cole

CO Regional Coordinator

It was a bold statement for any superintendent to make. But that is exactly what Albuquerque Public Schools Superintendent Raquel Reedy did at the Mission: Graduate meeting March 3.

Reedy stated, "We currently have 1,500 high school students doing internships. But we want there to be 15,000 internships by 2020." A ten-fold increase in internships in just three years is not just a bold assertion but indicative of the ambition of APS to not only join the national trend to increase high school internships but to set the pace in the trend.

"I am not sure if Superintendent Reedy realizes what will be required for her goal to be achieved," remarked Mission: Graduate Executive Director Angelo Gonzales. "But it is commendable that the district realizes the importance of internships and is pursuing them accordingly."

High school internships are not new. To a certain degree, they have been around as long as school. Throughout history, students have often worked as apprentices to learn a skill, trade or profession while also attending classes. But

in the 21st century, internships are getting explains Mora. "Businesses, particularly new traction as employers note that their here in New Mexico, often have job prospective employees are not "job- openings that go unfilled because proready." Indeed, the US Department of spective employees not only don't have Education notes that in 2015 only about work experience or essential skills, they one percent of high school students were don't know how to work with others." participating in "official" sponsored internships. Undoubtedly, millions of high school students are working part-time jobs and getting workplace experience. But the vast majority of the time they are not receiving training for the career they ultimately wish to pursue. Thus, flipping burgers down the street may teach students workplace etiquette and basic responsibility but they are often not learning knowledge and skills essential to their desired career or the higher order soft skills (think teamwork, formal communication, time management, etc.) that set apart good employees from those who are mediocre.

Ralph Mora, Director of Apprenticeship and Certified Craft Training for the Associated General Contractors of New Mexico, says the need for official, school -sponsored internships has never been greater.

"The needs of today employers, whether they are in the construction trades or any technical industry, require employees to begin a position job-ready,"

That is why school districts are under pressure to collaborate with organizations (industry, non-profits, government agencies) to develop internship pipelines to align with trade school and university certifications as well as the job qualifications of the work place. Thus, what was once primarily the abode of college students has over the past decade or so become a rapidly developing component of high school programs. And as the search for talent expands to fill internships, high school students are now being targeted to increase the quality of organizations/ companies' internship programs and future candidate pools.

According to columnist Dave Imbrogno, a recent study conducted by Millennial Branding, a Gen Y research and consulting firm, surveyed employers from across the country. The study found that "half of employers are either currently accepting applications from high school students for internships or plan to this year. That means that although companies are currently developing their





Photos by Rick Cole

(Left) Former Las Cruces MESA student Edward Park benefited from a research internship with NMSU. (Right) The 300-acre Facebook construction site in Los Lunas is just one of scores of sites open to internships.

us on HS Internships

pipelines to include high school students, experience (81%) and the vast majority of the high school popunetworking (72%)." Each of these items is Reedy, and other superintendents nationlation still remains untapped. Indeed, most the typical result of university internship ly ineligible for internships because of college applications, while developing time constraints, even though many of strong professional contacts early in their these would be considered top-notch in- careers. tern candidates. Depending on the school and community, another 20-40% work sons companies are offering high school part-time jobs are also unavailable because internships are to "support local high of time constraints. That means 30-60% are totally untapped and unrecruited to find future college interns (18%)." However, students could be recruited from each of these groups if the options were increase greatly through support of local truly fruitful. Organizations/companies need to begin implementing programs that also bring a fresh perspective to compaattract promising high school students nies, and those students that succeed in no doubt high school students are hungry sooner rather than later.

up as internship programs develop, mak- ing their college years. ing it more difficult to attract top high school talent. Companies that get ahead of future.

internships are "new skills (92%), work neering firm.

estimates indicate that 20-30% of high participation, and high school students are school students actively participate in hoping for the same outcomes. New skills school athletics and school-based extra- and work experience are concrete items curricular activities making them general- that students can put on their resumes and

According to the survey, the top reaschools (46%), gain new ideas (23%) and Brand recognition and employee morale communities. High school students can high school internships are likely to re-The competition, of course, will heat ceive offers to return for internships dur-

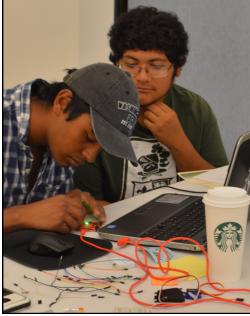
Such was the case with Jedediah Alderete of Peralta and Zach Harris of the curve to create and implement a high Bosque Farms when they participated in companies and students, the trend of reschool internship program will have a Sandia National Laboratory STAR internmore successful recruiting outlook in the ships as Los Lunas High School students. Alderete, BS and MS in mechanical engi-Also, according to the Millennial neering, is now a lead engineer at Sandia Branding survey, the top three things that Labs. Harris, BS in chemical engineering high school students want to get out of and MBA, is a manager for a local engi-

With such anecdotal knowledge, wide, are rushing to develop viable high school internship programs. As these programs are designed and implemented, it will be essential that schools and businesses have open and effective working relationships, combine the search for and nurturing of high school interns with an organization/company's philanthropic strategies and the roles of high school interns must be aligned to skills the students already possess or can easily gain. NM ME-SA is already poised to contribute to preparing students for interns through the many activities the organization sponsors that collectively address achievement, leadership and service learning.

As the Class of 2017 graduates, there is for meaningful work to help shape their future career objectives and organizations/ companies need to take advantage of this willingness to work.

Thus, with obvious benefits to both cruiting high school interns is only likely to grow. Plans are being implemented locally, at the state level and nationally to make internships a bigger component in secondary education. Can it grow ten-fold in three years as Superintendent Reedy asserts? Time will tell.





(Left) Construction is just beginning on the 1,627-acre Central NM Rail Park, expected to generate at least 5,000 technical jobs and hundreds of internships for high school students in the next decade. (Right) Owen McCaffrey, left, and Cesar Maestas, right, of Los Lunas High School are prospective interns working on an Arduino coding project at a Central Outer Regional workshop.







The Many Faces of MESA Day 2017—

(Clockwise from top left) Chris Arena of John Adams MS posing as a thinker, Bailey Dodson of Cibola HS relocating objects, Adrian Luna of Deming HS getting dexterous, Martha Pena of Robertson HS celebrating 25+ years in MESA, Anastacia Salas-Munoz of Ernie Pyle MS tossing accurately and Ben Imbus of John Adams MS is just happy!



NM MESA Executive Director

Toney Begay

Deputy Director

Ling Faith-Heuertz

State Program Coordinator

Anita Gonzales

Accounting Technician

Helena Kirkwood

Editor

Rick Cole

Regional Coordinators

Kim Scheerer, Alejandra Carmona-Cruz, Betty Chancey, Rick Cole, Nicholas Kunz, Terry Ramirez, Shawndeana Smith

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