

Ban Computers and Cell Phones from Classrooms

By Dr. Ira Hyman, Ph.D

From *Psychology Today*

<https://www.psychologytoday.com/blog/mental-mishaps/201409/ban-computers-and-cell-phones-classrooms>

We should ban the use of computers and cell phones in classrooms. I know that is a radical statement and one that will generate controversy. But what else can we do?

Let me be clear that I love computers and I love my cell phone. I use computers for my work. I expect my students to use computers – for writing, research, data analysis, and almost everything else. Computers and cell phones are professional tools, and pretty fun toys. I know my students live on the internet. I seem to exist there as well and I frequently check email and various other accounts.

My concern is about using these tools in classroom settings. And I know the point of some classrooms is to teach with the computer. I do so when teaching my research methods and stats classes. But enough of the qualifications – let me get to the argument.

In the traditional college classroom, computers and cell phones should be banned. There are two reasons for my suggested ban. The first reason is the most obvious. What is actually on that computer screen? Plenty of distractions become available when the computer or cell phone is activated. Students who are texting and surfing the web are students who are no longer engaged in the classroom. Cognitive researchers have always known that although people can multitask, there are costs. The research on this topic is unequivocal. This seems particularly true in the classroom. In the classroom, the primary task is learning. Being distracted by text messages or web surfing decreases learning.

For example, Kraushaar and Novak (2010) conducted a study of classroom learning over an entire academic term. The students used laptops and knew they would be monitored and tested. The students agreed to have spyware installed on their computers to track what they were doing. Even though the students knew they were being monitored, the students were frequently off-task. They used their computers for non-class activities about 40% of the time; checking email, surfing the web, using instant messaging. Time spent off-task predicted grades: the more someone was off-task, the poorer the grade. The students also woefully underestimated how much time they spent off-task.

But what about the student who isn't surfing the web? What about the student who is using the computer for note taking? Would that be ok? This brings me to the second reason for the ban – Even when only used for note taking, computers impair learning. In a recent study, Mueller and Oppenheimer (2014) had students watch a lesson and take notes. They either took notes with a computer or with pen and paper. The computer was not connected to the internet and the only available use was for note taking. But even in this completely limited situation, the students using a computer for note taking performed less well on a test than students using pen and paper for note taking. When allowed to go back and study their

notes, the students who used a computer performed less well than those using pen and paper. Their approach to note taking did not aid learning and led to less useful studying later. Interesting, people wrote more when using the computer, but that didn't help. The problem is how people take notes. With pen and paper, people are selective and look to record the important points. With computers, people strive to take down everything; they aren't particularly selective. They aren't actively processing the information during learning. Their notes don't focus on the key aspects of the material. This means poor learning and less useful notes for studying later.

So for two reasons, we should seriously limit computers and cell phones in the classroom. They distract from the primary task and they result in less effective learning even when used appropriately. Of course, sometimes the content of a class concerns using a computer. In that situation, we have to use computers in the classroom. But I suspect that in this situation a lot of multi-tasking happens. How can you keep their minds in the classroom when the world-wide web is at their fingertips?

By the way, I suspect we might find something similar if we looked at the effects of computers and cell phones on work meetings. How often have you seen people in meetings distracted by their cell phones? How often have you seen someone trying to get everything down and not actually thinking about the topic of discussion? If you want effective meetings, leave the cellphones outside. If you want effective classrooms, leave the cellphone turned off. Oh, and good luck getting people to follow this advice.