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“Work Smarter, Not Harder”:  
How technology has contributed to college corner cutting.

Gone are the days of notebook paper, mechanical pencils, cd players, and landlines. Today, the typical college never leaves home without a laptop computer, an mp3 player, and a cell phone. While ubiquitous, technology has become essential to the modern undergraduate; using the Internet to browse scholarly resources is commonplace and communication is largely done by email. In truth, as our society has pressed forward into the digital age, higher education, and the students who participate, has not been left behind. According to some, this has brought our students to the academic zenith. With millions of journals and articles published online, we quite literally have the world at our fingertips. With just a few keystrokes, the answer to any question can be found. Studies, research, opinions and interpretations all appear at the press of the “enter” button. It’s a world our academic predecessors only dreamed of, a world where knowledge is readily available to everyone and free thought is encouraged, rather than hoarded by a select group of privileged individuals.

It cannot be denied that technology has brought significant advances to the world of higher education. But these developments have come at a cost, a high price that our students must pay. With the constant flow of information that has accompanied the digital age, we have morphed into the “Efficiency” generation, a peer group dedicated to accomplishing every goal in front of us while exerting as little effort as possible. This change in mentality regarding higher education has shown a spike in scholastic crimes,

such as plagiarism and corner cutting. Rather than enjoying a pedagogical crest, the Efficiency generation is falling desperately into a trough of learning without real understanding. Thus, in order to halt this pattern, we must examine the societal consequences driven by technology and work to reverse them, using our digital progress to our advantage, rather than our detriment.

Any person living in the 20th century cannot deny the benefits of technology. Information and sources that once resided in all corners of the earth are now at our immediate disposal. Research that once took days or weeks to complete can now be available to us within a matter of seconds. We are truly living in the information age; anything we ever wished to know is only a Google search away. And when we're not working, we utilize the Internet to our personal advantage. Social networking sites, blogs, and online news sources dominate our screens as we click and scroll, productively or otherwise.

Certainly the content of the Internet entices us. With page after page of new information to process and consider, we enter a virtual labyrinth every time we log on. Like the proverbial running stream, we never enter the same cyber space twice. However, while pages that flash before us are seducing us, we are nearly oblivious to how the medium itself is affecting us. "Media aren't just the channels of information. They supply the stuff of thought, but they also shape the process of thought. (Carr 6)" The Internet, with its vast amount of information, is organized in such a way to keep us constantly bombarded with new stimuli. Structured to be read quickly and cherry-picked for important points of interest, the Web allows it's users to jump from article to article, absorbing data rapidly while simultaneously moving on to the next hyperlink. This design

not only engages our cognitive processing but also our motor sensory functions. As we skim and scroll, tap and click, rotate and manipulate, the screen changing speedily in front of us, we are kept constantly engaged and focused.

We console ourselves with the idea that the content that we're processing is more important than the media itself. Certainly it stands to reason that, as long as the ideas are being communicated clearly, how they're being packaged and delivered is irrelevant. But most fail to see that the medium is not only introducing new theories, it actually has the capacity to adjust our cognitive functions, thus changing not only what we think but also how we think. While the human brain still represents complex mysteries, we have come to understand two central facts. The first is that the brain continues to be malleable long after our adolescent years, a fact we have only recently discovered. Rather than being static after a given critical period and retaining the processes we have learned to that point, our minds have the ability to mold and adapt.

The second central fact is that our brains actually do rewire themselves, circuiting themselves to match the demands made upon it. Essentially, our brains react to a set of conditioned responses and modify themselves according to how they are rewarded. "When we click a link, we get something new to look at and evaluate. When we Google a keyword, we receive, in the blink of an eye, a list of interesting information to appraise. (Carr 117)" This also means that the way we then process the data will affect the reality we perceive. In other words, the way we input the facts and figures will affect the output. For example, when advances in cartography progressed, "the spread of maps also disseminated the mapmaker's distinctive way of perceiving and making sense of the world. The more frequently and intensively people used maps, the more their minds came

to understand reality in the maps' terms. (Carr 41)" So, when we utilize the Internet as our primary form of gathering information, our brains will not only adjust to the rapid, staccato pattern but also affect how we recognize the world around us.

