

Acceptance of Online Education within Corporate America and Academia

James D. Cunningham
jcunningham40@gatech.edu

Abstract—Online education has exploded in use in the past 15 years, and while the perception of the validity of online programs is possibly improving, there remain many questions and concerns for businesses, hiring managers, students, and universities. Companies are faced with the challenges of having to better understand what exactly an online degree means, and what they can expect out of applicants that bear them. It remains a challenge to be able to determine at a glance if one candidate is better than another, and many older biases still exist, especially when it comes to recognizing reputable educational institutions. This paper will address that fact as well as the fact that there exists some positive trends in research that suggest the attitudes of decision makers are improving and are looking favorably on candidates with online education credentials. However, the existence of diploma mill institutions and poor reputation entities such as ITT Tech are not helping the landscape. There is significant data to support that higher education correlates directly with job opportunity and advancement, and this paper will attempt to examine whether a direct correlation between an online degree and opportunities for advancement exist, as well as the acceptance of online programs by students at Universities that have competing seated degree opportunities.

I. CORPORATE AMERICA

Online Learning has seen extraordinary attendance rates rise in the past 15 years, and this growth has given rise to new questions that have become very relevant to professionals in the workplace. How much actual value does a degree earned wholly or partially online provide to a work candidate? Are there barriers to success simply due to the fact that a degree is earned online? This research examines this area and provides insight into the perceptions of online learning among today's professionals. Additionally, it is important to note that this research is specifically examining the acceptability of online learning, whether the degrees are earned partially or wholly online, in the eyes of decision makers in the hiring process. These decision makers involved in the hiring process can be referred to as any individual with influence to the individual responsible for potentially hiring the applicant [1]. This research will look to examine and address any perceived biases in regards to online learning.

In Adams and DeFleur's study of Acceptability of Online Degrees [2], it is specifically noted in their research that the then current mentality weighed heavily against individuals possessing a degree earned partially or wholly online. Their research followed a questionnaire that attempted to compare theoretical job applicants in the eyes of gatekeepers and decision makers. At that time, the conclusion showed a strong bias against candidates possessing degrees earned partially or wholly online. Our research approached this same scenario

as a survey distributed through professional networks such as LinkedIn, and queried individuals with responsibility within the hiring process. This means that if the individual participated in any way in the hiring process, such as interviews, reviewing a resume, discussing a candidate with the hiring manager, or any other method of participation, then they were invited to participate in this survey. 696 individuals responded to the survey and the results indicate a shift in perception. 24% of the respondents indicated that they had a negative opinion of candidates that possess online learning credentials, while 57.3% responded as neutral or having no strong opinion either way. 18.7% responded positively, indicating that online credentials were seen as a benefit to the candidate. See figure 1 for reference.

If the candidate you are interviewing has educational credentials that were earned partially or wholly online, does this negatively or positively affect your opinion of the candidate? Please rate on a scale of 1 - 5, where 1 is a very negative opinion, 3 is a neutral opinion, and 5 is an extremely positive opinion.

Answer Options	Response Percent	Response Count
1 - Very Negative	11.6%	81
2 - Negative	12.4%	86
3 - Neutral	57.3%	399
4 - Positive	15.5%	108
5 - Very Positive	3.2%	22
answered question		696
skipped question		0

Fig. 1. Survey Question # 5

Our research conducted interviews with additional professionals that met the same criteria as those participating in the survey in order to solicit more qualitative answers to these same questions. Kim Maylee, District Sales Manager, noted in response to this scenario that when he is evaluating a job candidate, his concern for qualification revolves around what the candidate has done historically [4]. He mentions that his focus is on the technical skill set of the applicant rather than how the applicant chose to attend college.

Despite this positive acceptance, we also note that further into our survey we ask the question in a slightly different format - this time specifically asking if they were presented with two competing candidates where the only difference between the candidates was the method of obtaining the degree, where does their preference lie in selection? It is here that we see only 6.9% indicated their preference being the candidate with an online degree, and 38.1% indicating their preference of the candidate with a traditional degree. It is important to note that the majority of respondents (55%) indicated that they had no preference based on this criteria. See figure 2 for reference.

If 2 candidates were equally qualified for a position, where candidate A held a degree earned online and candidate B held a degree earned traditionally, please rate on a scale of 1 - 5 your preference with 1 being strongly preferring the online degree candidate, 3 being a neutral opinion, and 5 being a strong preference for the traditional degree candidate.

