

Thesis Project Portfolio

The Current State and Future Needs of Systems Engineering Curriculum: A Proposed Curriculum

(Technical Report)

Identifying the Flaws With Online Higher Education and Understanding Why They Remain Unsolved

(STS Research Paper)

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Introduction

On average, a bachelor's degree increases career earnings by \$1.2 million when compared to non-degree holders (Miller, 2018). At \$30,000 per year over a forty-year career, a degree can be a difference of millions when invested properly. However, college degrees come at a hefty price point, averaging \$148,400 at private institutions (Hanson, 2021). COVID-19 has only worsened this, with *CNBC* estimating that now more than half of students probably cannot afford college (Dickler, 2020). This is where online degrees come into play. Online degrees provide an avenue for those who cannot afford a traditional college degree, but are looking to get one to increase earning potential. As Franklin University states, online degrees provide balance, lower costs, and self-paced learning (Franklin University, n.d.).

Online higher education encompasses all fully-online bachelor's and greater degree programs. As *Franklin University* has noted, the flexibility of online higher education degrees makes their target audience those looking for flexibility and affordability in their degree programs, such as working adults (Franklin University, n.d.). Online higher education programs can be classed as for-profit or non-profit. For-profit programs are owned by a managing company (called an online program manager, or OPM) with the sole purpose of making a profit, while nonprofit programs are partially or fully subsidized by the state (Lobasco, 2016). However, private-public partnerships with OPMs still create profit motives for nonprofit programs. As my research will show, this is one of the glaring faults in what should be a positive learning experience for students. Therefore, I will answer the following question: "what are the problems with online higher education programs and why do they continue to exist?".

The largely profit-motivated nature of online higher education creates a greed-based system that treats students as sales figures and diminishes the overall learning experience. The

literature review will focus on three topics: the profit motives of online higher education, the intrinsic flaws of online learning, and predatory marketing tactics of online education programs. This will then be followed by an analysis that leans on data on or relating to the aforementioned topics, such as demographic data of online institutions, journals, articles, legislation, and testimonials. All analysis will be done through the lens of Actor Network Theory, a framework with which I can analyze how the important relationships in the sphere of online higher education interact to influence the current degree programs being offered. Through this work, I find that online higher education programs provide a subpar education with high dropout rates that aren't rectified due to a lack of legislation and poor alternative programs, leading me to conclude that the online higher education system needs a massive overhaul that places a higher emphasis on student success.

Literature Review

Online higher education is primarily for-profit. According to the *College Financing Group*, “over the past few years, thanks to a declining high school population and an improving economy, enrollment at community colleges has declined. For-profit universities followed a similar trend—that is, until 2014, when they halted the decline and drastically improved their enrollment rates” (College Financing Group, 2022). For-profit colleges are starting to take a larger stronghold on online higher education, and are starting to become synonymous with online higher education as a whole. Stephanie Hall (2022) researched the profit motives and setup of these for-profit programs, finding that “when OPMs entered the scene as enablers, they offered to front the costs and risks associated with launching online programs in exchange for a substantial cut of the tuition revenue (often around 50 percent and sometimes up to 80 percent).” Online program managers exist solely to use the demand for education to make a profit, shifting

the motives of these programs away from education, creating a diminished experience with high dropout rates and low graduation rates (Hall, 2022). This even extends to non-profit online programs, with “OPM partnerships with traditional colleges are growing quickly, and yes, there are hazards and will likely be some scandals” (Newton, 2016). Non-profit public and private schools are setting up online programs with OPMs that, while still considered non-profit, follow a profit motivated model. Further research is still needed however. A major gap exists in understanding the influence of the OPM-student relationship on student experiences, with an analysis of that relationship likely revealing *why* the student experience is so diminished.

