New Mexico Mathematics, Engineering, Science Achievement, Inc.

34th Annual MESA Day

Celebrating Invention

April 7-8, 2022
UNM Continuing Education
Albuquerque, New Mexico

Official Handbook

34th Annual MESA Day Handbook
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MESA DAY GENERAL INFORMATION

The NM MESA, Inc., Annual Statewide Math and Science "MESA DAY" is designed to encourage the concept of problem solving through teamwork. It salutes NM MESA students for their commitment to academic excellence and reinforces the NM MESA mission of preparing students from historically underrepresented ethnic groups for college majors and careers in math, engineering and science. In keeping with our mission, advisors are encouraged to assemble teams that are representative of the ethnic and gender diversity of their school and MESA enrollment.

COMPETITION OVERVIEW: All of our events will address the topic of Celebrating Invention. NM MESA schools are invited to participate in our MESA Day as follows:

- On Site Science-Invention Station Quest
- On Site Math-New Mexico Math
- On Site Art Achievement-Artistic Invention
- On Site Engineering-Music and Machine Motion
- Prepared Design-IDEA Challenge, Solutions for Educators

ALL TEAMS: The MESA Day competition will run like a MESA Medley. Each team will be composed of 2-4 students. If schools have multiple teams, full team(s) of (4) members must be created and all events

filled before building an additional team. *Example:* Team 1 must be complete with 4 students and a Prepared Design submission before adding a Team 2. Team 2 can then be partially complete.

All team members will work together on the Prepared Design event. However, students will compete individually in their assigned event. If a team has less than (4) members, they can only compete in the number of events they have team members for. Team names MUST be declared as follows: (School) (Level) – (Team #). *Example: Mesaville High School – Team #1*

Each school is allowed to have (4) named alternates that can be used on any team. In addition, the day of MESA Day, teams may be condensed if needed to complete teams. *Example: Students can be moved from Team 4 to Team 2 in the event of no shows.* It is HIGHLY suggested to identify alternates in the event a student(s) cannot attend the event.

ELIGIBILITY: All participating teams must come from official New Mexico MESA School Programs. Schools must be considered official, and advisors must enter all profiles (A-2's) and submit all A-1's to their Regional Coordinator's Office by **5 PM MST, Friday, March 11, 2022**. Only the students listed on the roster (have their A-2 submitted <u>and</u> have their A-1's submitted) will be eligible to participate. **<u>NO EXCEPTIONS!</u>**

<u>Of Special Note to Middle/Junior High Schools serving 9th grade students</u> – Each middle/junior high school that includes a 9th grade class is allowed to have an event team with a maximum of 50% 9th grade students. These teams will compete in the Middle School division **<u>only.</u> <u>No</u>** 100% 9th grade teams will be allowed in middle school competition.

ATTENDANCE AND QUALIFICATION: All schools will be allowed to participate in MESA Day as follows. Please use the table to determine the number of teams your school can bring.

MESA Day Competition	
Small School: <= 30 profiles	Max number of teams=2
Large School: >=31 and <=69 profiles	Max number of teams=4
Extra Large School: >=70 profiles	Max number of teams=6

PLAGIARISM AND ADVISOR POLICY:
Academic honesty and personal integrity are essential to ensure future success as college students and STEM Professionals. As such, NM MESA expects that the work will be solely the work of the students. If the work or ideas of another are used to further students' work, then proper credit must be given to the owner. Failure to do so will result in an act of Plagiarism. If it is determined that a student committed plagiarism, they will be disqualified from the competition and will be ineligible to receive any awards. They may also risk further sanctions from NM MESA.

Due to the nature of some events, the event will be done with the trust that all students will abide by this policy. There will be unmonitored times. All onsite events are to be completed individually with the assigned student solely completing the task. The prepared design event should be completed by the entire student team and be the original work of the students.

