



**Guo, P. (2013, November 13). Optimal video length for student engagement [Web log post]. Retrieved from <https://blog.edx.org/optimal-video-length-student-engagement>**

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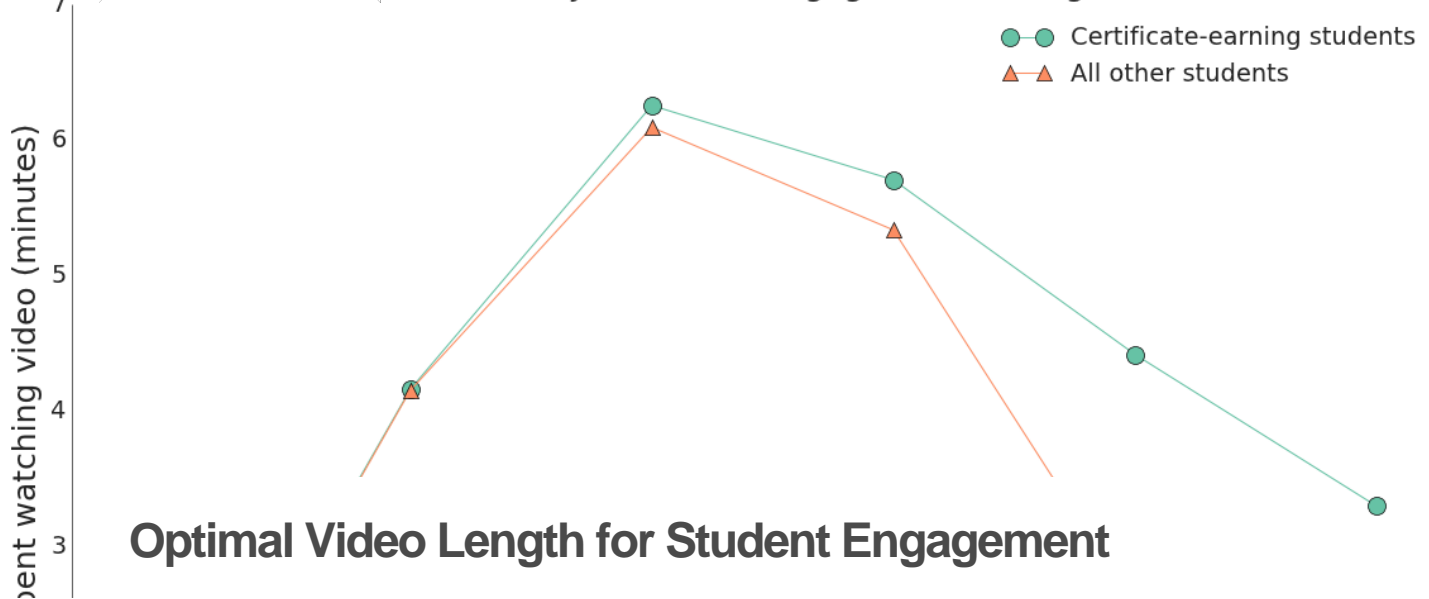
EDDL 5101  
Educational Technology for Learning