As technology becomes more pervasive, it's not shocking to find that the majority of college-aged students are the prime consumers for digital products and services. We are known as "digital natives," a generation that grew up immersed in a computing environment (Glenn 4). For example, where letters and phone calls dominated the communication mediums of our parents, Facebook and texting have become the primary means of correspondence. Eighty-five percent of young adults have a social networking site and check it regularly while ninety-nine percent of the same age group own cellphones (DailyNebraskin.com). With little to no learning curve, each new technological progression brings novel ways to quickly and easily manage our social and academic lives, often simultaneously.

It appears that any given teenager could text, hold a conversation over social networking, and surf the web for a research paper concurrently. However, as previously mentioned, this constant bombarding of stimuli isn't a naturally occurring pattern within our brain functions but, rather, one that we have acquired. Instead of being rewarded for staying on task, the developing brain of a young adult may become habituated to quickly moving from one task to another, making it nearly impossible to sustain attention. For example, if a nineteen year-old woman is sitting down to write a term paper, but is constantly interrupted with texts and emails, the brain assimilates quickly that each task should be concise and swiftly accomplished, making her writing assignment that much more difficult to complete. Over time, this incident manifests itself into a pattern; rather

than setting aside time to thoroughly conclude an assignment, the brain now rationalizes finding the quickest and most effective way to accomplish the task at hand.

This is becoming a near epidemic among young adults. Teenagers are putting their minds through a rigorous series of conditioned responses where multitasking is rewarded.

Focusing on one task at a time has become outdated, if not impractical. “If you’ve grown up processing multiple media, that’s exactly the mode you’re going to fall into when put in that environment — you develop a need for that stimulation,” reports Daniel Anderson, professor of psychology at the University of Massachusetts at Amherst (Richtel 3). With the average student now equipped with the ability to write a paper, while surfing Facebook and texting simultaneously, addressing only one of these tasks at a given moment seems like a waste of time. Why go at half speed when full throttle is available?

But this isn’t necessarily a conscious choice. Certainly, we believe we can handle each task that we’re inundated with, and we surely try. But even as we prepare to sit for a challenging assignment, one that will take longer to articulate than a text message, we begin to crave these interruptions. Each Facebook notification, each *Bing* of an unread email represents a new valuable piece of information. Even though the details may be banal, “we crave the new even when we know that the new is more often trivial than the essential. (Carr 134)” Meanwhile, as we attempt to focus on the endeavor at hand, we find our minds difficult to control. After being trained to move quickly and easily from one exercise to the next, being forced to rest on one subject is uncomfortable at best.

With this new brain structure, coupled with the availability of scholarly information, we see the birth of the Efficiency generation. Our new mental wiring pushes

us to multitask and find the most effective way to complete an exercise while the Internet creates a siren song, crooning the simplicity of a Google search. This “work smarter, not harder” philosophy has dampened the purpose of higher education; rather than using assignments to guide learning and a deeper understanding of a given subject, they are merely obstacles to be overcome, items to check off the proverbial to-do list. Instead of gauging the priority of tasks based on their importance or intrinsic value, assignments are executed according to how quickly they can be completed, encouraging short cuts like plagiarism.

For example, a student is assigned to read William Shakespeare’s popular play, “Hamlet”. However, because of this new approach to education, it seems reasonable in the mind of a young student to merely type the title into a search engine. In doing so, he can find dozens of summaries, comments on character development, and various interpretations of Shakespeare’s political commentary. Instead of spending twelve hours flipping pages, he can acquire the same information in twelve minutes. Thanks to Wikipedia, Cliffs Notes, and other online resources, this student will still be able to regurgitate a plot summary and prove some knowledge of the piece. Thus, by maneuvering through this task quickly and efficiently, his brain is rewarded. He has achieved the same results with much less time and energy exerted.

