Angst, Technology, and Innovation in the Classroom: Improving Focus for Students Growing Up in a Digital Age

With the recent economic downturn and corresponding loss of legal jobs, most professors in legal education have noticed increased angst in students. Many students entering law school carry a heavy burden related to student debt, and they fear that there will not be jobs that pay a sufficient salary to cover that debt and result in a meaningful career.1 Quite often, the angst carries over into the classroom. Students seem more prone to pushing professors for exact information that will yield the highest grades, and less inclined to spend time working out answers to questions, instead, relying on professors to give more concrete answers to any questions asked.2 There is visible frustration when a student cannot acquire and absorb a piece of information immediately.

Many legal educators, observing this angst phenomenon, blame the distractions of technology, such as surfing the web, checking e-mail, or sending text messages, instead of listening and absorbing in the

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2 Michele Goodwin, Law Professors See the Damage Done by ‘No Child Left Behind’, CHRON. OF HIGHER EDUC. (Mar. 12, 2013), http://chronicle.com/blogs/conversation/2013/03/12/law-professors-see-the-damage-done-by-no-child-left-behind/
classroom. The ready access to technology is only partially to blame. The reality is that all of our lives have become infinitely more complicated, and the ready access to technology has caused us to be so close to all of the stressors in our lives that we can rarely concentrate and absorb information in a way that was once possible.

Most professors in legal education grew up in a world in which there was not as much of a demand on our time. Older law professors grew up in a world without cell phones, a world in which the workday had the possibility of being finite and the most recent case on an issue was not available immediately after it was decided. Even younger law professors likely grew up in an era when technology became a dominant force in their lives, but not when there was such an immediacy to everyone’s actions.

Today, there is almost no ability to function without the immediate access to information at every minute. Employers may demand immediacy, and because of e-mail, Twitter, Facebook, cell phones, and text messaging, few people in a career have the opportunity to ever be away from work. Because of this same technological access, we demand immediate contact with whomever we want to reach at any time and desire answers and information as quickly as possible. The nature of this world has not only retrained most of us to be impatient in terms of getting tasks done, but it has caused us to demand immediacy in everything that we do. None of us ever has time to wait because we are perpetually on to our next task.

Moreover, because we are aware that everyone else is functioning in this same type of world, we are never “off the clock,” either from our employers or everyday worries. We know that if we spend a few hours without checking e-mail, others may not be doing the same thing. Others, especially those in other time zones, are still working; they might be requesting information from us or providing important information that we need. We know that if we go a day without checking our e-mail (or our multiple e-mail accounts), the inundation

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5 Id.

of messages will cause us to be overwhelmed and unable to efficiently function.7

This is exactly the world in which current law students have grown up. They have not had the opportunity to learn patience in undertaking a task. They have always had information at their fingertips and near immediate feedback on all they have done. They are consistently taking surveys and quizzes on computers and have seen their performance evaluated in real time. Grades are no longer a compilation of scores communicated after the semester is completed, but a day-to-day review of numbers and percentages posted on a website where parents and children can immediately calculate what scores are necessary to receive the highest grade.

Furthermore, today’s students have always had an immediacy of expectation regarding their own actions. All of their “free” time tends to be scheduled to the minute, and many of us who have children have trained them to expect that all of life will be a compilation of immediate actions and responses, only to finish something in order to move on to the next required task. Parents, who often lament that technology has taken over their children’s lives, facilitate this need for immediate action by expecting their children to instantaneously respond whenever that child is called or text messaged.8

Legal educators are correct in their belief that most incoming law students have not had the opportunity to gain sufficient practice in critical thinking skills or studying material in depth. Although, they are mistaken in placing the entire blame on the economic crisis and suggesting that law school applicants are not as bright or motivated as they once were. What is happening to incoming law students is happening to all individuals living in the technological era—too much information is coming at us at one time, and we have an inability to process it fully, coupled with an expectation that all of life is get-it-done-now.9

In the previous few years, there has been a lot of literature on reaching students and doing it primarily through technology.\textsuperscript{10} Thus, professors have been encouraged to incorporate visuals in the classroom as well as communicate with students via e-mail or through websites. Despite efforts to meet students on their own turf, professors are increasingly frustrated by students’ apparent lack of ability to absorb material. Consequently, professors tend to blame the students rather than to address the issue and work out the best methodology to reach the students.\textsuperscript{11}

Over the years, I have changed my curriculum and teaching methodology in an attempt to better meet the needs of my students. When technology became more readily available and was an expected part of the classroom experience, I shifted my teaching methodology to include more visuals and communicated more through the Internet. By 2010, I eliminated almost all paper from the classroom and opted instead to present my course material by distributing documents through a listserv and posting material on a course website. All of the assignment submissions, as well as my critiquing, were done electronically. Textbook use was minimized in favor of material that students could download and read on their electronic devices.

I thought I had developed the ideal curriculum in terms of meeting the expectations of students. However, in 2011, an interesting shift occurred with the students. Although almost the entirety of the course was available through online materials and communication, students seemed to absorb less of what they were being presented. I was often asked questions that were answered with material readily available on the syllabus, which was the first thing on the course website. When I asked students to follow the format of a certain handout that had been e-mailed to the class (and available on the course website), students were confused and asked for further clarification as to what they should be looking at. Moreover, despite the voluminous comments I thought I was providing the students by grading electronically, students came to conferences as if they had not even looked at any of them.


