

eNews

The official e-communication
for Colorado MESA



Welcome to the August 2008 - Volume 3, Edition 1 of the Colorado MESA e-News electronic newsletter. Please let us know how we can assist your MESA program and make a positive difference for our MESA students. For more information on any item mentioned in the newsletter,

please contact our office at 303.352.3869 or via email at ColoradoMESA@ucdenver.edu. In this edition, you'll find information on recruitment timelines, MARK 2008, Multi-Task Trebuchet Challenge Design updates and much more. To view past newsletters or print a pdf version of the current issue, visit www.cmesa.org/news.html

Welcome Back!

Welcome Back! We hope that you had a relaxing summer vacation. The Fall semester is quickly approaching and Colorado MESA has been hard at work this summer preparing for 2008/09 academic year. As many advisors gear up for the upcoming fall semester, we would like to note a few items to keep in mind for the first few weeks of school:

- **Student Recruitment**

Recruitment and retention of students is crucial to the success of the MESA program. It is important for MESA advisors to understand that many underrepresented students respond differently to outreach and recruitment. Simply announcing the MESA meeting time and location is not a sufficient recruitment effort. Successful minority recruitment means that additional forms of outreach must be undertaken. Below is a suggested timeline for recruitment:

August 2008 Enlist the assistance of the "veteran" MESA students and the math and science faculty to identify potential MESA students that meet the general requirements.

September 2008 Organize the first MESA student meeting and select the meeting times and places for the remainder of the semester.

Submit your Advisor Information Sheet to the statewide MESA office.

Plan your MESA semester parent meeting.

- **MESA Forms and Documents Submission Deadlines**

[MESA Advisor Information Sheet](#)
[Parent Permission Forms](#)
[Student Enrollment Forms](#)

Friday, September 19, 2008
Friday, October 10, 2008
Friday, October 10, 2008

- **REVISED Student Enrollment Form**

In an effort to streamline our data collection, we have revised our MESA Student Enrollment Form

(SEF) for the 2008-09 academic year. Please make sure to use the updated form! You can download the form at www.cmesa.org/advisor/forms.html.

- **University Mentor Program**

Our university mentor program provides an opportunity for MESA students and advisors to interact with mentors (university students, retired engineers and engineering professionals) in the field of mathematics, engineering, science and technology. Mentors provide leadership skills and serve as a role model for students, assist you with administering activities and developing projects for the local/statewide/national competitions.

Over the summer, we have made several improvements to our University Mentor program. One significant change from last year, but similar to years prior, we are requesting that each school/building requesting a University mentor split to cost 50/50 with Colorado MESA. Given a limited number of resources, both financial and human, this allows us to maximize the number of MESA programs using a university mentor.

Please note that university mentors are currently available in the Denver Metro area. For areas outside the Denver Metro, please contact the MESA statewide office for more information. To request a mentor, please complete the online request form at <http://www.cmesa.org/advisor/mentors.html>.

SAVE the DATES!

MESA Advisor & Retreat Kick-Off (MARK)

September 11 & 12, 2008

[Click here to register for MARK online >>](#)

Fall Fling 2008

November 6 & 7, 2008

University of Colorado Boulder



MESA Advisor Retreat and Kick Off (MARK)

Professional Development Training

September 11th and 12th, 2008

MESA's annual MARK event is a comprehensive professional development workshop for our MESA advisors and official kick MESA kick-off event for the upcoming academic year. The event offers a series of workshops that support, stimulate and provide networking opportunities with universities, industry representatives and MESA advisors from around Colorado. Advisors have the opportunity to learn how to integrate hands on STEM related projects into their MESA programs. In addition, advisors will receive continuing education credit from the Colorado School of Mines for attending the professional development workshop. Please note that this year's MARK event is a divided into two (2) one day sessions as follows:

Day 1 – Thursday, September 11, 2008

Recommended for New MESA Advisors

Xilinx, Inc.

3100 Logic Drive
Longmont, CO 80503
9:00AM – 4:00PM

[Click here to view agenda >>](#)

This year, we collaborated with our St. Vrain MESA program for the first session. Day 1 targets our new MESA advisors with a one-on-one detailed orientation and a Resource Exhibitor Session that is open to all MESA advisors. The goal of the first day is to expose new advisors and advisors who need a refresher course on the MESA program logistics and available resources. **Please note, that Day 1 is designed for all new MESA advisors and/or MESA advisors who would like to re-familiarize themselves with the MESA model.**

The Friday session will include hands-on project workshops, curriculum overview and much more... The event will conclude with the traditional MARK Professional Development Training on Friday at the University of Colorado at Boulder.