Answer Options	Response Percent	Response Count
1 - Strongly Preferring Online	4.6%	32
2 - Preferring Online	2.3%	16
3 - Neutral	55.0%	383
4 - Preferring Traditional	21.0%	146
5 - Strong Preferring Traditional	17.1%	119
answered question		696
skipped question		0

Fig. 2. Survey Question # 6

We asked our survey participants to try and identify any concerns that might be had regarding online education - what actually drives the bias against one method of learning over another? According to our results, we can see that there exists concerns about an online program's degree of difficulty when compared to a traditional counterpart. The potential for cheating, a lack or reduced opportunity of social interaction among students and staff, and the thought that content taught online may not be the same content taught in a traditional program were the primary concerns listed. These findings stay relatively consistent to the concerns identified in Columbaro & Monaghans research on employer perceptions of online education [1]. Figure 3 contains the relevant statistics from our research for review. We also note that a significant number of respondents indicated that they had no concerns regarding online education (18.4%). An interesting response that will be addressed later in this paper comes from Mark Hill, Solutions Architect, stating that "My concern about online degrees is that I am mostly unfamiliar with the school and how their program is designed." [5]

If you have negative opinions towards an online degree, please select all that apply as potential concerns:

Answer Options	Response Percent	Response Count
Difficulty or rigor of online program	20.6%	254
Cheating	17.9%	221
Lack of social interaction	17.1%	211
Content may not be the same as a traditional	19.7%	243
No negative opinion(s)	18.4%	227
Please enter any concern you may have.	6.2%	76
answered question		1232
skipped question		0

Fig. 3. Survey Question # 7

These results suggest that universities need to expand marketing efforts to go beyond simply attracting students to raise attendance rates. In fact, the data suggests that lower awareness of how online programs work can directly be attributed towards persistent concerns of program rigor. Students will tend to select universities based on program reputation, personal interest in study, and schedule availability - especially in an online environment. Universities tend to market their online programs to these desires, but as we can see based on our results, it should be considered to include additional marketing that is geared towards companies looking to recruit graduating students. The Georgia Institute

of Technology does an excellent job in their pioneer program, OMSCS, of providing excellent media and marketing materials emphasizing the program rigor and what can be expected of graduates [6].

We can support this idea based on our participants responses when directly asked about their familiarity of online learning programs. For the sake of this question, we included all forms of learning in an online environment. This means we are speaking about certifications, MOOCs, university degrees, etc. 33% of the respondents indicated that they were unfamiliar with how any form of online learning actually works, while an additional 31% indicated that they had only a base level of understanding. This immediately tells us that 33% the individuals involved in the hiring process do not know anything or do not know enough about online learning to make an informed decision, yet they regularly make these decisions regarding individuals that have gone through the challenges of earning a degree online. We can say that 64% of the respondents lack a strong understanding of what goes into earning a degree online. It would seem awareness and education are going to be extremely important factors that students will come to consider when making their selection among universities.

Please rate how familiar you are with online learning (Online undergraduate, Masters, Doctorals, MOOCs, Certifications), with 1 being extremely unfamiliar with online learning, and 5 being extremely familiar with online learning.

Answer Options	Response Percent	Response Count
1 - Extremely Unfamiliar	16.2%	113
2 - Unfamiliar	17.1%	119
3 - Neutral	31.0%	216
4 - Familiar	15.5%	108
5 - Extremely Familiar	20.1%	140
answered question		696
skipped question		0

Fig. 4. Survey Question # 2

Despite their being considerable evidence from this group of respondents that tells us there is still a lot of room for improvement on acceptance of online education (and importantly, understanding of online education), we can also note that there are strong positive trends telling us that acceptance and understanding are on the rise. Webley's research which comes from the Society for Human Resource Management[7] supports the notion that online education does in fact help increase a student's chances of getting hired or advancing a career. It is noted that HR managers have been less critical recently of online degrees and tend to look favorably on candidates with reputable university names.

Terry McElfresh, COO of Alliance Cost Containment, told us that his hiring philosophy actually leans favorably towards candidates with degrees earned online. "People who put in the time and effort to go to school online usually have a full time job and family to deal with. That tells me they have a strong work ethic, and that in particular is what I am interested in." [8] Tom Rogers, CEO of VendorCentric, agrees with this sentiment. "Any higher education effort is admirable. I absolutely appreciate a candidate's educational credentials, online or not, because it demonstrates that they took one more

step than the next guy to improve themselves.”[9]

II. ACADEMIA

Student and faculty acceptance of online learning is just as important as is the acceptance of Corporate America. Our research looks to get current insight into student perceptions of available online learning methods and assess their confidence in the programs available to them.

As already mentioned, online education is has increasingly become a very attractive option for access to higher education. Our research method polled students across major universities in the US and asked how many classes have been taken in an online format while in pursuit of a degree. Only 3.4% of the respondents indicated that they had never taken a class online.

