iMedEd Hackathon

Cooney | Chan | Voros | Patocka

Welcome to the CORD-ALiEM Design Thinking Workshop

Let's begin with our case...

The Case of the Catastrophic Classroom

by Robert Cooney, Catherine Patocka, & Jeremy Voros.

Jill, an emergency physician, is a recently-hired junior faculty member at the St. Elsewhere Emergency Medicine (EM) residency program. She completed her own training 5 years ago at a well-respected residency, where she was chief resident, and then stayed on as a faculty member. She had a strong interest in resident education and was active on the CORD listserv. But there was a well-established leadership team at her home program and limited opportunity for advancement.
Jill took a position at St. Elsewhere, a less-established residency, that offered her a leadership role. Her first challenge in this new role was a revamp of their weekly half-day educational conference.

This is how the St. Elsewhere residency program's informational web page described about their conference:
"Our residents are relieved from regular hospital duties (i.e. they receive protected time) to attend conference. The sessions are held in a Campbell-Morrison memorial lecture hall at St. Elsewhere every Wednesday from 7:30 am to 12:30 pm for their educational conference. The day begins with a Morbidity and Mortality conference, followed by various lectures delivered by senior residents or faculty members. Lecture topics are on a repeating curriculum on a 1.5-year cycle, thereby ensuring that the residents see every topic as both a junior and senior resident. Our curriculum is based on the EM Model and uses guided readings from prominent EM textbooks."

When Jill emailed the current program director (PD) about who the last curriculum lead was within the faculty, and how s/he designed the curriculum. The PD quickly wrote back stating that he couldn't remember, and that he thinks it was always that way. He wrote: "I think this is the way things are done because this is the way things have always been done.

Jill's First St. Elsewhere's EM Conference Experience
Jill arrived early and sat in the back of the hall taking notes throughout the first conference. She was joined in the back of the lecture hall by a rotating cast of 3-4 faculty members who came and went throughout the conference. Only one other faculty member attended the whole conference but he worked on his laptop the whole time.

The Morbidity & Mortality (M&M) conference was a series of typical case presentations lead by a senior resident. The resident involved in the management of the case stood before the group as well, answering questions about his thought process and management choice. Several residents took questions clearly placing blame on their choices, and one of the residents became quite tearful and had to leave the podium mid-presentation.
A 4-question multiple choice quiz followed M&M, about the week's assigned reading. Residents perfunctorily completed the quiz. Correct answers were provided by the residency coordinator afterward. No discussion followed.

M&M was followed by several PowerPoint-driven, didactic lectures. One was given by a senior resident, and included a detailed review of the Kreb's Cycle. Another was given by a faculty member on renal emergencies but the slide deck was clearly prepared by someone else, as evidenced by the fact that the other person's name was still listed on the title slide. Throughout the conference most residents were slumped in their chairs staring at their smartphones. One resident slept in the front row.

There was confusion over which faculty member was supposed to deliver the final lecture and the assigned person was not present or reachable by phone. As such, the conference ended 45 minutes early.

Jill Meets with the Stakeholders
Jill met with one of the chief residents, Rob, to discuss conference. Rob is well-respected among the residents and besides being clinically excellent is a reliable advocate with the administration. He expressed frustration about conference. The format is largely unchanged from when he was an intern. He feels too much of the teaching is done by senior residents – which though beneficial for junior residents, leaves senior residents' needs unfulfilled. Early on he had hoped to stay at the program when he graduated but now he is actively looking for an academic position elsewhere.

Jill heard more complaints from faculty after their last staff meeting. Several staff members complained that there was no CME credit for them if they attended. One faculty member, who had previously been a regular presenter at conference, complained about the lack of financial incentive (i.e. "There is no buy-down! It's essentially volunteer work!") or even recognition throughout the residency for active involvement in the educational conference ("I don't even get a thank-you letter!"). Others complained that the early start time made coordinating childcare difficult. Some expressed surprise to learn of any concern over the quality of conference.

