

The Lighter Side

...But Is It an Improvement?

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One of the aspects of teaching that has experienced the greatest change over the last century is the introduction of technology. We are referring for example to the use of PowerPoint, personal/audience response systems (i.e., clickers), e-texts, and long-distance learning. Unfortunately, there are often significant problems associated with the use of technology in teaching/learning. For example, although students may respond favorably to PowerPoint, it is not clear that the reasons—and the ways in which they utilize PowerPoint—are ones that educators would embrace [1]. Assessment of the benefit of using technology, as with educational assessments in general, can be difficult due to limited sample size, the need to follow subjects longitudinally, problems

normalizing effects due to different instructors teaching the same class, and many other factors including the time of day and year when a class is taught. One general conclusion from studies analyzing the effects of incorporating technology into classrooms is that such changes can be beneficial or detrimental, depending on how the technology is used and whether it is needed.

We think that when it comes to the introduction of technology, as is frequently the case with curricular or pedagogical revision, changes are often made without adequate assessment to determine if they have achieved the intended goal. When considering technology the problem often goes even one step further because in many instances instructors



Drone-delivered lectures. We don't know if they work yet, but they're the newest thing!

FIG 1

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decide to add a technology component to their course without even having a specific learning goal in mind (Fig. 1). However, the applications of technology to education simply for its own sake (i.e., not to address a specific pedagogical need) are often costly and disappointing; instead “when we find situations...that capitalize on the unique attributes of technology for a matching instructional need, what we have found amounts to good instructional design” [2]. In other words, technology can be used effectively in a classroom setting, and it may help meet specific learning goals. However, simply jumping onto the bandwagon of the latest technological innovation to impress the administration at your institution with regard to your dedication to being an effective

instructor, or because everyone else seems to be using it, carries many risks and does not ensure an improved learning environment.

References

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