Day 2 - Friday, September 12, 2008
Recommended for ALL MESA Advisors

University of Colorado at Boulder
8:00AM - 3:00PM

[Click here to view agenda >>](#)

All advisors from around the state will attend the General MARK Professional Development Workshop, where we will highlight the new 2008-09 policies, procedures and new design challenge standards. This year's MARK event will feature a renewable energy, soil analysis, roller coaster design and project management workshop for advisors.

[Click here to register for MARK online >>](#)

STEMapalooza – Field Trip Opportunity

Colorado MESA will showcase our MESA program and schools at the first annual STEMapalooza on October 24 & 25, 2008.

STEMapalooza is a two-day event that features exhibitors from around the state of Colorado that support STEM programs for students and educators and employ hundreds of thousands of jobs in STEM related careers. The **goal of STEMapalooza** is to bring industry, educational institutions, students and organizations together to:



- Create urgency and enthusiasm about the need for continuous and rigorous STEM education focused on the needs of the economy
- Develop awareness of opportunities in STEM education in Colorado
- Engage policy makers and the media in the STEM conversation
- Develop networks and partnerships among STEM providers
- Connect employers and job seekers with the thousands of available jobs/internships/externships that utilize STEM education and skills

- Highlight successes and generate a forum for sharing STEM practices across stakeholder groups
- Take responsibility for improving competitiveness in the international arena of STEM education.

Field opportunities are available and appropriate for upper elementary, middle school, and high school students. This event provides an amazing venue for students to foster the desire to learn more about careers in STEM, extracurricular programs, support Colorado MESA, and simply, how the world works.

Students will have opportunities to:

Meet with professionals in STEM fields, such as engineers and scientists that use math and science every day; Engage with other students and participate in exploration activities that will foster thinking about how math and science is applied in real world settings, including activities such as:

- Rocketry by the Space Foundation
- Fast Track Racing (an exciting and educational application of math and science using race cars)
- Animal exhibits by the Denver Zoo
- Butterfly Pavilion bringing "Rosie the Tarantula" and her other invertebrate friends
- Spacelab Planetarium
- WWI French Airplane built by North High School students
- computer simulations
- various hands-on student demonstrations

6 sessions are available:

1. Friday, October 24th, 9:00 a.m. – Noon
2. Friday, October 24th, 11:00a.m. – 2:00p.m.
3. Friday, October 24th, 1:00 p.m. – 4:00 p.m.
4. Saturday, October 25th, 9:00 a.m. – Noon
5. Saturday, October 25th, 11:00a.m. – 2:00p.m.
6. Saturday, October 25th, 1:00 p.m. – 4:00 p.m.

****NOTE:** Bagged lunches will NOT be available for purchase. There are concession stands within the Event Hall should you choose to stay during lunch hours. Open floor space will be available for students to gather and eat lunch, but the Convention Center does not allow attendees to eat outside of the exhibit hall (unless outside of the building).

Registration

[Click here for Online Application](#)

Deadline: September 30th, 2008

More detailed information regarding directions, school bus drop of zones, permission slip forms, and event instructions will be sent to registered contacts 3-4 weeks before the event.



Congratulations to Heaton Middle School & Pueblo East High School

Students from both Heaton Middle School and Pueblo East High School represented Colorado MESA at the annual MESA USA Engineering Design Challenge in Maryland June 19-22, 2008.

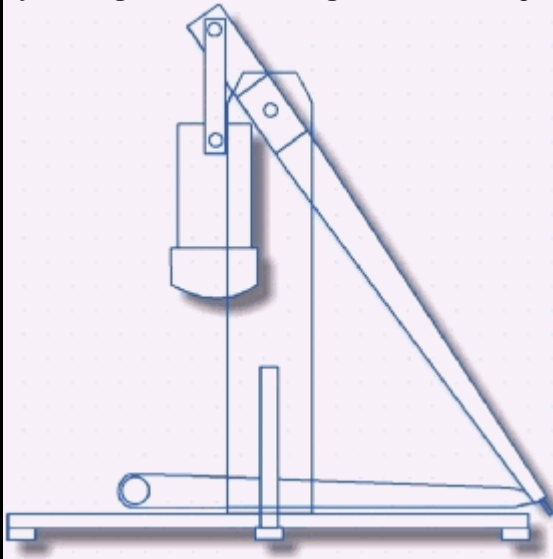
The 2008 design challenge was to design, build, test and present a modern version of the ancient counterweight trebuchet. Students competed on four different components related to the trebuchet; Performance, Technical Paper, Academic Display and Oral Presentation before a panel of industry judges. The overall score is combined score of all the components.