Online learning has intrinsic flaws. In his 2019 study, Alshamrani found that one of the major factors contributing to failure in the online learning space is absenteeism. The more self-paced nature of online learning creates a detached environment that forces the student into isolation. The study also mentioned lack of interaction, isolation, plagiarism, and dependency on the Internet as flaws persisting in online higher education. Robert Ubell (2018) cites even worse issues, mentioning that students in online classes, when compared to their in-person counterparts, were more like to fail or withdraw. Hybrid courses were found to be a much better alternative, with them having equal completion rates to in-person courses (Ubell, 2018). The study therefore hints at the correlation between student-teacher interaction and student success. Again, the gaps in this research come back to motives – research needs to be done to address the reason that the student-teacher relationship in online coursework is nonexistent.

Online learning programs use predatory marketing tactics to attract students. As Melinda Anderson (2016) of *The Atlantic* wrote, “Increasingly, for-profit schools have come under scrutiny from regulators and critics for leaving students—disproportionately black and Latino young adults—with heavy debts, poor graduation rates, and weak job prospects.” While the debts

are a separate issue, marketing allows these online programs to shape their class at will. In fact, according to the *Journal of Blacks in Higher Education* (2021), “at the national level, for-profit schools are roughly twice as likely to set up in majority Latino or majority Black zip codes as compared to majority-White zip codes. Majority-Black zip codes are over 75 percent more likely to have a for-profit college than zip codes that are not majority Black.” The similarities between these OPMs (which exist for non-profit schools as well), and other predatory institutions such as check cashers and title lenders are shocking, and they all come back to their intention to profit off of black and underprivileged communities (JBHE, 2021).

Framework

In conducting the following analysis, I plan to use Actor Network Theory (ANT) (Latour, 2005). Actor Network Theory consists of two main ideas. Firstly, that everything in the world (human and non-human) can be represented as constantly shifting networks of relationships (Latour, 2005). This means that both human and non-human actors can exact influence and wield power. Secondly, these relationships can be influenced by, and influence, technology. Technology is a broad concept, and in the case of this analysis, the technology in question is online degree programs as a whole. The actors at play are numerous, and include online program managers, students, teachers, the program itself, legislators, etc. Using ANT allows me to analyze the connections between the relevant actors, and how their interplay amongst each other and with the online degree program has propagated major flaws, such as through the lack of oversight by the government (an actor). This form of analysis will further allow me to examine power dynamics and understand where certain actors have too much control over what should be a thoroughly regulated system (education).

Methods

All of my research will be done through journal articles, news articles, legislation, literature reviews, and demographic data. The primary data will be collected through databases and Internet research, with topics ranging from the demographic makeup of a university to a study of the experiences of a student in the online classroom. For example, with a lot of my focus being on for-profit programs, I plan to gather demographic and graduation data from schools such as the University of Phoenix to supplement or analyze the claims of journal articles further. Many of the secondary sources I plan to collect and utilize will focus on relationships and motives, crucial to analyzing how the current state of online higher education has come about. Supplementing this with student experiences will help understand how the degree programs are directly being shaped by these relationships, as the primary users of these degree programs are students. With this data I will use Actor Network Theory to map out relationships, and analyze how the influence of the relationship shows up as a consequence in the current state of online higher education programs.

Analysis

The profit-forward motives of online program managers cause students to be viewed as sales figures, turning the education into a secondary experience. The *University of Phoenix*, a heavily advertised program synonymous with online higher education has a “roughly 8% graduation rate” (DataUsa, n.d.). With such a low graduation rate, it is clear that their focus is on profit over student success. The graduation rate alone is a large indicator that the school itself views its students as dollar figures, not students, with the large graduation rate a symptom of collecting students and not putting time into their education or success, thus influencing the online education program into a product rather than an experience. However, for something viewed as a product, program managers seem to take the forced demand and quantity approach

over the quality approach. The median public college spends \$1.29 on the dollar for instruction for every student, compared to \$0.38 for for-profit programs. (Hall, 2022). Rather than improving the student experience, tuition just increases the profit margins for program managers.