At first, I adopted the viewpoint that I was not the problem. I blamed the declining skills of my students brought about by the downturn in law school applications—this, and the inferior education most of my students had with respect to critical thinking. However, after a second year in which this same phenomenon seemed to occur, it dawned on me that the issue was not necessarily diminished skills nor a lack of training in critical thought, but rather the mere nature of the world we were living in where all of us were overburdened with information, stress, and responsibility.

The issue was not that the students were not reading the material. Rather, the students were incapable of reading and absorbing the material thoroughly because they did not have the luxury of unimpeded time to focus. Leisure technology might be partially to blame for the lack of focus, but it is only a small part of the bigger picture. Although technology has been extremely beneficial in helping us organize our lives, it has also been detrimental in causing us to be on information overload all the time. As an example, we all have multiple e-mail accounts to better help us organize our responsibilities, but within those e-mail accounts, we are inundated with information. The information is both important and unimportant, but it is information that must be processed nonetheless.

Even outside the scope of technology, we deal with parents, children, employers, and other types of relationships, each making demands on our time that cause us to apportion our days into smaller and smaller increments. Although technology is a blessing in terms of being able to obtain information necessary for our complicated lives quickly, it also means that we are never away from any of our responsibilities long enough to wholly concentrate on one thing.

Thus, all of us, whether we like it or not, have become multitaskers—not in the sense that we might be checking Facebook during what we perceive is a dull meeting, but in the sense that in every meeting we attend, we are always thinking about tasks that need to be done, from picking up children, to submitting forms, to making doctor’s appointments, to fretting about the amount of e-mails that might have to be processed in the time that we are away from checking our e-mail. Being overwhelmed with a desire to finish tasks

immediately has become the concept that unites all of us—not by choice, but by virtue of the way in which the world is now constructed.\textsuperscript{13} Moreover, the ready access to communication and information has a predictable consequence. When we have a computer or smart phone in front of us, we have an almost uncontrollable tendency to use the object.\textsuperscript{14} Most of us have actually rewired our brains to crave continuous information and contact, even though it is unhealthy and adds to the stress of our frenzied lives.\textsuperscript{15}

What I learned about my students is that they were not slackers. They simply had an inability to absorb material because they neither had the time to focus nor the time to look for materials that would help them with whatever task they needed to complete. The fact that a document had been sent in the past or was available online was not immediate enough for students to be able make use of them at the exact time that they needed the information.

As a consequence of this discovery, I made adjustments to my technology-oriented classroom. Although I still e-mailed assignments and documents to my students, I doubled my efforts to make the material more available for immediate use. Instead of referencing handouts from the course website or pulling them up on screen for reading in the classroom, I passed out the applicable handout we would be using for class as well as displayed the handout for the class as visual supplementation. What I discovered is that students needed supplementation and easy access to the handouts if they were to make any progress in focus and absorption. With documents in front of them reinforced by visuals, levels of student stress seemed to be lowered in the classroom. This made for more productive classroom sessions because students were not hindered by their inability to find and understand materials immediately.

In addition, I incorporated active learning sessions in which students were required to work in groups, discuss questions, and formulate answers, all without the use of their laptops. Where previously I had students compose answers on laptops and e-mail


\textsuperscript{15} \textit{This Is How the Internet Is Rewiring Your Brain}, HUFFINGTON POST (Oct. 30, 2013, 5:18 PM), http://www.huffingtonpost.com/2013/10/30/shocking-ways-internet-rewires-brain_n_4136942.html.
them to me in order to view the material at the front of the class on
screen, I changed many of my class activities to ones in which
students were required to write down their answers and either present
them orally or physically turn them in. By virtue of slowing down the
process of acquiring, contemplating, and absorbing the information, I
was able to give students more of an opportunity to focus on one task
at a time. These exercises took much of the stress of using technology
out of the learning equation. By simplifying the actual tools used for
teaching and learning, I was able to demonstrate to the students that
the key to learning many of the concepts I was discussing was an
ability to focus without the outside distraction of even turning on a

Although the conventional wisdom might be that those who cannot
focus cannot be productive in the practice of law, the reality now is
that students entering law school have a split attention span that
hinders their performance. In order to deal with this, legal educators
must provide exercises that promote focus and concentration on one
task. However, as legal educators, we must also accept that our
students’ brains have already been rewired so that full focus at most
times will be impossible. Rather than lamenting the fate of the
incoming law student and hoping for better days in the future, we
must accommodate the need we all have for immediate information
by modifying the classroom experience to provide for the immediate
access to information in the form of additional handouts or repeated
announcements.

Law professors must develop the patience necessary to understand
that many questions coming from law students are not coming as the
result of lack of effort, but because students have grown up in a world
where they have had to deal with too much information. It is our
obligation to help the students wade through the great morass of
information and help the students learn the skills necessary to become
the future leaders they need to be.