Or, perhaps, a student opts to read “Hamlet” but does so while distracted. While trying to wade through Shakespeare’s rich language, she also tries to manage three conversations at once, all on different mediums. Because of her acquired multitasking skills, she is able to accomplish her goals and finishes the play. However, even though

our brains have become accustomed to moving quickly from subject to subject, she is unable to retain any of what she has read. She may, in essence, accomplish the task, but the intrinsic value and meaning has been lost. “Every time we shift our attention, our brain has to reorient itself, further taxing our mental resources. The brain takes time to change goals, remember the rules needed for the new task, and block out cognitive interference from the previous, still-vivid activity. (Jackson 22)” Even though we have mastered a swift switch, retaining what we’ve built proves a greater challenge. According to research done by UCLA psychologist Russell Poldrack, “Our results suggest that learning facts and concepts will be worse if you learn them while you’re distracted. (Carr 133)”

For what the Efficiency generation is gaining in time by multitasking or cutting corners, however, we are losing in understanding. Certainly, it seems as if there’s no harm done in skimming a plot summary rather than reading the actual literature. It’s faster, easier, and, often earns the same grade on a test or a paper. But as we’re cheating our way through classes, we’re actually cheating ourselves out of a quality education. We may be able to recite passages from classic novels verbatim but that is not what constitutes true knowledge and understanding. Let’s return to the example of the student who used Wikipedia in lieu of reading “Hamlet”. Without a doubt, he could tell his professor what role Claudius and Gertrude played and the general themes of revenge and moral corruption. But beyond the basic skeleton of the text, this student is at a loss. Reading the Wikipedia page has not contributed to his learning; he knows the facts but a true understanding of the work is unattainable.

This may hardly seem like a great loss; one student deciding not to read one Shakespeare play is not a tremendous scar on the face of education. But consider the number of times an undergraduate opts to cut corners, as it appears to have become the norm rather than the exception. With 14.4 million college students in the United States all taking short cuts, we can begin to imagine the severity of this issue. In truth, this mentality flies in the face of the goal of higher education. In order to truly achieve free thought in a forum where all opinions hold equal weight, each participant must be presented with the same information and be allowed to create his own individual interpretations. This is impossible if we do not fully understand the subject that we're supposed to be studying. Rather, the discourse that we value so highly on college campuses would be reduced to a mere back and forth of our predecessors' interpretations, rather than a collaboration to come to a higher truth. When we only understand a fraction of the available knowledge, we've not gained anything except a satisfied conscience that we have made some effort toward our education. We must understand that cutting corners on a larger scale has a greater societal impact and that we do ourselves no favors by striving to do the bare minimum. In truth, this is how, as a generation, we know more than our parents, but we understand significantly less.

So how do we expect our teachers to compete with keyboards and LED flashing lights? We don't. Most professors have ascertained that shoving books and power points in the faces of their distracted students doesn't help them to learn. Our brains have been hardwired to look at screens, making traditional classroom methods obsolete. Thus, as our students have evolved with technology, our education system must do so as well. Many schools are reallocating funding toward digital advances, such as affording I pads

for English classes. According to Geoff Diesel, a teacher who has made this technological leap, students today are not comfortable writing essays on paper, but can write four pages over text messages or Facebook. He's found that by allowing students to use a medium that feels comfortable to them, they can thrive. (Richtel 4)

We cannot deny that there has been a definite shift in student mentality in regards to education. Because of the constant flow of information of the digital age, young adults have become susceptible to the bombarding of media. While trying to balance intense academic responsibilities as well as a technological social life, malleable minds have rewired themselves to adapt to multitasking, making the ability to focus on one task at a time nearly impossible. Thus, when faced with scholastic pressures that require centered time and effort, students crumble and recede instead to the Internet. In the infinite pages of the Web, they find their answers with a few double clicks of their mouse, thus satisfying their brain patterns as well as their professors. The Efficiency generation is constantly looking for faster, quicker ways to accomplish their young adult duties. Unfortunately, this has led to a pattern of corner cutting in higher education overall.

We cannot run from technology or the consequences of living in the digital age. Just as today's students have adapted, so must our education system. Traditional methods no longer propel us forward into learning, but, rather, represent a weight that drags us behind. Students, in search of the fastest, most efficient way to accomplish academic priorities, find themselves attracted to Google searches and multiple, unfocused priorities. Obviously, this isn't a healthy pattern to promote within our colleges and universities. But before we can make any substantial transformation, we must first understand what

immersing ourselves in technology is doing to our students' minds and decide if this immediate access to knowledge is worth the dangerous change in our brains.

To unplug or not to unplug...

That is the question.

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