Advisors (or non-competitors) are NOT allowed in any competition. All advisors are expected to assist their teams with meeting deadlines, register their teams, assist their students to ensure they are where they need to be, and that the prepared design is saved and submitted correctly. Any complaints and/or appeals need to be addressed by the students to the Event Coordinator during the event.

COVID POLICY: All events are expected to be completed in person (besides the Prepared Design) and they will not be converted virtually. If an individual student cannot attend due to a quarantine requirement, a named alternate may take their place. If an entire team is unable to attend due to school closure or quarantine, then the program will not be allowed to compete in the on-site events and a makeup will not be arranged. The team's prepared design will still be included in that event for consideration and an "Other Competition Credit" in MIMS.

Events will be held in a way to minimize contact with large groups of people (see agenda) and schools will be assigned shifts to host the event in smaller batches. This event will follow current CDC guidelines which could include wearing masks indoors, recommended distancing, required sanitation, etc. More information will come on the exact requirements closer to the event.

SCORING SUMMARY: Final team rankings will be based on the total score, which is derived by adding all of the component scores. *NOTE: Results are not final until overall results are reported.*

On Site Science	100 points
On Site Math	100 points
On Site Engineering	100 points
On Site Art Achievement	100 points
Prepared Design	100 points
Total	**500 points**

AWARDS: (Middle and High School)

Overall Teams: Placing 1st-3rd Overall
- Trophies will be awarded to the top 3 overall teams (1st-3th Place).
- Awards will be presented to individual team members placing 1st – 3rd Place.
  - 1st Place-Laptop Computer or Choice of $100 Gift Card
  - 2nd Place-$75 Gift Card
  - 3rd Place-$50 Gift Card

Individual Event Awards:
- Awards will be presented to the top student in each individual event (1st Place).
  - Award may be event specific (Approximately $50 Value)
- Additional awards may be provided.

At the conclusion of the event, an awards form will be collected from each student electronically that has won an award. It is HIGHLY suggested that students use a non-school email for gift card receipt as many school domains reject outside emails. *Awards will not be issued to any student that does not submit the required award form by the given deadline and awards will not be re-issued due to failure to receive them (by using an email that is incorrect or that does not accept the award).*

IMPORTANT: Awards will not be presented at the live MESA Day Competition. To ensure accuracy and to accommodate all competing shifts, final scoring will occur upon the conclusion of the event and a live virtual announcement will be done at 3:00 PM on April 11, 2022.

DISQUALIFICATION: Individual event teams can be disqualified for the following:
- Any team member not having a Student Profile (A2) or A1 on record
- Anyone else completing or helping with task that is not the registered student
- Prohibited advisor, parent, or other "outside" assistance in events
- Lead judge disqualifies an event team for not following event guidelines

- Unauthorized use of cell phones during event(s) to include phone calls, internet, and/or texts
- An event team is found to have violated event guidelines after competition has concluded
- General inappropriate behavior at any time during the competition
- If after competition is concluded, it is found that any team violated rules or requirements for any event, they may be disqualified from competition and will forfeit any qualification or placement spots they may have earned.

ADDENDUMS AND EVENT RESOURCES: There are several addendums and resources which will be useful in preparing for MESA Day. All addendums will be available on the NM MESA-MESA Day Event Website. These include:

- Any Final Logistical Information
- Prepared Design Template (in Word and Google Doc Format)
- Event Resources and Helpful Preparation Information
- MESA Day Frequently Asked Questions (FAQ)
    - Will be changed throughout year as questions arise

It is the responsibility of the school program to periodically check for resources and updates. Before competition date, it is STRONGLY encouraged as the FAQ section will contain any clarifications and/or addendums to the event handbook and these will be followed at competition. The FAQ document is an official MESA Day Document and is the official addendum to this handbook.

TRAVEL LOGISTICS:

Food: (1) meal voucher will be provided per competing student and school advisor. Exact location to be determined but will be a voucher for a meal at an Albuquerque local eatery within a pre-arranged menu. Because schools will be shifted in attendance, meals will be available for lunch or dinner depending on your individual school schedule. No other meals will be provided.

