

Students are smarter, but have they changed?

By Audrey D. Kline



Audrey D. Kline, audrey.kline@louisville.edu, is an Associate Professor of Economics, College of Business, University of Louisville.

Abstract

After over a decade serving as a senior academic administrator in her college, the author returned to the classroom this year. Teaching had always been fun for her, and her return to it was no exception. In this paper, the author explores some of the changes she sees for both students and faculty compared to teaching over a decade ago. The upward pressure on her university's admissions statistics implies today's students are smarter. Concurrently, the

presence and role of technology has changed dramatically in her time outside the classroom. As a result, she anticipated finding students would be more easily engaged in discussions, would ask more questions either in person or electronically, and would have improved classroom performance. She expected that the combination of ready availability of information and online resources, as well as their better academic profile, would create an improved, more dynamic learning and teaching experience. Her first year back in the classroom has held some surprises, and the benefits of technology for students are not so clear.

Initial Impressions of Today's Students

After over ten years out of the classroom, this academic year I stepped away from a senior administrative role and returned to teaching Principles of Microeconomics. Overall, it's been an absolute blast, but there have been some surprises along the way.

A recent <u>Washington Post</u> article compared the performance of U.S. millennials to their contemporaries around the world on a technology skills test developed by the OECD and found the U.S. participants performed at or near the bottom relative to their peers on the series of tests. Similar to what I am observing, performance has slid over the past decade. I offer here a few simple observations about student learning based on nearly two semesters back in the classroom. Maybe it's too early to be pondering student performance and engagement, but maybe it's right on time for my return to teaching and for others engaged in teaching the Principles courses.

We all know that the basic economic concepts that we teach haven't changed a whole lot at the introductory level. A free market approach ten years ago showed the negative economic impacts of both minimum wage increases and taxes, just as it does today. However, delivery options for teaching and ancillary resources have evolved, and students have access to more information than ever before. There are a plethora of online resources, blogs, articles, and more at everyone's fingertips. Today's textbooks have accompanying ebooks that will read the text to you, embedded videos within the ebook chapters, online exercises that will instantly grade for the instructor and the student, flashcards for studying, the ability to highlight and bookmark the ebook, take notes, and more.

Technology: Information Overload and A False Sense of Security

What I have come to wonder with increased focus as the academic year draws to a close is whether or not technology is an asset or a liability for students. On the positive side, it makes communication so much easier and it does provide a ready supply of helpful resources. On the negative side, I wonder if it is too much information, does technology provide too much of a distraction (browsing online, texting during class), and does technology provide a false

sense of security for students because they assume they can just use a Google search for information or work online problems later, if they need it. I am starting to sense that for my students, the negatives are outweighing the positives. I see less student engagement than I did over a decade ago. Students today seem to be increasingly distracted and have more things competing for their attention and time. The distractions seem to be inhibiting learning and classroom performance for many of the students.

All of these new resources will surely convert to higher student engagement and achievement in class, not to mention making it easier for students to understand things like the negative impacts of price controls and taxes, right? Surely if I provide these resources, they'll use them. And if I provide some extra credit on the test, they'll read these articles I push out through the course-available software, right? Well, maybe.

Recently, *Mises Daily* published a great article, "<u>Yes, Minimum Wages Still Increase Unemployment</u>," by Andrew Syrios. I have talked about this topic throughout the semester, not only because it is course appropriate, but also because a local ordinance was passed recently to increase the minimum wage here, and the state has taken up the issue. Even better, I was covering price controls in class the day the Syrios article appeared—perfect timing! I pushed it out to students through our online platform. I figured the article would surely help me reinforce with students why price controls distort markets with another piece of evidence from outside the textbook.

I had also sent out George Mason University Professor Don Boudreaux's WSJ letter to the editor from January 7, 2015 about the minimum wage at the beginning of the semester. Apparently, neither made much of an impact on my students. Despite the graphs presented in class, the textbook material, and the various articles I shared with them, several students still clung to their belief that minimum wage increases don't really cause unemployment, and that the increases are generally beneficial for society.

I will always challenge my students to think as we cover material in class—I do not just talk at them, but have a conversation with them. When I turned to the subject of taxes, I clarified the need for the provision of public goods, but many students cling to a broader role for government and taxation, despite seeing the evidence through the material on tax incidence that taxes raise prices to the consumer and generally reduce the quantity exchanged in a market. They think our city and state aren't "too bad" on taxes, when we have one of the highest tax burdens in the nation!

