Technologies to Engage, Excite, and Delight Your Math Faculty

Presentation:

If you've already seen how technology can reengage faculty on your campus with the scholarship of teaching, but you can't find a way to engage the math faculty in particular, then this presentation is for you. During this interactive presentation, we will explore a collection of math-related materials including digital libraries, interactive demos, clever videos, and the best software for teaching math face-to-face and online. You should be able to go home with a better understanding of the kinds of technologies that will engage, excite, and delight your math faculty.

Outline:

My presentations are interactive (built using mindmap technology) and designed to be tailored to the audience in the room. After a quick assessment of the needs of the audience, I focus on the parts of the presentation that are most useful to them and we go from there. All presentation mindmaps are available online and can be used in faculty development workshops back on campuses as a way to engage faculty. If you've never seen one of my mindmap presentations, then it's probably hard to understand how this works, but I can assure you that it does. My presentations using mindmaps have been highly received at conferences like AMATYC, DTL, and eLearning.

Description of Presentation:

There's a reason math faculty have been hesitant to make the leap to using technologies in the classroom and online teaching. Math is a difficult subject to teach (and learn), but the pace and requirements of curricula make math instructors even more hesitant to introduce what they see as "time-wasters." We can leverage today's technologies to move some of that required curricula coverage online, freeing up valuable class time to focus on student-focused instructional practice, concepts, and applications.

How can you effectively present material to students online? How can you encourage students to use the materials you gather? How do students show mathematical work in an online environment? Teaching math with technology is difficult for most math instructors to conceptualize unless they see context-specific examples. As faculty developers, you will have to swoop in with math-specific suggestions for solving these problems. Do you have the answers?

I've been blogging about math, technology, and teaching for almost three years. I've taught Calculus I and II online with success rates and grade distributions that are roughly the same as (sometimes better than) my face-to-face courses. All of my "traditional" courses now involve web components.

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