Lodging: Lodging will not be provided for participants in the MESA Day Event. Lodging is provided for competing MESA USA students (see the MESA USA manual for specifics) which will run consecutively. But is arranged independently.

Transportation: Transportation will be provided according to the current NM MESA Transportation Policy and reasonable bus-pooling may be expected with other schools from their district and/or area schools. If a school district has specific requirements that NM MESA is unable to accommodate, they may be responsible for financial assistance with transportation. Smaller vehicles and/or suburban use is recommended for smaller teams.

Agenda Shifts: See the General Agenda for exact times. During registration you will rank your preference of shift assignment and final assignments will be provided by March 14, 2022. Consideration will be given to accommodate travel logistics as best as able to include MESA USA participation, bus-pooling schools, distance traveled, lodging arrangements, or other travel considerations.

GENERAL NOTES: Students should be instructed to demonstrate good sportsmanship and will be held accountable for any misbehavior.

Cell Phone usage –Advisors are asked to follow and remind their students about appropriate cell phone protocol. Judges will repeat this cell phone usage reminder at the beginning of each competition and will relay what is allowed and not allowed. Failure to comply may lead to disqualification.

STATEWIDE OFFICE MIMS CREDIT: Students that submit items at the initial registration deadline will receive an "Other Competition" Participation Credit in MIMS. Students that compete in the live MESA Day Event will receive an additional MESA Day Participation Credit in MIMS.

SCHOOL SHIFT ASSIGNMENTS: During registration schools can rank their requested shift assignment. However, consideration will be given to transportation requirements (those who have shared), distance/time for travel, MESA USA participation (to schedule consecutively), and other constraints. NM MESA reserves the right to schedule as needed to maintain even attendance during all shifts and not all preferences may be able to be accommodated.

MESA DAY REGISTRATION: This is required for any team wanting to attend MESA Day. All registration and submittal of materials will be done via the Cvent System with a direct link on the MESA Day Event Page on the NM MESA Website. **ALL REGISTRATION WILL NEED TO BE SUBMITTED ELECTRONICALLY BY <u>FRIDAY, MARCH 11, 2022 at 5PM</u>.**

Closer to the event, advisors will be sent a final spreadsheet of registered attendees. The morning of the event, advisors will be asked to submit any modifications during event check in.

There is not a registration form collected in hard copy, but the following information will be needed to complete on-line registration. (1) Registration will be done per school and will collect all needed information for MESA Day participation.

Information You Will Need <u>Per School Registration</u>:
- How many teams you are bringing (and eligible for)
- Ranking for Attendance Shift and any Reasoning for Assignment
- What students are doing what event?
- Unique Email Address
- School Name, Level (HS or MS), Region
- Advisor Information and Contact information (phone, email, mailing address)
- Student Names and Assigned Event.
  - NOTE: There have been problems with student school emails accepting emails from the nmmesa.org domain. ENSURE that there is a good email as direct contact will be made to the competing student(s) by the Event Coordinators as needed.
- (4) Alternates Per School.
- Any specific team requests and/or information

Team Submittals You Will Need to Upload <u>Per Team in School Registration</u>:
- Prepared Design materials as listed below are required for participation in MESA Day.
- User Profile Template:
  - MUST be submitted in Portable Document Format (.PDF) as (1) Document.
- Project Video Link:
  - Must be accessible for public view in YouTube, Vimeo, Dropbox, Google Drive or similar format. Ensure access before submitting.

