UW-Stout Regional SkillsUSA Competition-

3D Printing vs Additive Manufacturing Contests

Abbreviated summary of each contest:

Additive Manufacturing: 2 day on-site competition- design a solution to a challenge that is 3D printed (day 1), test the solution (day 2).

- First day of the competition- contestants are given a challenge to solve.
    - They must bring a computer with CAD software to design a part that will solve the challenge (within the design parameters given).
- The designs are 3D printed overnight.
- Second day of the competition- Contestants will assemble/remove support/finish as needed to complete their parts.
    - Contestant groups will present their solution
    - Completed 3D printed parts will be tested how well they solve the challenge.

3D Printing: 1 day on-site competition (involves multiple days of pre-planning)- contestants will document and give a presentation about the design process used in the evolution of the part/product they designed.

- Contestant will obtain a notebook to devote to documenting the design evolution of the part/product they wish to create.
- Contestant selects a product to create and/or improve.
    - Contestants use CAD to design the product.
- Contestant 3D prints the part at their school and test/review.
- Improvements are identified and documented in a Designer's Notebook
    - Modifications made in CAD and 3D printed again.
- Cycle repeats multiple times and documented improvements made with each iteration.
    - All iterations of 3D printed parts are used during presentation as visual aids
    - Designer's Notebook is submitted for scoring (returned at end)