UCLA MESA
Advisors Meeting

August 26, 2015
Ice Breaker
Card Arrangement Challenge

Instructions

With a partner, work together to arrange the 13 cards provided as described below.

The challenge is to arrange 13 cards so that when you hold the cards face down, the first card turned over is **Ace** and the second card is put at the bottom of the pile in the person’s hand. The third card turned over is a **2** and the fourth card is put at the bottom the pile. The fifth card turned over is a **3** and the sixth card is put at the bottom of the pile. Keep repeating that process with the cards face down so that all the cards turned over are in consecutive order, Ace through King.
Ice Breaker
Card Arrangement Challenge

and the winners receives ....

Starbucks Gift Card

Answer: A, Q, 2, 8, 3, J, 4, 9, 5, K, 6, 10, 7
MESA Advisor Folder Contents

Left Side:
• Ice Breaker : Card Arrangement Challenge
• Fall 2015 Deliverables Checklist
• 2015 -16 MESA Enrollment form Guideline
• SparkFun Flyer
• UCLA MESA tutoring Flyer
• 2015 – 16 MESA Advisor Booklet

Right Side:
• MESA Advisor Stipend Awards and Criteria Agreement
• MESA Questionnaire
• W-9 (if applicable)
• Advisor Profile
Beginning in 1997 with only five schools, UCLA CEED's MESA Program served 19 schools and approximately students.

Works with teachers in the Los Angeles Unified Centinela Valley and Inglewood Unified School Districts.
# Active UCLA MESA Schools

<table>
<thead>
<tr>
<th>High Schools</th>
<th>Middle Schools</th>
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<tbody>
<tr>
<td>Academy of Science and Engineering</td>
<td>Burroughs MS</td>
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<tr>
<td>Crenshaw HS</td>
<td>Cochran MS</td>
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<tr>
<td>City Honors HS (IUSD)</td>
<td>Crozier MS</td>
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<tr>
<td>Fairfax HS</td>
<td>Emerson MS</td>
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<tr>
<td>Hamilton HS</td>
<td>LACES MS</td>
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<tr>
<td>Inglewood HS (IUSD)</td>
<td>Monroe MS</td>
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<tr>
<td>LACES HS</td>
<td>Parent K-8 School</td>
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<tr>
<td>LACSHA</td>
<td>Webster MS</td>
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<tr>
<td>Lawndale (CVUSD)</td>
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<tr>
<td>Morningside HS (IUSD)</td>
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<tr>
<td>UCLA Community School</td>
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<td>University HS</td>
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<td>WESM</td>
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MESA CALIFORNIA MSP SITES

• NORTH REGION:  CSU Chico FS, Alturas RISE FS, Ukiah FS, Santa Rosa FS, CSU San Jose, CSU East Bay, Sacramento Area MSP, University of the Pacific

• CENTRAL REGION:  UC Santa Cruz, UC Santa Barbara, CSU Fresno

• LA METRO REGION:  UCLA, CSU Los Angeles, USC, CSU Long Beach

• SOUTH REGION:  Chapman/UC Irvine, UC Riverside, Imperial Valley, CSU San Diego
California MESA Program Divisions

MESA STATEWIDE OFFICE
Oakland, CA

MESA SCHOOLS PROGRAM
19 SITES

MESA COMMUNITY COLLEGE PROGRAM
36 SITES

MESA ENGINEERING PROGRAM
12 SITES
MESA’s Recruitment Statement

MESA serves educationally disadvantaged students and, to the extent possible by law, emphasizes participation by students from groups with low rates of eligibility for four-year colleges.

Refers to those students who historically have been less well represented in higher education than in the general population of high school graduates.

Educationally Disadvantaged Indicators include 5 categories:

- Economic status
- Past participation in similar programs
- Education Environment (school characteristics)
- Family/Home Environment
- Academic Performance Indicators
Students Selection

- MSP Enrollment Form
- Educational Disadvantaged Inventory (meet at least one indicator)
- Reflect population of school
MESA Statewide Office

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UCLA MESA Annual Goals 2015 - 2016

Annual Goal 1: Student Academic Development in STEM
Implement weekend Math Tutoring on campus from September - December

Annual Goal 2: College and STEM Career Preparation
Plan and conduct two workshops during the academic year that introduce students to web development and/or coding. September - November.