MESA DAY COMPETITION GENERAL AGENDA
Thursday, April 7-8, 2022 – Middle and High School
UNM Continuing Education Center
1634 University Blvd. NE; Albuquerque, New Mexico

TIME	Description	Location
	There will be (2) shifts each day to follow the same schedule	
7:00 AM	MESA Staff Report	
8:00 AM	**School Check in for AM SHIFTS 1 & 3**	*Lobby-126*
	Prepared Design Prototype Drop Off	*Auditorium*
	Judges Report for Event Orientation	*TBD*
8:30 AM	Shift 1 & 3 Welcome Instructions and Opening Ceremony	*Auditorium*
9:00 AM	Shift 1 & 3 On Site Events Begin: OS Math, OS Engineering, OS Science, OS Art Achievement	
11:00 AM	Shift 1 & 3 Prepared Design Prototype Inspection and Judging: Teams can report once done with their OS Event	*Auditorium-2nd Floor*
12:00 PM	**AM SHIFTS 1 & 3 Dismissal (or when done with events)**	
	Staff and Volunteer Lunch	
1:00 PM	**School Check in for PM SHIFTS 2 & 4**	*Lobby-126*
	Prepared Design Prototype Drop Off	*Auditorium*
	Judges Report for Event Orientation	*TBD*
1:30 PM	Shift 2 & 4 Welcome Instructions and Opening Ceremony	*Auditorium*
2:00 PM	Shift 2 & 4 On Site Events Begin: OS Math, OS Engineering, OS Science, OS Art Achievement	
4:00 PM	Shift 2 & 4 Prepared Design Prototype Inspection and Judging: Teams can report once done with their OS Event	*Auditorium-2nd Floor*
5:00 PM	**PM SHIFTS 2 & 4 Dismissal (or when done with events)**	
	Event Locations	
	Prepared Design	*Auditorium*
	On Site Math	*SB-1st Floor CR*
	On Site Science	*SB-2nd Floor CR*
	On Site Engineering	*Room B & C*
	On Site Art Achievement	*Room D & F*
	Monday, April 11, 2022	
9:00 AM	Prepared Design Videos Posted for Public View	*Website*
3:00 PM	Awards Ceremony: All Participants Log In as Desired	*Zoom*

MESA Day Event Information:

For On Site Events: Additional information for all on site challenges will NOT be provided in advance, beyond what is below. You are reminded that only (1) student will complete each challenge.

For Prepared Design: Teams will submit majority materials in advance at the Registration Deadline. They will need to bring their prototype the day of competition.

On Site Science

Invention Station Quest

Students will rotate through different stations to answer questions about major inventors and inventions. The stations quest will have hands-on problems, trivia questions, involve Kahoot and Gimkit platforms, and will give an opportunity for students to make inventions work. Major inventors and inventions used will be grade appropriate and based on NM STEM Ready! Science Standards.

On Site Engineering

Music and Machine Motion

Students will engage in a Rube Goldberg Reaction Machine style challenge in this design competition. Each student will be allowed to bring one bag (1 yard max) or crate of **clean** recyclable materials to use in their creative build. Points will be determined based on various categories of complexity and task completion. NM MESA will provide materials such as scissors, adhesives, measuring devices, basic building components and some festive reusable STEM items!

On Site Math

New Mexico Math: Staying NM True to Solve Problems

Students will compete in a hands-on challenge with math problems built around the diverse cultures of our beautiful Land of Enchantment. Students will discover and solve the math problems our Indigenous communities and early settlers faced when building homes, and irrigating land for growing crops. Get ready to identify patterns in weavings and be challenged with math that takes you up in a hot air balloon. Prepare yourselves for how math applies to daily life here in New Mexico. Get ready to flex your math muscles, bring your thinking cap for this round-robin style event. All needed supplies will be provided.

On Site Art Achievement

Artistic Invention

Students will learn about the vital link between invention and artistic creativity. Whether a technical design, 3D model, computer aided design, or even an abstract depiction, visual art can serve as a method to generate and refine ideas and to create prototypes and accessible representations of the different stages of innovation. Students will use their own skills to meet an invention challenge and condense ideas to create a prototype that will also be a piece of art. Artistic skill is welcome and encouraged, but not required. Everyone can be an artist!

