**Student Perceptions of Creative Opportunities in Engineering Design: Preliminary Findings**

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**Methodology**

- **Recruitment**
  - Recruited & selected freshman students enrolled in Design-Build-Test sections of ENGR 100. Eight sections are represented.
- **Survey Spacing**
  - 4 Qualtrics surveys distributed bi-weekly beginning after the students’ receipt of the final project statement

**Survey Samples**

- **Survey 1:** Perception of Creativity in Engineering Design
  - “How do you define creativity?”
  - “Rate the level of creative freedom your professor encourages for this design project.”

- **Survey 2:** Design Project Progress & Decisions Made
  - “What were the 3 biggest decisions that you or your team made concerning your design project?”
  - “What are you finding most challenging about your design project?”

- **Survey 3:** Design Project Progress & Decisions Made
  - “Would you rather develop something that will definitely work or something that is creative, but has a bigger risk of failure?”
  - “List 3 words that you consider to be synonymous with your definition of creativity.”

- **Survey 4:** Perception of Risk of Creativity in Engineering Design and Final Project Outcome
  - “What risks are involved in incorporating creativity in engineering course design projects like the one you just completed?”

**Conclusions**

- At the beginning of students’ projects, they feel there are many opportunities for creativity.
- As they progress, they perceive that constraints of time and technology limit the opportunities to bring their creative ideas to fruition.
- At the conclusion of the project the students conclude that creativity is ideal but not always realistic.