Annual Goal 3: Teacher Professional Development
Provide opportunities for teachers to learn and use technology and project based curriculum in the classroom.

Annual Goal 4: Parent Education and Involvement
Plan and implement Parent Orientation on the UCLA campus.
MESA Day Competition Updates

Balsawood/Craft stick Bridges - no changes at MS or HS level

Balsawood Glider - no changes at MS or HS level

Egg Drop - no changes at MS or HS level

Model Science - no changes at MS and HS level

Mousetrap Car - no changes at MS and HS level

Public Speaking - no changes at MS at HS level
Solo Math

**MS Level** - only 8th grade can compete in MS Solo Math
Test is a mock PSAT test with multiple choice question for Math Section

**HS Level** - only 9-11 grade students can compete in HS Solo Math
Test is a mock SAT exam with multiple choice question from the Math section
MESA Day Competition Updates

Team Math Quest

*MS Level*
- only 6-7 grade students can compete in MS Team Math Quest
- only one level; covers Gen Math, Pre-Alg., Alg. 1
- teams will be judged at the level of student in the highest grade

*HS Level*
- only 12th grade students can compete in team Math Quest
- only one level; covers Alg1 through Calc
MESA Day Competition Updates

Prosthetic Arm

– Cost of device cannot exceed $80.00
– Arduino must be used to device to open and close device fingers
– Cannot use wrist of fingers to control device in any way
– Unencumbered had can be used to activate device
– Different team member must perform each trail
– Poster must include block diagram of Arduino Programming
– Pseudo code must be included in appendix
– Discussion must detail integration of electronic into device
MESA Day Competition Updates

Prosthetic Arm

– UCLA MESA will buy a limited number of SparkFun Kits for teachers who are planning to participate in the PAC 2.0 competition.

– Kits are available on the SparkFun Website:
  ▪ SparkFun has a page dedicated to the MESA Prosthetic Arm competition
  ▪ provides, sample program, tutorials, and videos
Advisors Participation

MESA Advisors
Maximum - $2,000.00 ( $1000 per Semester)

A. FOR STUDENTS: Coordinate the Involvement of Students in MESA’s Academic and College Prep Activities
- MESA Project Preparation and MESA Day Competitions (Preliminary and Final Events)
- Participate in two or more STEM or College Planning Events: Example-JPL Challenge; MESA College Day at USC; UCLA Engineering SOG-Sponsored Activities (EIT/YMD/WISE)
- Organize opportunity to review students’ academic plans —Priority Grades 8-11 
  (Align student’s course planning with university admission requirements)
- Disseminate college-going materials (summer programs, scholarship/financial aid)

B. PROFESSIONAL DEVELOPMENT (PD)
- Teacher/Advisor Meetings: September and January
- LA Metro Region MESA Teachers Training Day or another PD Activity
- Judge MESA competition at Preliminary Event

C. SUBMIT REQUIRED FORMS
- MESA Advisor’s Profile Form
- Student Enrollment Forms with Parent Signature by the indicated deadline
- (Minimum 40 students per teacher) Enrollment forms submitted after deadline will receive a 10 % reduction in the stipend amount
- Activity Report: Teacher/Student:  May
- Assist with the collection of transcripts of MESA participant who graduated at the end of the academic year
Advisors Participation

**MESA Counselors**
*Maximum of $1,000.00 ($500 per semester)*

**Assist 11/12th Grade Students with the College-Going Process**
- Disseminate college-going material and information to 12th grade students
- Assist with the enrollment of 12th graders in MESA and their participation in college-focused events
- Provide transcripts of MESA participants who graduated at the end of the academic year
- Assist with Senior Exit Survey completion
- Co-Judge MESA Competition at High School Preliminary Event
- Participate in at least one MESA teacher/counselor meeting

**Schedule of Payment**
- **Installment 1:** December (contingent on submission of enrollment forms)
- **Installment 2:** June

**Project Materials**
- $170.00 per teacher (included with Installment 1)
- Receipts must be submitted May with Activity Logs
Other Activities for MESA Students

AP Readiness Workshops at UCLA
2015: September 19, October 17, November 14, December 12
2016: January 30, February 27, April 2, and April 23