Prepared Design

IDEA Challenge (Inventing, Design, Engineering, and Art): Solutions for Educators

Competition Overview:
"Invention education puts science, engineering design, making, and other skills into action! Inventive thinking is necessary to build an innovative, entrepreneurial, and diverse workforce to meet our country's future needs. Invention education utilizes a construct that asks students to identify a problem in their own lives, or that of those around them, employ problem solving and creative thinking processes to solve the problem, develop an invention idea, and finally build a prototype of the solution." -Invention Convention

"Human Centered Design is a creative approach to problem-solving. It's a process that starts with the people you're designing with and ends with new solutions that are purpose-built to suit their needs. Human Centered Design is about cultivating deep empathy with the people you're designing with; generating ideas; building a bunch of prototypes; sharing what you've made together; and eventually, putting your innovative new solution out in the world."-IDEO, Design Thinking

For this project, student teams will pair Invention Education and Human Centered Design to research, invent, and deploy an innovative ***Solution for Educators***.

Competition Components:
The components listed below will be used to assess the effective implementation of a human-centered design approach in the context of designing for educators, effective implementation of the engineering design process, the design of the prototype, and the delivery of the chosen solution.
- User Profile - The objective of the profile is to provide a summary of the human centered design process. The profile will emphasize the research the team has completed for the project.
- Prototype- Team will create a working prototype and provide an overview of the prototype functionality including a technical explanation of the required mechanical operation(s).
- Project Video - The objective of the video is to give a project overview and convince the audience that the design meets the user's needs and has value as a solution for educators.

Scoring Summary:
Below is a summary of the point values for each component:
User Profile	30 points
Prototype	40 points
Project Video	30 points
Total	100 points

MESA USA and Originality:
This competition is independent from MESA USA. Team(s) are allowed to use the same idea for both competitions if it satisfies both themes, but team(s) must complete the individual components for each competition and recognize that requirements are different for each competition. Teams cannot continue working on a project started in previous years and must be the original work of the current team(s).

General Rules:
1. See the rubrics and sections for user profile, prototype, and project video to find detailed specifications.
2. The project must address the requirement to design a ***Solution for Educators***.
3. Prototypes are required to have a machine as the main component of their design. By definition, a machine is "any physical system with ordered structural and functional properties. It is an

apparatus using or applying mechanical power and having several parts, each with a definite function and together performing a particular task. Machine elements consist of three basic types:
   a. Structural components such as frame members, bearings, axles, fasteners, seals, and lubricants.
   b. Mechanisms that control movement in various ways such as gear trains, linkages, and simple machines.
   c. Control components such as buttons, switches, indicators, sensors, and actuators."- Wikipedia
4. Teams will submit all required products in advance (User Profile and Video) during registration to be eligible to compete in MESA Day.
5. Judges will evaluate all submitted materials.

Event Procedure and Submission:
1. For the User Profile Section:
   a. Team(s) are required to complete the submission template. Submission template will collect team information and required information. **Available on the Event Website.**
   b. The submission template MUST be saved as a .PDF document WITH the school and team number in the document title.
   c. During registration, you will upload the required PDF submission template for each team.
2. For the Project Video:
   a. Videos should be created in a format that can be uploaded as described below.
   b. Videos are to be uploaded to a Dropbox, Vimeo, Google Drive, YouTube, or similar media sharing account with settings set to public.
   c. During registration you will provide the link for public viewing and review.
   d. If a video cannot be opened or viewed by our judges or during the public showcase it will not be scored. Please ensure all sharing settings are applied.
   e. Video must be available through April 30, 2022.

User Profile

Objective: The User Profile provides an overview of the human centered design process used in the entire project. Teams must use the User Profile Template (**see Event Website**).