Student experiences cited by the *Brookings Institute* back this up. One student discussed their experience with a discussion post, stating that “I posted some BS just to meet the number you have to... because I realized that it wasn’t the professor that was checking it, it was a computer to make sure you input something. So, I wasn’t getting – I wasn’t learning – anything out of the online” (Brookings, 2019). The teacher-student relationship is key here - in a situation where the teacher enforces learning and positive educational principles the degree gains value. However, by again treating the degree as a product or checklist, the relationship influences the degree into losing value, both economically and socially as employers view these programs as “BS”. Another student cited similar issues, “I got an A on a paper that was just trash, but it met the 10,000-word count, so it’s on point.” It felt like it was more focused on “make these eight posts...” (Brookings, 2019).

As mentioned earlier, these profit motives are not unique to for-profit schools. Students are therefore signing up for programs advertised as nonprofits, even though they are functionally operating like a for-profit program. The major actor here, OPMs, convince nonprofit schools into easing their burden and running their online programs, in exchange having power and influence over the degree program, reinforcing the poor education quality at for-profit schools and tarnishing the reputation of an online degree. Unfortunately, the marketing tactics of these OPMs allows them to maintain a large income stream.

Online programs continue to make a profit off the efforts of recruiters encouraged by program managers to use predatory marketing tactics to turn a profit. As Anderson mentioned in

his 2016 article, “for-profit schools prey on [disproportionately black and Latino young adult] students without high school counseling, after which they inevitably drop out or end up in debt.” In an alternate world, proper counseling is provided to these students leading them down a more traditional path. But, the sphere of influence of online program managers is too large and can easily find students who would slip through the cracks otherwise. Again, these tactics extend to non-profit online schools too, as they all come back to OPM managed recruiters with similar motives throughout.

The president of *Baker College*, a non-profit institution that is set up similar to schools such as the *University of Phoenix*, said that “he believes Baker’s marketing efforts — costing \$9.7 million in the 2019-20 school year [are] more than the college spent on financial aid...” (Clark and Jesse, 2022). Recruiters view students as data points or “sales”, and their relationship to the student devalues the educational experience as the people running these programs are selling a piece of paper, not a learning experience. The influence of recruiters make it such that the student views the degree as a path to a better future, contrary to the data point they really are. These marketing tactics are clearly targeted too, with the *Capsee Center* (2018) finding that “students at for-profits are disproportionately older, African-American, and female... .” Recruiters essentially choose the demographic they want to target. The monetary goals blind the recruiters into a brute force approach, unlike a school such as UVA that provides a positive educational experience with the interests of the governing body adding value to the degree through a commitment to a positive without profit motives. Student experiences back this up, with a student describing her predatory experience with a recruiter who was “very motivated to get everything signed off and ready to go for the next month... that was a very motivated process and I was getting calls a couple of times a week and e-mailed and follow up phone calls... if I

could have started that week, they would have done it” (Brookings, 2019). The students being preyed on don’t know better - without proper counseling they are prone to falling into the trap of OPMs, considering they have all the power and influence. It creates a perfect storm of consistent income through a worthless program.

Online learning has intrinsic flaws that are exacerbated by the lack of investment into improving student-teacher relationships and student counseling services. The classroom experience can only be approximated in an online platform. The *Brookings Institute* mentions the effect of this as a 0.2 standard deviation reduction in test scores, when comparing students to their pre-online grades (Brookings, 2021). This likely stems from the intrinsic flaws of online learning, including feelings of isolation, difficulty adjusting to increased flexibility, a lack of student-teacher interaction, and simply a difficulty with processing information in the altered environment (Lodge et. al, 2022). While some of these flaws are unfixable (difficulty with processing information is a largely individual problem), many stem from a lack of interaction or oversight by teachers, a problem solvable with increased spending on student success and interaction. A student survey cited by the *New York Times* backs this up, finding that students liked the increased interaction afforded in larger classes online (message boards, discussion posts, etc.) but disliked how (Marcus, 2022). Clearly, it is the student-teacher relationship that has one of the biggest influences on the student experience. When teachers become a more active actor in developing the student relationship, the student begins to view the degree program as a more positive learning experience. Unfortunately, a *National Center for Education Statistics* study found that (in 2020) for-profit schools have, on average, 10 more students per instructor when compared to public four-year schools (NCES, 2022). Further, as Ubell states in his article, online schools often spend next to nothing on student services, while their traditional

counterparts can spend up to 20% of their budget on student support (Ubell, 2018). The weak-teacher student relationship combined with the lack of spending on student support exacerbates that intrinsic flaws of online learning.

