

Video Journal

- LEVEL:** Middle and High School (all grades)
- SCOPE:** Required for all MESA Day project competitions
(except: National Engineering Design Competition and Hack Attack)
- OVERVIEW:** The purpose of the Video Journal is for students to follow the practices of an engineer more closely in the completion of their MESA Day projects. The Video Journal will encourage students to take a purposeful and sustained approach to building their devices. MESA projects are not designed to be completed in a single class period or day, but to be the result of thoughtful research, planning, analysis and evaluation. The journal should provide a visual record of the thought and insight that a team is putting into their project, from initial ideas to the final completed project.
- MATERIALS:** The video must be in mp3 or mp4 format.
- Pictures**
Teams will need to have pictures demonstrating, at minimum, three iterations of the design process. These pictures must include: initial design sketches, final prototype, and evidence of changes in design.
- Technology Usage**
Teams may use any available technology to create their video. It can include, but is not limited to, Google Slides, PowerPoint, iMovie, or any other presentation software. Teams are encouraged to be creative with their presentation.
- Audio**
Teams are NOT required to have any commentary in their video. Teams may add sounds or music as long as, in the judge's opinion, it does not distract from the video

REQUIREMENTS:

The Journal is meant to clearly demonstrate and illustrate evidence of the application of the Engineering Design Process in the MESA project. One journal per team should be submitted per competition.

The video journal must be properly labeled (full school name and competition) and contain and demonstrate the following information:

1. **IDENTIFY THE PROBLEM** - Demonstrate what is the challenge being worked on? What are the limits/constraints? How do you think you can solve it?
2. **DESIGN** – What is your initial design?
3. **DESIGN 2** – What changes did you make to your initial design? Clearly show all changes
4. **REASONING** – Explain why you made the changes that you made.
5. **DESIGN 3** - What changes did you make to your second design? Clearly show all changes
6. **REASONING** – Explain why you made the changes you made from design 2 to design 3
7. **FINAL PROTOTYPE** – What is your final prototype?

SCORING:

Every journal score will be a multiplier to their associated project. The Journal Multiplier will be determined by dividing the journal score by the maximum points. (25 point maximum) If team does not submit a journal their journal multiplier will be .10.

For example, if a journal receives 20 points. The journal multiplier will be .80 (20/25).

Rubric for Video Journal (VJ).

Category	3	2	1	0
1. Define the Problem				
<ul style="list-style-type: none"> Problem is clearly identified Definition of Problem aligns with problem statement in specifications Definition of Problem matches solution 	All	Most	Some	None
2. Initial Design				
<ul style="list-style-type: none"> Picture of sketch of initial design is present Sketch can be clearly seen Sketch is aligned to objective as specified objectives in specifications 	All	Most	Some	None
3. Design 2				
<ul style="list-style-type: none"> Changes from Initial Design to Design 2 are visible and/or marked Sketch/Prototype can be clearly seen Design 2 is clearly marked as Design 2 	All	Most	Some	None
4. Reasoning for change from Initial Design to Design 2				
<ul style="list-style-type: none"> Reason(s) for change(s) are based on testing Reason(s) for change(s) make logical sense Reason(s) for change(s) keep prototype aligned to Problems Statement 	All	Most	Some	None
5. Design 3				
<ul style="list-style-type: none"> Changes from Initial Design to Design 2 are visible and/or marked Sketch/Prototype can be clearly seen Design 3 is clearly marked as Design 3 	All	Most	Some	None
6. Reasoning for change from Design 2 to Design 3				
<ul style="list-style-type: none"> Reason(s) for change(s) are based on testing Reason(s) for change(s) make logical sense Reason(s) for change(s) keep prototype aligned to Problems Statement 	All	Most	Some	None
7. Final Prototype				
<ul style="list-style-type: none"> Final Prototype addresses the problem statement Final Prototype is clearly visible Final Prototype is clearly marked as Final Prototype 	All	Most	Some	None
Audio is clear and does not distract from video			Yes	No
Video Journal is 5 minutes or less			Yes	No
School name is part of journal			Yes	No
Competition name is part of journal			Yes	No
Total				