Over the course of your educational career, approximately how many online classes have taken while seeking a degree?		
Answer Options	Response Percent	Response Count
0 - 2	22.4%	146
3 - 8	34.6%	226
9 - 15	31.1%	203
16+	8.6%	56
I have never taken an online course.	3.4%	22
answered question		653
skipped question		0

Fig. 5. Academia Survey Question # 1

Student acceptance of online education has several different requirements that should be considered. First, the measure of satisfaction a student receives from online education courses is a primary factor of success overall, for both the student and the university offering the program. Student satisfaction in this regard is most closely tied to perceived learning outcomes of the online program as well as timely and effective instructor feedback[10]. Students must also be assured that there is perceived value in the work they are completing in order for them to accept online education as a viable path for advancement. According to our research, the current state of student acceptance is fairly high. Our research suggests that almost 86% of students feel like there is some sort of benefit to them, be it personal or professional, in taking classes online. This measure should be strong encouragement to the university program that the availability of online programs is important to the student body. Narrowing the scope of this perceived value for the student, we asked the students specifically if they felt that employers today see any value in a degree that the student might earn online. The results suggest slightly less confidence in online education from a student's perspective when examined from this angle. 41.8% of the respondents felt that employers see little to no value in a degree that is earned wholly or partially online. Just 16.2% of respondents felt that employers see more than an average value in an online degree.

There is also the concern of employer bias from a student perspective. Our research spoke previously about bias in corporate America, and it is important to note that students will have to address this concern as they graduate and enter the workforce or as they look to advance an already existing career. Universities should make note that this perception can impact student registration, especially as the responsibility of

Do you feel like there is a benefit (personal, professional, etc) for you in taking classes online?		
Answer Options	Response Percent	Response Count
Yes	85.9%	561
No	14.1%	92
answered question		653
skipped question		0

Fig. 6. Academia Survey Question # 3

Do you think that employers see value in a degree earned online?		
Answer Options	Response Percent	Response Count
I think that employers see little to no value in degrees that are earned online.	5.4%	35
I think that employers see some value in degrees that are earned online.	36.4%	238
I think that employers see average value in degrees that are earned online.	42.0%	274
I think that employers see above average value in degrees that are earned online.	9.0%	59
I think that employers see considerable value in degrees that are earned online.	7.2%	47
answered question		653
skipped question		0

Fig. 7. Academia Survey Question # 5

credibility and prestige falls on the university's shoulders in terms of promotion. Many students choose to pursue a MBA or MS with the specific idea of advancing their career or breaking into a new career field. We specifically note that 36% of our respondents currently have low to no confidence that they will be able to successfully advance their career or switch careers based solely on acquiring a degree online. This does not specifically address the prestige of the school, nor does it examine the specific degrees being pursued or the types of advancement or jobs being pursued. Rather, this is an observation solely based on the individual student's feelings and opinion about their specific program.

How confident are you in advancing your career or breaking into a new career with a degree earned online?		
Answer Options	Response Percent	Response Count
I am not confident at all that I can advance my career or break into a new career with an online degree.	13.8%	90
I am somewhat confident that I can advance my career or break into a new career with an online degree.	22.5%	147
I am confident that I can advance my career or break into a new career with an online degree.	26.0%	170
I am very confident that I can advance my career or break into a new career with an online degree.	20.8%	136
I am extremely confident that I can advance my career or break into a new career with an online degree.	10.4%	68
N/A	6.4%	42
answered question		653
skipped question		0

Fig. 8. Academia Survey Question # 6

Our research also looked to gauge the level of concern specifically that the student might have over the potential stigma of online education, given that many for profit institutions have performed poorly or have failed outright. There is concern that without proper marketing and awareness, that particular stigma might bleed over into accredited online programs from respected institutions. We asked how students felt today about any potential negative bias towards them and a degree earned online, and how concerned they were with dealing with that stigma in corporate America. Only 17.6% reported that they were not concerned at all about negative perceptions of online education. This again reinforces the point that the university system should look for additional

ways to promote the validity of their programs, the rigor of the material, and the technology used to safeguard against regular academic concerns such as cheating. Without this type of support, it is evident that student acceptance can start to deteriorate as a whole or simply with the institution that they are currently attending. The university system can only benefit from providing marketing support that reinforces the value of what the student is doing and reinforces the value of the degree the student earns.

Consider that there still exists some negative bias towards degrees earned partially or wholly online: What level of concern do you have that you will be subjected to a negative perception as a result of your degree?		
Answer Options	Response Percent	Response Count
I am not concerned at all about any negative perceptions or negative bias.	17.6%	115
I am somewhat concerned about negative perceptions or negative bias.	36.6%	239
I am concerned about negative perceptions or negative bias.	29.7%	194
I am very concerned about negative perceptions or negative bias.	16.1%	105
answered question		653
skipped question		0

Fig. 9. Academia Survey Question # 7

III. ACADEMIA - CIVIL WAR

Interestingly, our research revealed that among the student body, there exists a group that holds concerns about the perceived value of a university's online program. 36.6% of students have some level of concern that online classes can possibly devalue the university's brand or harm the student. Simply put, there is a general concern that increasing the accessibility of online education can potentially devalue the brand of the university and therefore devalue the degree that both the traditional student and the online student receive. In these instances, the concern is based on a few specific points. The first being that there is an assumption that the content of the online program is not the same as the content of a traditional program. The resolution to this point falls back to promotion and awareness of the actual program being offered, and this is on the university to disseminate. Traditional students may be concerned that employers will see that their university is offering an easier version of their degree.