Required Elements
- Problem Statement: Describe the people who will benefit from the project and the challenges they face. Discuss the solution(s) that the project hopes to address.
- User Research and Methodology: Discuss key information about the users gathered through your research, interviews, and ongoing discussion with the user throughout the project. The information shared here should be directly related to the user's needs, insight, goals, and prototype.
- User Insight: Discuss your team's understanding of the experiences, emotions, and motivations of the users. This insight should inform the rest of the project and help the reader have a deeper understanding of need(s) of the user.
- Current Solutions: What are current solutions that you have researched to help you solve your problem? Why is your design innovative?
- Prototype Iterations: List (2) iterations of your prototype before arriving at your final prototype. What were the main design considerations in each one and what changes were made in each one and why?
- Protoype Tests: Testing is important in the Engineering Design Process. What tests did you do to determine if the prototype meets the needs of the user?

- User Feedback: What feedback did you collect to ensure your prototype met the needs of the user?

Prototype

Objective: Prototype provides an overview of the prototype functionality including a technical explanation of the mechanical operation(s). Teams must use the User Profile Template (**see Event Website**) and bring their working prototype to the MESA Day Competition.

Required Elements
Team(s) must answer the required questions in the template:
- Machine Elements: List key features, illustrating that the design will adequately meet project goals.
- Design Rationale and Challenges: How did your final design meet the needs of the user?
- Design Considerations: There are many things that go into a final build of a prototype. They can include material considerations, cost considerations, limitations, needed skills, etc.
- Prototype Drawings: include up to (2) pictures highlighting your prototype. Include any labels with key design elements. Scale should be included as needed.

The day of competition students will be interviewed by judges. Questions will allow judges to better understand the machine operations of the prototype, how it meets the need(s) of the user, and the team's understanding of their project.

Prototype Rules
1. The prototype is required to work. Failure to work will result in no points awarded for the live portion of the event.
2. Prototype cannot include any material that is harmful, toxic, or messy. No liquids or similar materials. No glitter, confetti, or similar materials.
3. Prototype must operate on its own. There is no guarantee of electricity or internet usage. If device requires power or internet, it must be provided by the team.
4. Prototype must operate safely-no projectiles, flammable conditions, etc.
5. Prototype operation may be started by user (control component), but mechanism operation must work independently.
6. Prototype should be designed to be used by any user (i.e. judge). Teams should be prepared to have judge demonstrate their product if needed.

Project Video

Objective: The objective of the video is to give a project overview and convince the audience that the design meets the user's needs and has value as a solution for educators. Students will prepare a creative, engaging video to showcase their project. The video should define the problem; provide a description of their user and their needs; and show how their prototype helps meet the need(s) of the user.

Required Elements
- User Introduction and Problem Addressed:
  - Describes the user.
  - Describes the problem the team is solving and its impact on the user.
  - Describes how design requirements keep target users in mind.
- Product:
  - Defines the proposed solution through the prototype.

- o   Describes how the solution meets the requested need.
- o   Uses the prototype in the video.
- Overall Quality of the Video:
  - o   Effectiveness of speech organization and delivery.
  - o   Audience engagement – ability to hold audience's attention.
  - o   Presentation skills – it is a well-organized video and presenter(s) are able to convey well.
  - o   Product delivery-students used skills to create a quality media product
  - o   Closing statement - the speech ends with a final statement that summarizes the user, problem, and solution in a memorable manner.

Video Rules
1. Video can be no longer than 3 minutes. Nothing will be scored/viewed beyond the 3-minute mark.
2. All videos must be respectful of the broad spectrum of NM MESA stakeholders' cultural backgrounds and experiences.
3. All individuals in the submitted video are expected to abide by their schools and NM MESA's code of conduct including dress and language. Video and all included music must be free of profanity, inappropriate, and/or vulgar language and/or content.
4. Teams are encouraged to be creative and use additional audio and visual aids to enhance their video. Video can be made lots of ways including a zoom recording or through cell phones.
5. All video links will be shared for a public showcase the day of the awards presentation.