The lack of control over online programs by legislators creates a future of unfettered growth and action for online programs. One of the major actors that goes unnoticed in the sphere of online learning is the government, specifically state and national legislators: “The Department of Education quietly introduced significant changes to accreditation in November 2019...critics say the move will weaken the credibility of the accreditation system, dilute the quality of accredited higher education institutions, and remove consumer protections for students and their families” (Tomar, 2023). The notable issue with the accreditation system is the lack of regulation over the accreditation bodies. Many accredited online programs are accredited by bodies that have no relation to the typical bodies that accredit traditional four year colleges such as UVA. This relationship between accreditation companies and governing bodies such as the DoE therefore shapes the worth of an online degree, weakening its value as the standards that the program has to meet are much less strenuous than their traditional counterparts. For students who only have OPM-managed programs as options to get a degree, it means they aren’t afforded equal opportunity.

Further, national legislators are doing nothing to assist in changing the OPM system: “... as he rebuilds the department's regulatory authority over for-profit schools, Biden has opted to leave Trump-era policies in place while new rules are negotiated — with for-profit schools occupying a seat at the table... [leaving] both for-profit colleges and student advocates frustrated” (Arrojas, 2022). While some of the intended changes have been blocked due to party disagreements, the fact of the matter is that competing interests and party lines have made the

national government a sitting duck. It's not their influence but lack of influence in their relationship with OPMs that continues to devalue online degrees and harm student experience. While at this point in time the national government can be considered a neutral observer, the same cannot be said for state governments. According to Stephanie Hall, "pressure to compete online can come from governing boards and state legislators who want their institutions seen as national leaders in an increasingly crowded "global U" arena" (Hall, 2022). State legislators are actually working to better the interests of OPMs, detracting from the student experience, and influencing the technology into a status figure that can be flaunted by the state.

Conclusion

There is a huge gap in the higher education system, where the current form of education designed to provide a more flexible and affordable alternative to traditional higher education is a poorly-run debt trap treated as a product rather than a learning experience. Students are duped into viewing online degrees as a path to a brighter future while online program managers have no incentive other than to collect students like trading cards.

There is a clear opposing argument in support of OPMs that argues that they are simply benefiting off the unregulated free market, a completely legal path to profit. They may be overzealous with their sales tactics, but any student can be made aware of their shortcomings before enrolling. While that is true, there are certain portions of the free market that have an obligation to act with more care or succumb to being regulated further. Like the pharmaceutical industry is regulated to prevent unfettered profit over people's livelihoods, higher education is an integral part to modern society and often the ticket to a brighter future to many. So, while their actions may be legal, viewing students as sales figures creates a level of exploration that turns a major portion of the free market into a lost opportunity for students. Whether or not the actions of

OPMs are legal, viewing students as sales figures is a level of exploitation that makes their actions unethical.

The findings of this research would be best utilized by traditional higher education schools without online programs, current programs run by OPMs, and legislators. A combination of competing online programs that are truly non-profit, an increased focus on student success in current OPM managed programs, and more crackdown by legislators against OPMs would create a safer and more productive experience for students in online programs. This research, if that were to occur, would then be a difference maker in bridging the income inequality gap, giving a fairer playing field for those who cannot afford traditional education.

The most effective further course of action would be legislation and activism in order to end the reign of OPMs over online education. However, there is still room for more research to better understand the subject. Namely, the topic would benefit from further research into the relationships between state legislators and OPMs. My research revealed that there is some amount of pressure coming from state legislators to push online programs to further the reputation of the state, however the nature of this pressure is crucial to understanding the situation.

This path of study also opens questions as to the current accreditation process in the United States, and how the student testimonials mentioned previously can still lead to students gaining a degree. In reality, a lack of strict accreditation leads to a lack of value, and thus a degree program that eats at the money of the vulnerable without providing any return on investment. The legal setup that has allowed this system to go untouched is the next logical and necessary course of research.

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