ONLINE AND DISTANCE EDUCATION



## MOOC RESEARCH

## Preliminary edX video engagement findings



## Optimal Video Length for Student Engagement

NOV 13, 2013

BY CANDACE HAZLETT

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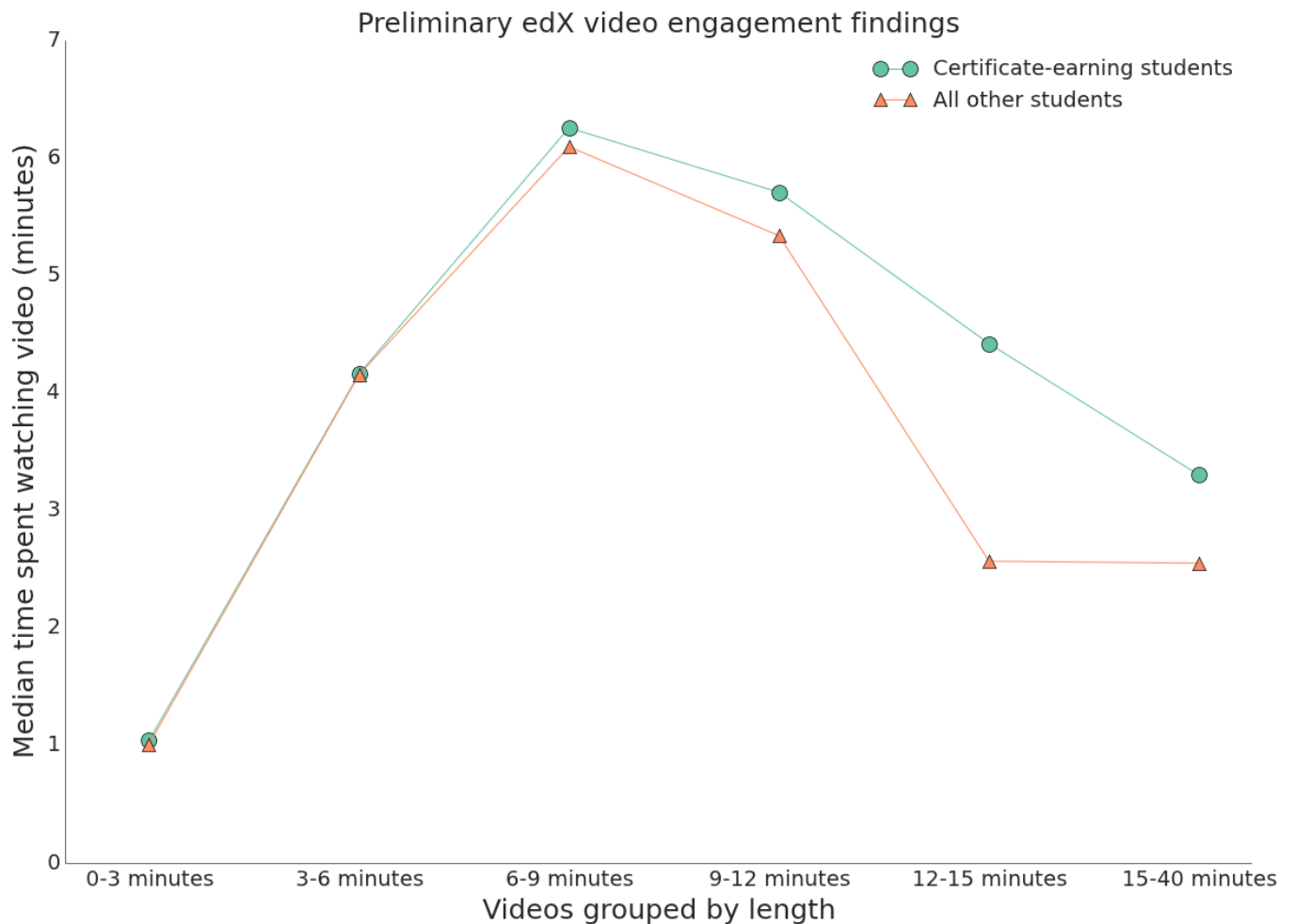
Hi, I'm Philip Guo, an assistant professor of Computer Science at the University of Rochester. Since my research interests are in human-computer interaction and online education, I was really excited when Anant Agarwal (edX President) and Rob Rubin (VP of Engineering) invited me to spend the past summer at edX as a visiting research scientist.

Anant, Rob, and the rest of the edX leadership team have been wonderfully supportive of my research efforts. In addition, Anant and Rob have personally contributed to framing some of the questions that I investigated in my work. I plan to blog about my findings in the coming months.



In this first post, I'll share some preliminary results about video usage, obtained from initial analyses of a few edX math and science courses. Unsurprisingly, students engaged more with shorter videos. Traditional in-person lectures usually last an hour, but students have much shorter attention spans when watching

educational videos online. The graph below shows median engagement times versus video length, aggregated over several million video watching sessions:



Analysis by Philip Guo (pg@cs.rochester.edu)

The optimal video length is 6 minutes or shorter — students watched most of the way through these short videos. In fact, the average engagement time of any video maxes out at 6 minutes, regardless of its length. And engagement times decrease as videos lengthen: For instance, on average students spent around 3 minutes on videos that are longer than 12 minutes, which means that they engaged with less than a quarter of the content. Finally, certificate-earning students engaged more with videos, presumably because they had greater motivation to learn the material. (These findings appeared in a recent Wall Street Journal article, [An Early Report Card on Massive Open Online Courses](#) and its [accompanying infographic](#).)

The take-home message for instructors is that, to maximize student engagement, they should work with instructional designers and video producers to break up their lectures into small, bite-sized pieces.

Stay tuned for more detailed posts in the coming months, and visit [www.pgbovine.net](http://www.pgbovine.net) to learn more about my research and education projects!

By Philip Guo

