Banning Laptops from Classrooms (updated January 2018)

There are three reasons to ban laptops from classrooms. The first is obvious: many students engage in other activities on their computers rather than pay attention in class. Not only do those students who engage in other activities distract themselves, but they frequently distract those students sitting near them, whether those students wish to be distracted or not.

The second reason is that laptops and other electronic devices have a negative impact on learning. Research on learning has consistently and overwhelmingly demonstrated that <u>even the proper use of laptops</u> does not further student learning, but actually distracts students and lessens student engagement. While students using laptops who focus exclusively on class may take more extensive notes, the ability to consult such extensive notes does not compensate for students' lessened classroom participation as they devote more attention to the taking of those notes. Students using laptops may become better at taking notes, but they do not absorb as much of the material in class, nor do they engage in classroom exchanges as frequently, thus depriving the rest of the class of their potential contribution. Other research shows that when students use electronic devices while studying, their learning and understanding is "shallow" rather than deep and that they are less likely to do well on tests and assignments. Finally, research has shown that the process of writing longhand is superior for creating memory than typing.

The third reason is drawn from the second. When students withdraw from class discussion to focus on electronic devices, discussion suffers. Discussion is an important part of learning, even for those who do not participate. It elevates the energy level in the room and can help "reset" the attention spans of students whose minds have drifted during a lecture.

I have included several links below which support these points.

Laptops Are Great. But Not During a Lecture or a Meeting.

Susan Dynarski, *The New York Times*, Nov. 22, 2017. https://www.nytimes.com/2017/11/22/business/laptops-not-during-lecture-ormeeting.html?_r=0

The impact of computer usage on academic performance: Evidence from a randomized trial at the United States Military Academy (Academic Research) Susan Payne Carter, Kyle Greenberg, Michael S. Walker Economics of Education Review, Volume 56, February 2017, Pages 118-132 https://www.sciencedirect.com/science/article/pii/S0272775716303454

The Pen is Mightier than the Keyboard: Advantages of Longhand over Laptop Note Taking (Academic Research)

Pam A. Mueller, Daniel M. Oppenheimer, *Psychological Science*, April 23, 2014. https://sites.udel.edu/victorp/files/2010/11/Psychological-Science-2014-Mueller-0956797614524581-1u0h0yu.pdf

Laptop multitasking hinders classroom learning for both users and nearby peers (Academic Research)

Faria Sanaa, TinaWeston, Nicholas J. Cepedabc <u>Computers & Education</u> 62, March 2013, Pages 24-31. <u>https://www.sciencedirect.com/science/article/pii/S0360131512002254?via%3Dihub</u>

In-class laptop use and its effects on student learning (Academic Research)

Carrie B. Fried <u>http://faculty.washington.edu/dechter/classes/Soc352/Study%20Tools/Fried_In%20Class%</u> <u>20Laptop%20Use%20on%20Learning_Comp&Ed_08.pdf</u>

Evidence against Laptop Use (summary of several research papers) <u>http://www.stanford.edu/class/linguist156/laptops.pdf</u>

Students Using Laptops in Class Do Worse on Tests

http://www.findingdulcinea.com/news/education/2009/march/Students-Using-Laptops-in-Class-Do-Worse-on-Tests.html

Are Laptops Distracting Educational Tools in Classrooms

Falah Awwada , Ahmad Ayesha, and Sarah Awwad Procedia - Social and Behavioral Sciences 103 (2013) 154 – 160 <u>https://ac.els-cdn.com/S1877042813037658/1-s2.0-S1877042813037658-main.pdf?_tid=759bf2fe-0077-11e8-b6d9-00000aab0f6b&acdnat=1516737551_9acc9d0cf1769a1ca234e684f8a38e00</u>

Law Student Laptop Use During Class for Non-Class Purposes

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1805107

What are Students Typing?

http://www.insidehighered.com/news/2011/05/18/professors_spy_on_students_to_see_how_they are using laptops in class

Laptops vs. Learning (by Georgetown Law Professor David Cole) http://www.washingtonpost.com/wpdvn/content/article/2007/04/06/AR2007040601544.html

More professors ban laptops in class (also focusing on law schools) http://www.msnbc.msn.com/id/12609580/

Wide Web of diversions gets laptops evicted from lecture halls <u>http://www.washingtonpost.com/wp-</u> dyn/content/article/2010/03/08/AR2010030804915_pf.html

The Blackboard versus the Keyboard: Why more colleges are banning laptops in the classroom.

http://www.thebigmoney.com/articles/diploma-mill/2010/04/20/blackboard-versuskeyboard?page=full

Why the University of Chicago Law School Cut off WiFi http://www.insidehighered.com/news/2008/04/18/laptops