Danyale Hager, Markia Higby, Jazmin Negrete, and Catalina Santos led by advisor Mike Almeda placed 2nd overall at the 2008 Engineering Design Competition middle school category.

Pueblo East High School represented Colorado in the high school category, taking 2nd place overall. Led by MESA Advisor Jeff Osborne, team members include Maleah Gregory, Aaron Griffin, Rose Snyder and Ryan Zanini. Pueblo East High School has represented Colorado at the national competition for the past three years, placing in the top each year. [Click here to view the Pueblo News 11 video segment >>](#)

MESA USA National Design Challenge **Multi-Task Trebuchet**

MESA USA presents its national engineering design competition specifications for the 2008-2009 year. The Multi-Task Trebuchet event involves the transfer of energy from the counterweight to the projectile being thrown. **The maximum amount of energy available to complete the tasks will be limited to that stored by raising the counterweight.** Colorado high school and middle school teams will compete in the following four components in order to qualify for nationals:



1. Performance
2. Technical Paper
3. Academic Display
4. Oral Presentation

Please note the following areas in the revised 2007/08 rules and guidelines:

- Projectiles
- Academic Display
- Oral Presentation
- Device Inspection Criteria

The high school qualify event is schedule for **November 6 & 7, 2008** at the annual **Fall Fling Event** at the University of Colorado at Boulder. For more information or questions, please email us at

coloradoMESA@cudenver.edu.

Energy Hog School Program Now Available for **Elementary Schools – Accepting Reservations Now!**

The Energy Hog makes learning about energy fun! The Energy Hog School Program makes it easy for teachers to introduce energy education into their classrooms to teach students the importance of saving energy. The two-part program, which begins with classroom lessons and ends with a memorable visit from a “real, live” Energy Hog (a mascot costume), teaches students where energy comes from, how we use energy, and the importance of energy efficiency and conservation.

Thanks to funding provided by the Colorado Governor’s Energy Office, the program is now available to

elementary schools across Colorado free of charge during the 2008-2009 school year, as long as funding lasts.

Participating educators receive everything they need in a box. Included are a CD of classroom materials; a professional mascot costume for the Energy Hog; a white lab coat for the Energy Hog Buster; and a script for a ready-made skit. The CD contains printable workbooks for students and a printable teacher's guide filled with energy lessons and activities. All participating students receive an Energy Hog temporary tattoo. For schools with a free or reduced lunch program in the Denver area, a special assembly program with actors is available.

Included in the classroom lessons are take-home assignments that empower students to apply what they've learned to their own homes. One such activity called the Energy Hog Scavenger Hunt is a child-led home energy audit. It allows students to apply what they've learned in the classroom to a real-life scenario as parents and children work together to identify their family's energy-saving potential.

Following the classroom lessons, teachers can bring to life the importance of saving energy by wearing the Energy Hog mascot costume and performing the ready-made game-show format skit. The skit reinforces the classroom lessons and creates a life-long memory of the importance of saving energy. Alliance to Save Energy staff are available to consult with educators throughout the program.

The Energy Hog school program is now available to elementary schools in Colorado free of charge during the 2008-2009 school year, as long as funding lasts. For schools with a free and reduced lunch program in the Denver Metro area, a special school assembly program is available through Energy Outreach Colorado by calling Heather Gullen at (303) 226-5051. To learn how your school can participate in Colorado Energy Hog programs, contact Maria Ellingson, (303) 333-4570.

UPCOMING EVENTS

▣ [2008 MARK Professional Development](#)

Thursday, September 11 &
Friday, September 12, 2008
Xilinx/University of Colorado at Boulder

▣ [STEMapalooza](#)

October 24 & 25, 2008
Colorado Convention Center
9:00AM to 4:00PM

▣ [St. Vrain MESA Expo](#)

Thursday, September 11, 2008
Xilinx Conference Center
1:00PM - 4:00PM

▣ [Fall Fling 2008](#)

November 6 & 7, 2008
University of Colorado at Boulder



University of Colorado Denver | PO Box 173364 | Campus Box 104 | Denver, CO 80217
Phone 303.556.8568 or 303.352.3869 | Fax 303.556.2344 | Email ColoradoMESA@ucdenver.edu

© 2008 Colorado Minority Engineering Association