What are Screeners looking for in a GSDSEF Level Project?

Remember, screening is not judging. Analogy: Screening is pass/fail whereas judging is a grade. For screening, ask yourself: Is the project quality commensurate with the standards of the Greater San Diego Science and Engineering Fair? Will the project be competitive at the GSDSEF?

Engineering Projects

• For engineering projects, the testing and re-design process leading to the optimized design must be evident as well as any data students may have collected. For further information, see: http://www.gsdsef.org/wp-content/uploads/2013/10/Guide...Engineering1.pdf

Computer Science Projects

• For computer science projects, evidence of <u>original</u> student works needs to be apparent—no commercial kit projects (robots, computers, drones, etc.). For further information, see:

http://www.createsoftgroup.com/gsdsef.org/wp-content/uploads/2013/10/GuidelinesForComputerProjects.pdf

Math Projects

• For math projects, please see information in the link below: http://www.createsoftgroup.com/gsdsef.org/wp-content/uploads/2013/10/MathProjectGuidelines.pdf

Science Projects

- There must be a testable question and/or hypothesis for science projects.
- There should be clearly defined controls, if needed, where the control is compared to the experimental group.
- There should only be ONE change from one group to another so they can be compared.
- Quantifiable data: Most data should be expressed in numbers; avoid words like better, best, worst, darker, brighter, etc. which are subjective and qualitative.

- If human subjects are involved, there should be an adequate number of participants (50+ recommended, but fewer are okay if the overall project is strong).
- If plants are involved, there should be an adequate number of plants per treatment (30+ recommended, but fewer are okay if the overall project is strong).
- For most other projects, there should be a suitable number of data points/measurements per treatment to establish a trend or pattern. (10+ recommended)
- Some calculations should be done with the results/data at least an average/mean.
- Any graph (usually a bar graph), picture, diagram should be <u>labeled</u> appropriately. Make sure the student has used the correct kind of graph to display data for this project.
- NO faces of any student participants may be shown. ONLY the experimenter's face may be shown if properly identified.
- Students should have analyzed data and drawn conclusions about their hypothesis.
- The conclusion must provide a logical, carefully analyzed answer to the question/problem posed at the beginning of the project. The hypothesis should be either accepted or rejected. Does the information flow correctly from problem→hypothesis→procedure→results→conclusion?