Swimming Outside the Lane: Teaching Subject Matter Experts about Learning

Kathleen (Kate) Lenert, MET

Associate Director Research Learning & Development

Assistant Professor, Medical University of South Carolina

MUSC
Medical University
of South Carolina

Changing What's Possible

Objectives

After this session, you will be able to:

- recognize the type of effective learning strategies subject matter experts may ready for and when to implement them.
- Plan a strategy for working with subject matter experts in transforming and enhancing learning content in the biomedical research domain.

Enhance educational offerings to the clinical research community

My Goal in the Project

Course Details: The Case

Professional development training

Course offered 2X year

6 weeks long

Enrolls 30 learners each time

F2F class with PPT lecture presentations

Content area Basic Science & Clinical Research Admin

Uses Blackboard Open LMS to Post Content & Quizzes

30 instructors teach one of 15 modules (2 instructors per module)

Diverse Non-Faculty Instructors

- Research Grants Admin
- Research Regulatory Managers
- Clinical Research Coordinators
- Clinical Healthcare Billing
- Basic Science Faculty
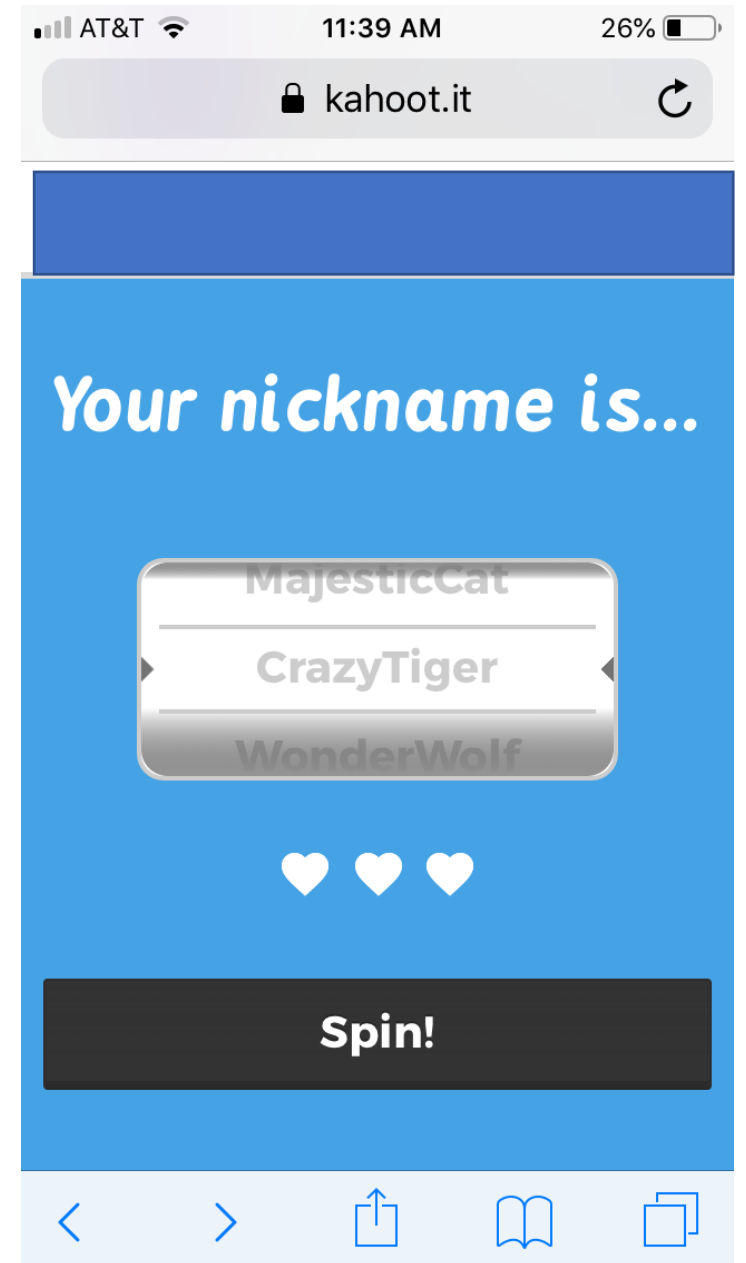- Lab Animal Resources
- IRB

Find a Partner!