School: _____ **Level: HS / MS** **Team #:** _____

User Profile Rubric:	LEVEL OF MASTERY					
	Exceptional (3 points):		Met Criteria (2 points)		Poor (1 point)	Not Present (0 points)
Problem Statement: Adequately describes the people who will benefit from the project and the challenges they face. Defines how this is a solution for educators.						
User Research: Adequately discusses key information about users gathered through research, interviews, and ongoing discussion throughout the project.						
User Insight: Demonstrates a good understanding of the experiences, emotions, and motivations of the user(s).						
Current Solutions: What are current solutions that you have researched to help you solve your problem? At least 2 must be presented.						
Innovation: Teams design is unique and innovative.						
Prototype Iteration 1: What were the main design considerations in your first design iteration? What were pros/cons of the design? Any changes made to this design?						
Prototype Iteration 2: What were the main design considerations in your 2nd design iteration? What were pros/cons of the design? Any changes made to this design?						
Protoype Tests: Tests were conducted, relevant, and helped to determine if the prototype met the needs of the user? 2 Tests required.						
User Feedback: What feedback did you collect to ensure your prototype met the needs of the user?						
Overall Quality: Submission has quality responses within word limit. This also includes spelling, grammar, thought, answering the questions completely and succinctly.						
COLUMN TOTALS:						
TOTAL:						

Judge Name: _____

Judge Comments:

School: _____   **Level: HS / MS**   **Team #:** _____

Prototype Rubric:	LEVEL OF MASTERY					
	Exceptional (5 points):	Excellent (4 points)	Met Criteria (3 points)	Fair (2 points)	Poor (1 point)	Not Present (0 points)
Machine Description: Key features and mechanical operations are included. The machine is The main component of the device. The machine description is clear and understandable.						
Design Rationale and Challenges: How did your final design meet the needs of the user?						
Design Considerations: There are many things that go into a final build of a prototype. Describe (2) important considerations and why they are important. (Material, cost, skill, etc)						
Pictures Present: Up to (2) Pictures are available. Key Features and Scale is provided as needed. Can you visualize the prototype with what is provided? Quality images?						
IN PERSON: MUST BE WORKING TO RECEIVE POINTS BELOW						
Team Questions: All team members can answer judge questions about their prototype and had a role in the project.						
Knowledge: Team is knowledgeable about the machine operations of their prototype and shows ownership of their project.						
Prototype: Prototype is a quality design. Team has tried other iterations and shows reasoning for the final prototype selection.						
Demonstration: Team shows through demonstration how the final design met the need(s) of the user. Demonstration can be done efficiently and effectively.						
COLUMN TOTALS:						
TOTAL:						

Judge Name: _____

Judge Comments:

School: _____   MS   HS   **State/Center:** _____

Project Video Rubric:	LEVEL OF MASTERY					
	Exceptional (3 points):		Met Criteria (2 points)		Poor (1 point)	Not Present (0 points)
Problem Being Addressed: Team explains problem and their presentation increases judges' understanding of the user(s) need(s) and the solution for educators.						
User Description: User is identified and an adequate profile is provided-Educator Required						
Design Requirements: Team explains how their prototype meets the user's needs in terms of aesthetics, functionality, ease of use, cost, or other needs.						
Solution for Educators: How well does the prototype meet the required solution?						
Audio/Visual Aids: How well does the team incorporate the prototype in the video?						
Effectiveness: How effective was the team in organization and delivery. Prototype and purpose is conveyed well. Team delivers an effective closing statement.						
Audience Engagement: How well did the team hold the audience attention? Did the presentation flow to capture attention from beginning to end in a logical way?						
Creativity and Skill: Team used their skills to create a quality media product with creativity, intention, and thought.						
Team Use: Team members were introduced, duties were shared by all of the team, and roles of all team members were understood. Not all team members need to be present in video.						
Overall Quality: Submission is easily viewed, was within time limit, and met overall quality standards.						
COLUMN TOTALS:						
TOTAL:						

Judge Name: _____

Judge Comments: