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Adjusting Higher Education Policy for the Internet Age

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The internet has changed many aspects of our lives. It has made it easier for us to connect with people willing to rent a room in their house overnight, and has made it possible to connect someone who needs a ride with regular car owners who are willing to drive others somewhere. Even before it disrupted the hotel/motel and taxi industries, it disrupted retail. Without the internet, a mega-retailer like Amazon, eschewing brick and mortar stores, could not exist.

The internet has worked major changes on higher education as well.

1. Just as the internet made physical retail stores less necessary, it makes the physical college campus less necessary.
2. Online and blended (also known as “hybrid”)

delivery dramatically reduces the need for live instruction. Lecture class sessions can be completely eliminated.

3. The need for formal education is reduced. Specialized career-related courses can be delivered on demand in small doses, and life learners can take inexpensive courses for personal enrichment.

Combined, these three changes can have a profound, positive impact on education. However, the benefits of the internet have been slow to reach students, because education is more heavily impacted by public policy than retailing and lodging. This paper explores the major changes in higher education, and makes suggestions for relevant policy changes.

The Declining Need for the College Campus

Historically, being present on a college campus was an inevitable part of obtaining a college education since the most efficient way to bring knowledgeable

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college instructors and students together was in a classroom on a campus. Since a relatively small portion of the population attended college, qualified professors were few and far between, and communications and travel were limited, centrally organized campuses made sense. But now, the college campus is optional, at least when it comes to covering the academic basics.

Technology has radically altered the future of college education. It is now possible to bring the instructor and an engaging, rigorous curriculum to the student as the student sits in the comfort of home.

Increasingly, the main reason for the college campus is to provide the “college experience,” the social interaction of students with other students and the general college community. This is distinct from academics although it may provide benefits, such as the development of social and leadership skills. For those who want it, the college experience requires a physical campus.

However, academic training and the college experience are no longer inherently intertwined since learning no longer, of necessity, has to be gained from face-to-face encounters with instructors.

To some students, the extra costs of four years of the college experience might be worth it, but there are many other others in college only for academics, who are anxious to begin a career, or who are already in the full-time workforce. Technology gives these students the ability to avoid the cost of the college experience.

Delivery of Academics

Undergraduate academics can be divided into two broad categories: general education and career education. General education is to make the student a broadly educated person. It can be thought of as an extension of high school at a more advanced level since there is no real change in the subject areas compared to high school: history, government, math, social sciences, humanities, and natural sciences. These constitute the freshman and sophomore level courses required of every college student in order to graduate, regardless of one’s major.

Career education is the student’s “major” subject of study and perhaps some additional concentration of study in a “minor.” Career education is far more

specialized and in-depth than general education.

General Education

Given the technology available today, the physical requirements for college general education courses are a personal electronic device (laptop, tablet, or smartphone) and an internet connection. Online coursework has long surpassed the equivalent of a mail correspondence course made more efficient by e-mail and discussion boards and is often arguably better than the physical classroom. Today, there are online textbooks with high-quality graphics, engaging videos, and interactive graphics. Online lectures give the student on-demand access to the best professors on their best day.¹

The internet eliminates the need for a physical library. Personal tutoring is inexpensive and available 24/7. Facilities are not even needed for testing since online test proctoring is available from numerous providers at a cost below physical proctoring sites

Online delivery allows courses to be self-paced and available on-demand with the advantage that learning improves when students can self-pace. Strong students can move on while weaker ones can take the needed time to fully master the material, something that rarely happens in a traditional classroom where everyone must proceed in lock step through the material.

In some cases, there might be a desire/need to blend online delivery with discussion or lab sessions. At most, this requires the student spend 1.5 hours a week in synchronous class sessions with an instructor. Discussion/lab class sessions can be delivered online via discussion boards, chat rooms, or video conferencing. Instructors do not need to possess PhD level expertise in the subject matter, nor spend a significant amount of time preparing for these sessions.

The potential negative of online delivery is that students have less opportunity to develop informal, personal relations with classmates. In order to facilitate these informal relationships, discussions/labs can take place in a physical classroom. However, facility needs are minimal and instructors can be part-time.

Early College High School

Under the Every Student Succeeds Act, “The term ‘early college high school’ means a partnership between at least one local educational agency and at least one institution of higher education that allows participants to simultaneously complete requirements toward earning a regular high school diploma and earn not less than 12 credits that are transferable to the institutions of higher education in the partnership as part of an organized course of study toward a postsecondary degree or credential at no cost to the participant or participant’s family.”² Because of the cost and time savings involved, early college high school programs are quite popular with students and their parents.

There are a variety of ways to structure early college high school programs. A commonly used model is for high school students to concurrently enroll in courses from a local public college or university. Generally, the high school student will simply attend a regular section of a college class on the college’s campus. Other programs bring college faculty to the high school campus to teach a section of the course just for participating students at that high school.³

Given the reduced needs for live instruction, all of college general education can now be delivered in high school through online or blended dual-enrollment courses. One model for doing this is for the college to provide the curriculum and grade exams while high school teachers run discussion and lab sessions. District personnel, acting as tutors, would not need to be directly supervised by the college. This model would let most college-bound students complete all their college general education while in high school. Online and blended delivery makes it possible to offer early college high school programs in any school district, regardless of district size or demographics.

Because online and blended delivery of college classes require significantly less instructor time than a traditional high school course, the cost of early college high school is much less than that of traditional high school. In fact, two years of college can be provided within existing secondary education budgets.

Low-cost tuition could be paid by the high school (or state) to colleges for their online courses. This tuition could be offset by savings at secondary schools due to reduced personnel needs.⁴

Career Education

The need for a physical campus increases with career education. When it comes to a student’s major, synchronous, instructor-led instruction might be necessary. As discussed above, synchronous classes can be delivered wholly online. In fact, this approach has become a major delivery mechanism for graduate professional education. However, purely online delivery may not work for courses requiring expensive equipment and/or hands-on demonstrations and labs in addition to customized assessments. Here a blended approach to career education is appropriate.

In addition, social networking may be a vital part of career education for many. College may serve as a source of valuable life-long connections, as well as a logical entrée with entry-level employers. Social networking and informal peer learning and study are arguably more likely to occur in a blended format with a physical campus. Thus, it is in career education rather than general education, that a physical campus is likely to be more beneficial.

How much formal higher education is necessary?

The more formal education one takes, the higher the cost. First, there is the cost of providing the formal education that must be paid through tuition, government subsidy, and/or charitable donations. Perhaps more importantly, formal education imposes opportunity costs on the student. Every hour the student spends on formal education is an hour that cannot be spent earning income and gaining practical experience. Together, the cost of providing formal education and the student’s opportunity cost can make formal education very expensive.

Many careers require some formal education beyond high school. However, this does not necessarily mean a four-year bachelor’s degree is necessary. Short-term vocational courses are enough for many careers. The internet makes delivery of these programs in either online or blended formats relatively inexpensive.

Many jobs arguably require students to have a college-level general education. This is usually done

in one to two years of college work. How much formal education is necessary beyond that? The current default option is a four-year bachelor's degree, which includes two to three years of career education on top of general education.

The internet makes it simpler and less expensive to learn apart from formal education. There is a tremendous amount of free or low-cost information available to anyone. The internet also makes it possible to provide career education in much smaller doses, and deliver it on-demand. This means students need less formal career education before entering the workforce, and it makes it easier for students to take more formal education in small doses as their career requires.

Rather than defaulting to a four-year bachelor's degree, colleges should have a general education component that is available via Early College High School (see box above). The amount of formal career education should then vary with the amount of formal education that a particular career requires. For many non-technical careers, minimal to no formal career education is necessary. Vocational schools and associate's degrees, depending on the field, are often sufficient. More technical work will require more time, but not necessarily a full two years.⁵

Implications for Policy

1 **There is still a need for a truly seamless system of credit transfers.**

For years, there has been an effort at the state level to align courses across public institutions, but the work is far from finished. Major universities, not just within states but across states as well, need to establish a seamless system of credit transfers. Courses do not have to be exactly the same, and protocols must be in place to make sure students do not receive credit from the same institution for nearly identical courses taken in two different places. However, creating and operating a seamless system is not an extremely difficult or time-intensive task. The cost is trivial compared to the time and money students can save from by the easy transfer of credits that have been honestly earned from one credible institution to another.

Public policy should mandate participation by

all public colleges and universities. Private higher education institutions should also be allowed to participate if they so choose.

A seamless system makes it easier for students to matriculate at multiple institutions according to their needs and course availability with the option of shopping around for needed credits, as opposed to the wishes and designs of the institutions. An added benefit is that this approach increases the amount of competition between institutions, leading to better quality and lower prices.

2 **Early College High School should be universally available to all high school students.**

Early College High School provides huge benefits to students. While not for every student, it is a perfect solution for most who plan to earn a college degree. State policy should make it universally available. This may require giving local high schools more flexibility in curriculum, staffing and budgeting. It may require modification to the funding formula a state uses to allocate money among their public schools.

There are multiple ways to implement universal early college high school, but one should be avoided. It should not be geographically-based, with the local college forced upon the student (pure online) or high school (blended). A policy to this effect may have made sense pre-internet, but not today. The student or high school should be allowed to choose any reputable institution provided its tuition is competitive.

3 **We need to rethink what is truly required for career training, especially when it comes to government-required credentials.**

Many students are forced to spend excess time in college to meet arbitrarily-determined career education requirements imposed by the government in order to pursue their chosen occupation. Occupational licensing has become ubiquitous and often requires a bachelor's degree or beyond even though the level of technical knowledge and skill necessary for success in that occupation is significantly less.

Even if one believes that licensing for a particular occupation is justified, current statutory education

requirements are generally excessive, and often irrelevant. In fact, if a licensing exam rigorously tests relevant knowledge, then the exam should be sufficient, regardless of how the license candidate gained that knowledge.⁶

4 Government employers need to move away from requiring a bachelor's degree for employment when these credentials are unnecessary.

Government is a major employer. As such, government can lead the way in eliminating unnecessary formal education requirement for new employees. This would significantly reduce the costs of entry into the work force---particularly benefiting students from low-income families who can ill afford wasting their time and money on unnecessary formal education. Government as an employer should make sure that its career education requirements match those necessary for a position, rather than default to a bachelor's degree as a job requirement. Many government jobs that currently require a bachelors require little, or often no, specific career education. An associate's degree should suffice for many.

Conclusion

Having thoroughly disrupted communications and the retail, hotel/motel, and taxi industries, internet-based innovation has begun to disrupt higher education. The physical classroom for general higher education is largely a thing of the past, and for career education, it is getting there. We just have to adjust higher education and other labor market policies to the new reality.

We can do this by:

1. establishing a truly seamless system of course transfers so that students can easily matriculate with multiple institutions according to the students' needs and not the institutions',
2. making Early College High School education available for everyone who can qualify so that, if motivated and able, students can graduate high school with an associate's degree and two or fewer years of college to complete,
3. eliminating excessive formal education requirements under occupational licensing, and
4. requiring government employers to eliminate unnecessary degree requirements as minimal qualifications for jobs, particularly jobs that require little, specific formal career education.

End Notes



¹ Vance Fried, “College 2020,” Heritage Foundation Report, Washington, D.C., March 26, 2013, <https://www.heritage.org/education/report/college-2020>.

² 20 USC 7801: Definitions, [http://uscode.house.gov/view.xhtml?req=\(title:20%20section:7801%20edition:prelim\)%20OR%20\(granuleid:USC-prelim-title20-section7801\)&f=treesort&edition=prelim&num=0&jumpTo=true](http://uscode.house.gov/view.xhtml?req=(title:20%20section:7801%20edition:prelim)%20OR%20(granuleid:USC-prelim-title20-section7801)&f=treesort&edition=prelim&num=0&jumpTo=true).

³ “Sample School Models and Budgets,” Edupreneur Academy, <https://edupreneuracademy.org/sample-school-models-and-budgets/>.

⁴ States are already engaged in various concurrent enrollment experiments wherein students sign up for college courses, paying reduced fees, with the state picking up the difference in some way. This merely proposes that public schools more formally share resources where appropriate. See Oklahoma’s concurrent enrollment program at: https://secure.okcollegestart.org/College_Planning/Prepare_for_College/concurrent_enrollment.aspx.

⁵ Richard Vedder, “Master’s Degrees in Janitorial Science?” The James G. Martin Center for Academic Renewal, January 17, 2018, <https://www.jamesgmartin.center/2018/01/masters-degrees-janitorial-science/>.

⁶ Byron Schlomach, “The Need to Review and Reform Occupational Licensing in Oklahoma,” 1889 Institute, Policy Analysis, September 2016, p. 6, <http://nebula.wsimg.com/b845ef32a491f4a35fb2ef7c97b05704?AccessKeyId=CB55D82B5028ABD8BF94&disposition=0&alloworigin=1>.