A. Redesign the LMS so it was more intuitive

B. Align learning outcomes to course activities & assessments

C. Introduce the instructors to active learning & engagement strategies

D. Curriculum mapping to scaffold content and skill development

Where would you start?
Go to: Kahoot.it

Focus on Instructors

Introduce the instructors to active learning & engagement strategies

Methods

Orientation with demonstrations

Pre-course survey

Follow up emails throughout course with video, readings

Student evaluations asking which engagement strategies were used each module

Post-course survey

Activities to Enhance Learner Engagement

Think, Pair, Share

Small group discussions

Students post ideas on the board to share

Ask open-ended questions

Give learners problems to solve

Polling to gauge learning or for feedback

Connect learning back to their work situation (relevance)

Games or other activities

	Pre-course N=17 Confident/Very Confident	Post Course N=15 Confident/Very Confident	PRE Unfamiliar/ Not Confident	POST Unfamiliar/ Not Confident
Think Pair Share	8/6	6/8	2/1	0/0
Small Group Discussion	8/8	5/9	0/1	0/0
Post ideas	8/6	5/8	1/2	0/1
Open-Ended Q?	9/8	7/8	0/0	0/0
Problem-solving	8/8	7/8	0/1	0/0
Connect to Work	5/9	4/11	0/1	0/0
Polling	8/5	8/5	0/4	0/2
Games	6/5	9/5	0/5	0/1

	Incorporated into Course	Did not, but considered doing so	Did not incorporate into Course
Think Pair Share	6	4	5
Small Group Discussion	5	2	8
Post ideas to share	0	3	12
Open-Ended Q?	12	2	1
Connect to Work	13	1	1
Polling	2	3	8
Games	3	2	8

Overcome Barriers

- Watch videos demonstrating
- Read about learning activity ideas
- Partner with another person
- Participate in a group
- Individual consultation
- Observe another instructor using an active strategy

Student Feedback:
Active learning least likely to be incorporated

- Paired discussions
- Problem solving
- Games
- Polling
- Break into small groups

Student Feedback:
Active learning Most likely to be incorporated

- Large class discussions
- Problem solving
- Case-based learning

Learner Feedback

- Instructors were very knowledgeable and you could tell (they) liked their jobs. Had good examples and stories, but maybe next time, do not read every slide as you go along.

- I just feel sorry for everybody having to use UMS… It would take a very talented educator to explain this in a manner that would allow a newbie, such as myself to , immediately use this information and apply it. This will take a lot of figuring out by yourself. Plus learning how to remain calm while the application crashes and the hourglass is taunting you.

- Everyone seems to truly enjoy what they do when they are teaching.

Future Directions

- Continue to Reinforce Active Learning

- Instructor interaction in the LMS
  - Static content
- Authentic assessment
  - Move away from multiple choice quizzes

- Learner Control: make their own decisions about sequence, pace, content of instruction
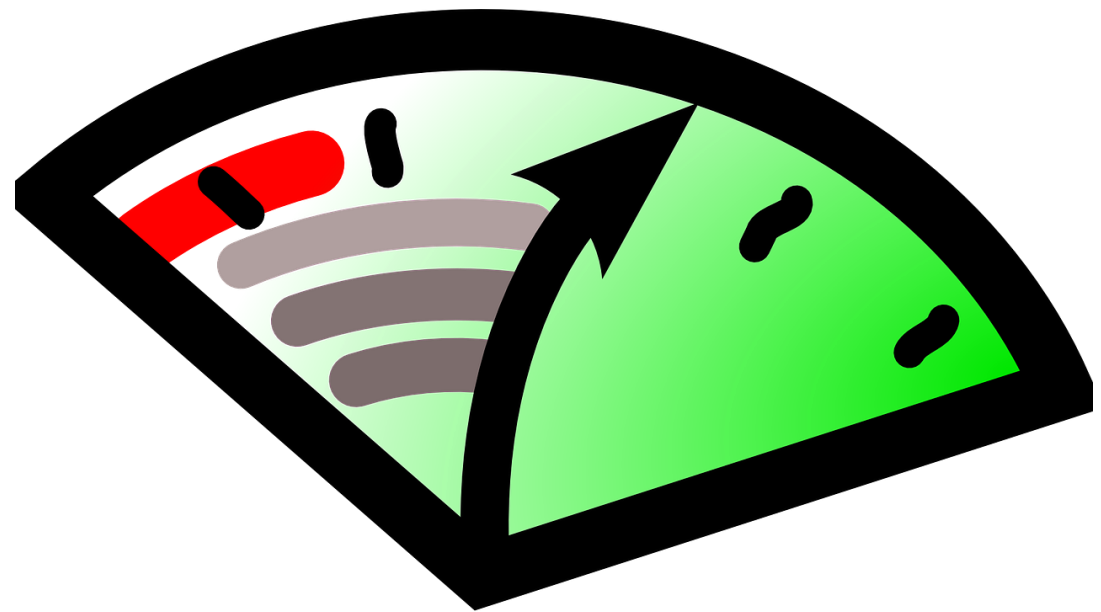
Conclusions

- Unless there is commitment for a full course redesign, decisions must be made on incremental improvements
- Non-academic instructors are not familiar with current active teaching strategies; or moving away from teacher-centered presentations