Some of my students think taxes are necessary and good. The students tell me that after all, taxing cigarettes will make people smoke less, which is clearly a good thing, elasticity of demand (and personal freedom) be damned! Some students think taxes are a benefit to society beyond providing the funding

for public goods. Some students argue that taxes are a must for a successful society, and that we need taxes to provide programs (like Social Security). Unfortunately, many of today's students don't seem to want to think through alternative solutions by utilizing what they are learning in class.

While I have to be careful about injecting my own free market beliefs in the classroom, I admit it is disappointing that some students seemingly refuse to think through a situation or believe what a graph or data show them. I have a handful of students that express agreement with free market-based economic principles, (interestingly, these are typically students who are a bit older, or have business or military experience), but it seems some students would rather stick to their perception of a positive role for expanded government, price controls, and taxes, despite the overwhelming availability of resources at their fingertips pointing out the negative impacts of these policies. Many students choose to remain silent and never speak in class. This is a real challenge for faculty in the classroom, especially with the lack of engagement in learning that the students display. Perhaps the problem is amplified in certain regions of the country.

Smarter But More Disconnected Students

Each year, lately, there is a clear push for the march upward in admission score performance at my university, with the annual proclamations of "this year's entering class is our best ever!" It is exciting and heady stuff, especially as we marched from Conference USA to the Big East to the more academically respected ACC. Now we've arrived and the students we admit are supposed to be moving toward being on par with other ACC schools. Better students should be able to achieve more, right? Well, maybe.

Admittedly, it is early for me to make projections and be able to provide definitive yes/no answers to my questions above. I teach in an interactive style, so I always have some class participation, but there is ample room for the shy (or sleepy) student to not answer my many posed questions through each class period and become one with their chair. I am pretty laissez faire in my approach—I treat the students like adults and expect them to be responsible for what they choose to do or not do for their success in the course. I don't require homework or attendance, I don't restrict the use of technology during class, either, so they could be surfing online, texting, or paying attention to what is going on in class, or maybe some combination of all three if they're really talented.

What I do see as a big change since I returned to the classroom is the short attention span today's students seem to have. And, despite the tremendously easy access to information today, students seem to be less aware of current events than they were many years ago. Now, admittedly, maybe my memory is the one that's off. But, I don't think so. I'm amazed by the lack of awareness of local, national, and international events, especially with nearly

everyone being attached to a smart phone, tablet, or laptop these days. It's an Instagram and Twitter society at the moment, but a lot doesn't seem to be getting through. What's worse is that many of the students don't seem to care that they are so unaware of what's going on around them. They're more interested in what's trending with their friends on social media.

What I'm finding with the availability of these truly fantastic new resources and the engagement of today's 'smarter' students is interesting and disappointing. As I passed the midpoint of the current semester, I had zero visits to office hours across 106 students. Last semester, I had fewer than five (of 45) students visit all semester. Most of those visits were to review a few exam questions after an exam or to pick up an exam because the student didn't come to class. No students came by for help along the way or to clarify questions before an exam.

I then suspected they must be using the online resources and all was well. Wrong! Now as my second semester back in the classroom is winding down, a few students are seeking help and asking how to navigate their notes and what should they be doing to do better. Again, these questions came after an exam, and now with only the final exam remaining. Why didn't they ask sooner? I nearly beg them to ask questions every class period and encourage them to text me or come visit for help.

After a pep talk with students about the importance of practicing answering questions, drawing graphs, and ensuring they understand the class material, about half way through the semester I encouraged students to spend some time with the material over the coming weekend and to ask any questions they had to date on current or past material the following Monday (though I start every class by asking if anyone has questions). I had checked the online engagement statistics for the resources that accompany the text. The time window passed, and I re-checked the online statistics. No change. I have 54 students in one section, and of those students, only 33 had used any of the online resources. My other section has 52 students, of which 43 had used the online resources.

While these numbers might seem good, the average "time in course" (use of any online resources connected to the course) was consistent at only *two hours* across the sections! The average number of logins was seven and six, respectively, and the percentage of activities accessed was four and three percent, respectively. The statistics were the same before my "pep talk."

For the completed course I taught in the fall semester, the class average for 'time in course' was eight hours, the average number of logins was 24, and the average for activities accessed was nine percent across 45 students. These are incredibly low numbers for active learners. As the semester draws to a close, the statistics have nudged up a bit—in both classes the average time in course is

four and six hours, the average number of logins is 12 and 13, and the percent of activities used is the same at 8 percent. A few students are logging reasonable amounts of time (12 to over 24 hours of use), but most are not, with some still not utilizing the resources at all (10 students in one class, 13 in the other).

