

Title: What Should a College Classroom Look Like in a Digital Age?

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Abstract:

The internet has made available to students a huge range of resources that can be accessed without ever leaving home. Courses can be taken online, and some universities have even made all of their lectures available for free download. What then should the role of a college professor be? Do we continue with the traditional lecture? If so, why is an experience in our classrooms more valuable than an online course or a downloaded lecture? Do we believe our lectures are more scintillating than others? Perhaps instead we should abandon the lecture and use a constructivist approach where we simply guide students in their exploration. Or is the best approach a balance of the two? We'll discuss techniques for having a more dynamic classroom, where students are more prepared and more engaged. Most importantly, there is evidence that these techniques yield greater learning!

Short bio:

Martin C. Carlisle, Ph.D., is a professor of computer science at the United States Air Force Academy. He has a Bachelor of Science in mathematics and computer science from the University of Delaware, and a Master of Arts and Doctor of Philosophy in computer science from Princeton University. He has made numerous contributions to the computer science education community, and is most well-known for RAPTOR, an introductory programming environment using flowcharts, and his YouTube videos introducing Java. He has been named an ACM Distinguished Educator, the CASE Colorado Professor of the Year and the US Air Force Academy Outstanding Science and Engineering Educator and was awarded the US Air Force Exemplary Civilian Service Award.