Design Review
Classroom Visit Goals

- Learn an engineering principle
- Become aware of engineering field
- Have fun
Design Review

- Objectives
  - Detail preliminary tasks before classroom visit.
  - Document classroom visit.
  - Prepare project for future use.
  - Learn to write for different audiences.
Design Review

- Main Sections:
  - Marketing
  - Instruction Manual
  - Methods
  - Experimental Analysis

- Teams of three: combine marketing and instruction manual; marketing’s appendix is not required
Design Review

- All sections must have
  - Appendix
  - At least one Fig. or Table
  - At least one reference
- Evaluation for is required
- Print and bring to classroom
- If changes to classroom visit form, please update it
Design Review

- Marketing Text (several pages)
- Acceptability
  - Functional performance, Acquisition cost, Ease-of-use characteristics, Operating cost, Reliability, Serviceability, and Compatibility
- Adaptability
  - How change to fit into entire K-12 system
- Marketing Appendix (one page)
  - Flyer, poster, or brochure for K-12 teacher
  - Lesson plan, contact information, and attractive design
Design Review

- Instruction Manual Text (a few paragraphs)
  - Overview of general procedure for facilitators
  - “Facilitators are instructed to gather materials.”
- Instruction Manual Appendix (several pages)
  - Audience is K-12 teacher / future facilitator
  - “Gather all materials.”
  - How facilitate in future
  - Step-by-step instructions
Design Review

- Methods (several pages)
  - Complete details on all preparation work for classroom visit.
  - Detailed step-by-step procedure used during classroom visit.
  - Establish criteria for success (survey score).
- Methods Appendix (one page)
  - Contest rules or design procedure written for students
    - "You will be placed into a team."
Design Review

- Experimental Analysis (several pages)
  - Detail observations (what happened during visit)
  - Analyze results of survey (compare to the criteria set in Methods section); include error analysis
  - Recommend changes if conducted in future

- Experimental Analysis Appendix (one page)
  - Blank copy of survey distributed to students
Classroom Visit Notes

- Allow time to check-in at office if requested by teacher
- If need PowerPoint in classroom, verify
- Follow county dress code (no flip-flops, spaghetti straps, rated R graphic shirts)