Jill also met with the program director, Ravi. He has been in the position for 5 years. Two of those years were complicated by conditional accreditation by the ACGME. When asked about conference he became exasperated. His primary goal is to stick to the ACGME requirements, especially those concerning total conference time and faculty supervision. He acknowledges his focus has been on duty hour compliance and implementing resident assessment based on the new milestones, rather than educational innovation.

Jill Seeks Advice
Jill reached out to her colleagues on the various listservs for suggestions to reinvigorate St. Elsewhere's educational conference. Many users suggested a "flipped classroom" approach but each had different conceptions of the final product. Some recommended FOAM resources on the internet, but others expressed concern about ACGME compliance. Other popular suggestions included small group sessions, off-site learning, and self-directed study.

STEP 1: EMPATHY PHASE (15min + 15min)

Take time to consider all the stakeholders in this problem. Think through their eyes. What are the problems with the present situation?

1. Share your findings from your prep work with your colleagues (15 min)
2. Triangulate this with the ALiEM Blog comments on the case. http://www.aliem.com/2016/medic-series-case-of-catastrophic-classroom/(15 min)

Below, jot down notes about problems that you see...

PERSONAL BRAINSTORM

Use the sticky notes to BRAINSTORM your ideas personally (5 min)
ONE STICKY NOTE PER IDEA.

STEP 2: STICKY NOTE SORTING (15 min)

Now comes the active part! Get up and sort the sticky notes with your colleagues! Don't be shy, move other notes around to form word clouds or clusters of related problems.

STEP 3: Form a PROBLEM GROUP (10 min)

Look around at those around you. Who sees the same main problem as you? Create a small group by finding 3-5 people who see the problem similarly. Come up with an awesome team name!

STEP 4: Define your Problem (5 min)

Work with your group to write down a SINGLE problem statement.
Write it in the space below!

Design Thinking

Here are the steps of the process:

1. PROBLEM ISOLATION

You will use this time to isolate the problems faced in the case (or at your home institution) by performing a thorough needs assessment. Design thinking asks you to build empathy with stakeholders but understanding their needs - so take care to use methods that explore their experience (e.g. qualitative methods) rather than making assumptions.

2. IDEATION

Make sure to generate lots of ideas. Fluency is an important part of brainstorming, so don't BLOCK yourself or KNOCK yourself. Defer JUDGMENT. Encourage WILD ideas. BUILD on the ideas of others. Stay FOCUSED on the topic. ONE conversation at a time. Be VISUAL. Go for QUANTITY.

3. PROTOTYPING

Sketch, doodle, pitch! Make sure to try things out and propose things - but make things look/feel real by designing "prototypes". Don't be afraid to fail fast and fail often, refinements come from these failures.

STEP 5: IDEATION TIME (20 min)

Brainstorm ideas for solving the MAIN PROBLEM you have written in the previous step. Work with your group mates to openly brainstorm. Don't say "No..." or "But"... Say "Yes... and..."

STEP 6: REFINING PROTOTYPES (60 min)

As a Problem Group, narrow down and develop one idea fully. Within your group you may start with each person sketching out an idea and then select ones that seem to resonate with others. By the end of the time, try to have ONE idea that you entire group can basically sketch it on the back of a napkin...

STEP 7: SHARING NAPKIN PITCHES (overnight)

Now you will need to leave the comfort of your Problem Group. Take your group's one idea and share it with 3-4 different people overnight (may be from other Problem Groups, may be your friends at dinner time!). Explain your idea in 2-3 min and then solicit feedback. If possible, return the favour by listening to the pitches of other groups. Refine your ideas as you go.

STEP 8: REFINING PROTOTYPES (60 min)

In your problem group, share the feedback and field research you gathered overnight. If you still have questions, consult other teams for their opinions to refine your prototype pitch more. Once you have a rough plan, develop and practice YOUR PITCH. (Remember we have a prize for the BEST PITCH!)