

Panel 5A Nifty Ideas and Surprising Flops

Facilitator: Susannah Howe – Smith College

Panelists:

Allyson Gibson - Brigham Young University
Alexis Gillmore - University of Tennessee, Knoxville
Jim Hartman - University of North Carolina, Charlotte
Kris Jaeger-Helton - Northeastern University
Nathan Kathir - George Mason University
Sam Malachowsky - Rochester Institute of Technology
Keith Stanfill - University of Tennessee, Knoxville

Description: This ever-popular session will feature very short presentations from capstone instructors showcasing ideas that were either a great success or an unexpected failure - or perhaps a bit of both! Come learn about new ideas or propose your own (time permitting at the end).

Notes:

- AG Senior Design Showcase Simulator
 - Assigned students role-plays: active vs passive, constructive vs destructive
 - Instructors demoed the different quadrants
 - Increased the student's comforts
 - o But didn't help students determine how to make the material accessible
 - o Used it instead of a peer review of posters; didn't take long to set up.
- KJH Shark Tank, Move over
 - Moved to a different Capstone Day format for 2021
 - Rather than a big day, had virtual events 45 minutes per team w/ Jurors
 - What do do for 2022 in person vs virtual?
 - → in person poster session w/ 5-minute pitches, in front of a juror
 - Worked well lots of fun, good alumni engagement, students doing 5 minute skits/pitches
 - For the pitch, brought in guest lectures to coach them, each student had to present. High energy pitches, students enjoyed being able to be creative
 - 18 teams, two sessions of 9, 2-hr event
- NK Periodic Activity Reports



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- Had previously done a 3-page activity reports every 3 week;
- Moved to oral reports 4 slides, 5-7 minutes, every 3 weeks
 - Require 2 new pictures for every presentation then has a bunch of pictures he can put together into a summary book every year
- Less time writing; more students learning from other teams; more immediate feedback
- SM Increasing Visibility of Coach Tasks for Accountability
 - Developed their own project management software for the capstones
 - Includes tasks on the todo lists that the students could see that were tasks for the coach; intended for students to be able to see the tasks their coaches are late on, so they would follow-up with their coach
 - Strong correlation between complaints and tardy coaches
 - o But still unclear if its a bug or a feature will try again but back off a bit
- JH Incentivizing Faculty Mentors
 - Generally mentoring a capstone team is a faculty mentor's 7th responsibility
 - Used ideas from Beth DeBartolo at RIT → Hire retired engineering managers to

be mentors

- Cost effective, passionate, experienced in giving critical feedback
- Easy to not hire back if they don't do well
- They do grade assignments, and promptly
- \$1700 per project per semester; paid for it by increasing the capstone fee
- Still has faculty mentors for some projects, but only for those that really want to mentor; the faculty mentors that didn't want to be there in the first place, he's replaced with these engineering managers
- He sent out an email to all the companies he's worked with before to solicit mentors
- Max 4 projects/mentor, but most 1-2.
- Co-mentor's the first project, then turns it over at mid-term
- AG, BYU (almost) All Female Capstone Team
 - A sponsor want to sponsor a project but requested an all-female team
 - The sponsor got a lot of PR and mileage out of it
 - The students were not all thrilled not enough women even took them up on the offer, and they didn't have all the skills/disciplines needed; some were offended by it. Needed to add a male on it.
 - Project was successful, but it could have been better



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- Would not do an all-women team again
- From audience: for seniors, they want to be trusted that they will know how to handle it and be able to go out into industry, so any deliberate team formation decisions based on gender. Students have been fine if it was just naturally all women.
- KS For Sale. Green Screen. Never Used.
 - Tried a large green screen kit for full body
 - Too long to set up full body and a lot of space and poor teleprompting
 - o Instead, just do torso, use green background via zoom
 - Record in camtasia, present in power point, record in zoom w/ green background
 - Some details; HD zoom camera, etc
 - Then pull zoom video into camtasia
 - o Canvas studio then processes the video to post to class and adds captions
 - Sharing slides as a Virtual Background Zoom Support
 - But can't slice it around as much, can only do w/ powerpoint
 - Some use twitch
 - Can also record within powerpoint
 - Can record the video w/ it, and it clips it for each slide you can redo just one slide.
 - OBS open broadcast studio
 - Microsoft Stream