See flyer in booklet for more information

Cash for College—College and Career Convention
Oct. 28 - 29, 2015

See flyer in booklet for more information

College Day at USC – Oct. 31, 2015

More information will be provided as event date approaches
Other Activities for MESA Students

2015 JPL Invention Challenge
**Date:** Nov. 21, 2015
“Ball Fling Contest”
Deadline to Register – Oct. 3, 2015
**Note:** Complete competition rules provided on USB

2016 MESA Robotics Competition
**Date:** May 2016
Theme & Rules announced – Feb 2016

Computer Science Workshop for Students - TBD
This workshop will introduce students to programming. Details on workshop will be provided at a later date.
MESA Tutoring

In partnership with Engineering Undergraduate students from

Tutors will be available to assist students with math and science 9-12 non in 6270 Boelter

- Tutoring Dates
- Oct 3, 17, 31, 2015
- Nov. 7, 14, 2015
- Dec. 5, 2015
MESA Saturday Academy

Designed to give students a better understanding of engineering and physics concepts behind competition devices and to assist them in building device

- Balsawood Bridges – Jan 30, 2016
- Balsawood Glider/Planes – Feb 6, 2016
- Egg Drop– Feb 13, 2016
- Public Speaking – Feb. 20, 2016

Sign up information will be provided at the end of the year
MESA Advisors Professional Development Opportunities

September 26, 2015
Time: 8:15 – 3:00 p.m.
Location: Chapman University

Southern MESA Advisory Regional Training (SMART)
Participating advisors will learn how to build various projects and also receive tips on enforcing competition rules. Workshops include: Bridges, Mousetrap Car, Prosthetic Gliders, and Algebra the Hands-On Way

Prosthetic Arm 2.0 with Arduino
Participating advisors will learn how the new rules for the Prosthetic Arm 2.0 National Competition and to program servo motors to work with the prosthetic arm.
MESA Advisors Professional Development Opportunities

Date: TBD  Invent for Life Workshop
Participating teachers will be trained on how to teach the principles of problem solving and invention. The workshop can be taught in one 8-hour class or two 4-hour workshop. Teachers completing the workshop will receive a Invent for Life Workbook for use in the classroom. Workshop limited to 15 participants.

Date: TBD  Computer Science Workshop for Teachers
Focus on Computer Science

**Scratch** – a object oriented introduction to Java Programing

- helps young people learn to think creatively, reason systematically, and work collaboratively — essential skills for life in the 21st century.

**Code.org** - non-profit dedicated to expanding participation in computer science by making it available in more schools, and increasing participation by women and underrepresented students of color
Google Suite: Can be used to create interactive forms in the classroom that students can use on their a computer, smartphone or tablet

Google Forms: A way to survey your students during class.

Teachers can use it as a way to determine student grasp of a presented topic.

formLimiter is an add-on that allows you to limit the number of submitters, given a cut off to accept submissions and evaluate a cell to turn off a form.
Technology in the Classroom

Google Apps Education

Google Education Technology

Synergyse Blog
Student Organization Outreach Events

November 25, 2015
Engineers in Training Day

February 26, 2016
Youth Motivation Day (YMD)

May 20, 2016
Women in Science Day
Funding Opportunities

The MESA Advisor Booklet contain a wealth of information for possible funding sources

Funding Sources provided

Lowes
Wal-Mart
Voya Financial
Honda
Air Force
Toshiba
AIAA
IEEE
NCTM

As district budgets are getting tighter this is a great way to obtain funding for MESA and your classes
What’s Next?

School Hosts
HS MESA Prelims – February 27, 2016
HS MESA Prelims – March 5, 2016

Next Advisor Meeting Webinar - Nov. 18, 2015

*Invent for Life – Two Saturdays for 4- hours each
What weekends are best?

*Computer Science Workshop? What weekends is best?
*Note: the last two workshops will be held sometime between Sept - Dec

Peer Training
MESA Advisors Meeting – Jan. 13, 2016

Is there anything else you would like UCLA MESA to do for you?
Forms Submission

Submit the following forms before leaving the meeting tonight

- Advisor Profile
- MESA Questionnaire
- MESA Advisor Stipend Awards and Criteria Agreement
- W-9 (if applicable)
- MESA Enrollment Forms & Transcripts

Let me know who has volunteered to host:

- MS MESA DAY Prelims: Webster Middle School
- HS MESA Day Prelims: ????