Proposer Info:

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Proposal Type: (please select one)

[X] Surprising flop: capstone-related teaching idea that didn't work as planned

Nifty Idea/Surprising Flop Description:

(100-150 words; describe your nifty idea/surprising flop)

As part of a first course in design, taught in the Spring quarter of the Junior year, students learn the design process in preparation for their capstone experience the following year. To make the process more real, and to show the students what they could do, we initiated a ‘design boot camp’, to bring students up to speed in engineering design. Our program does not have a Freshman design course, so this Junior course is their first formal introduction to engineering design. Therefore, to immerse them in engineering design, in this two-credit course (one lecture and one lab period per week, quarter system) undertook the detail design, construction, and testing of a design project, in addition to design documentation, concluding with a formal presentation.

Nifty Idea/Surprising Flop Outcome:

(100-150 words; describe why/how your nifty idea worked well or why/how your surprising flop didn't)

As instructors, we were very excited about the depth to which the students were engaged in the design process in this ‘boot camp’ and, as instructors, we were expecting (naively, it turned out) that our students would be able to look back on what they had achieved during this quarter and be proud of their work. Well, given that this is being submitted as a ‘surprising flop’… things did not turn out that way. At the conclusion of the course, the students were indeed impressed with how far they had come and how much they had accomplished. However, since their next design course in the Fall term was a four-credit course (three lecture, one lab period per week), they ended up approaching their capstone design experience with dread. Cloying, dripping, acidic, toxic dread. In fact, the ‘wind sprint’ in Junior Spring cast a pall over the entire capstone project, which was nearly impossible to shake.

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