What has become painfully obvious to me is students are students. It really doesn't matter how smart they are or how many resources are available to help them learn. Sure, a student with a higher ACT and GPA is likely to be able to navigate a multiple choice test a little better, but not always. And, a student with the better academic profile will be more attentive to their progress in class, come in for help, ask questions when needed, and so on, right? Well, actually, not really from what I've seen so far. Surprisingly, student behavior has not changed much for the better, at least not in my small sample of 150 or so students so far, and the level of engagement seems to have declined.

What I'm finding, in general, is that too many students are not doing the work needed to learn basic economic concepts. Some students have always confused basic concepts like a change in demand with a change in quantity demanded. What has changed is that I can ask questions today with the answer on the board, and students still answer incorrectly if they will respond to my questions at all. The quality of their input into the learning process and the desire to learn basic economic concepts seems to be sliding.

Students find it easier to snap a picture on their smartphone of the white board rather than take notes and ask questions as we cover material. They don't seem to understand that some of the learning happens by taking notes and that taking notes generally keeps them more engaged in class. A good example of this was that a few weeks after covering shortages and surpluses -- covered both with an adjustment back to equilibrium as well as with price controls -- it took some time for a classroom full of students to identify the economic concept of a shortage on a supply and demand graph. Students could not recall that quantity demanded exceeding quantity supplied was a shortage, so then I drew the graph. It still took some time, even with the graph on the board.

Similarly, almost daily I cautioned students about confusing a change in quantity demanded with a change in demand, and when I asked a simple question to test their knowledge, it was immediately evident that several students still confused the two concepts and declared a rightward shift in the demand curve as an increase in quantity demanded instead of an increase in demand. This happened immediately after the students told me they had started studying for their exam that was only a few days away. Yet, they asked no questions in their review opportunity at the start of class about the exam content.

After these mistakes on basic economic concepts during class, I stopped covering new material early and allowed another opportunity for review questions. A handful of students stayed in one class to listen to *one student* ask

questions. No students stayed for questions in the other class. And then students are perplexed by their poor performance on the exam! It seems that today's students are more proficient cost minimizers than ever. The statistics seem to show that several students put in the minimum time that they think they can get away with and still pass the course.

Perhaps the perceived lack of motivation to learn is why some students cling to preconceived notions about things like 'why we need taxes' and 'why minimum wage increases are a good thing' despite the concepts they are learning in class and the information to the contrary that is so readily available. They don't seem to understand or care that a minimum wage is a price control, even when it's presented as such. I do have some terrific students, but I'm perplexed by the apparent lack of interest in learning. Students seem as focused as always on the end result (a good grade), but less focused on the process to get to the end result.

Today's Students Fail To Ask For Help

Most students no longer want to take the time to ask questions, and it seems that they don't want to interact one on one with their professors outside of class. My visits to office hours are certainly slim but I generally don't see much 'traffic' in the hallways at my colleagues' offices, either. Of the few students that have reached out to me after the second exam or third exam this semester, the recurring theme I hear is that they are 'reading over the book,' but what they are not doing is practicing with graphs and working problems, despite my urging them to do so.

A few students who visited after the third exam missed several questions when a quick sketch of the relevant graph could have aided them tremendously in answering the questions. How did it not cross their minds to do that? I tell students specifically at the end of most classes what they should do on their own before the next class. Maybe they are starting to believe me. Unfortunately they are running out of time. Students seem to be making the mistake of trying to memorize. They are lacking the intuition that accompanies investing time to work with graphs and solve practice problems to enhance their understanding of microeconomic principles.

Never Give Up on Students

It is early yet in my re-immersion in the classroom. Rather than be discouraged by the seeming disconnectedness of some students, as well as their lack of belief or confidence in free market economics, I will continue to offer my students information, articles, and try to help them become more engaged learners to enhance their understanding of basic economic principles. And, of course, I welcome suggestions from colleagues. I am starting to believe that the "advances" in resources available for learning might actually be a detriment. Ready availability of information seems to create a false sense of security for

students, and perhaps there is also some fatigue from information overload. More importantly, though, too many of today's 'smarter' students seem less engaged in their learning of economics than they were a decade ago.