The second point being that there is an assumption that increasing the availability of online education further floods the job market with qualified individuals, thereby reducing the value of the degree earned. It is easy to say that only time will tell regarding this specific point, but it is important to note that the job markets vary significantly depending on field, geographic location, and consumer demand. It does not necessarily follow that having more qualified individuals results in a weaker position in the job market, especially considering that many highly skilled jobs are in high demand and the workforce today is having difficulty finding qualified candidates. Regardless of these points, universities would only be doing themselves and their students a favor by promoting these concepts more specifically.

It is easy to dismiss this idea due to the general low percentage of students expressing a significant concern, but it should be addressed overall in terms of promoting the value of the online program to current and future students.

As a student, how concerned are you with the potential for your university to dilute or reduce the value of your degree by offering online degrees?		
Answer Options	Response Percent	Response Count
I am not concerned at all, I do not feel like offering classes online harms the university or other students.	57.1%	373
I am somewhat concerned, and think that it is possible that online degrees reduce the legitimacy of the university.	26.0%	170
I am very concerned, and think that online degrees definitely devalue me as a student and devalues the university's brand.	10.6%	69
N/A - I do not have an opinion.	6.3%	41
answered question		653
skipped question		0

Fig. 10. Academia Survey Question # 8

The faculty and staff of a university system make up the final point of consideration for acceptance of online learning. In order for a program to be successful, it needs the cooperation and commitment of the faculty and staff that will be responsible for implementing and executing the online classes.

There are several primary factors that come into play when we discuss acceptance by faculty and staff. Ease of use of any technology that is in play for developing, delivering, and maintaining online content is an important contributing factor[11]. If the tools are obscure, or if the tools do not function easily, or in general if the tools make the overall educational process more difficult or drawn out for the instructors or the students, it can be expected that acceptance of this approach is going to decline.

Another primary factor in play is general concern that existing traditional courses could not be exported or converted easily or correctly to an online format. This is more of a qualitative concern expressed by instructors, and centers more around teaching style and intent[12]. Boosting acceptance of online learning in this area requires financial support and commitment from the university to ensure that there exists technical and content experts that are available to handle the technical work and leave the instruction up to the instructor. Again, it is fair to refer to the Georgia Institute of Technology's OMSCS program as a blueprint for successful high level instruction, acceptance, and engagement from faculty and staff[6].

IV. CONCLUSION

It is clear when comparing the historical data referenced in this paper to the current data obtained that general attitudes and opinions of online learning and the value of online learning is increasing. With regards to corporate America, there is good news for students who want to be sure that they have a good chance of recouping significant financial investments. Hiring managers and gatekeepers in general are slowly beginning to view candidates equally, regardless of the method in which the candidate earned their degree. There still exists many important opportunities for universities to promote their programs to the public. The key points to be promoted should look to reassure the public that the offered program is just as rigorous for the student as a traditional program would be. The university should promote the technology and tools that are used to administer the program, providing reassurance to the public that students engage in high levels of interaction

and are mentally engaged in various learning methodologies. Last, the university should be promoting the unity of the faculty, staff, and the student body - it is important for all prospective students to be reassured that there will not be internal barriers to success, and that the university is wholly committed to the student's success in the program.

V. ACKNOWLEDGMENTS

We would like to take this opportunity to thank Dr. David Joyner for his support and encouragement in working through this research project. Additionally, we would like to thank Mr. Ken Brooks. Mr. Brooks served as our mentor for this project, and his guidance was sincerely appreciated every step of the way.

REFERENCES

- [1] Columbaro, Norina L and Monaghan, Catherine H. Employer perceptions of online degrees: A literature review. 2008.
- [2] Adams, Jonathan and DeFleur, Margaret H. The acceptability of online degrees earned as a credential for obtaining employment. *Communication Education*, vol. 55, no. 1, pp. 32-45, 2006.
- [3] Adams, Jonathan. Understanding the factors limiting the acceptability of online courses and degrees. *International Journal on Elearning*, vol. 7, no. 4, pp. 573-580, 2008.
- [4] Maylee, Kim. District Sales Manager, Personal Interview. November 2016
- [5] Hill, Mark. Solutions Architect, Personal Interview. November 2016.
- [6] Why OMS CS? <http://www.omscs.gatech.edu/explore-oms-cs>.
- [7] Webley, K. & Webley, K. (2016) *Can an Online Degree Really Help You Get a Job?* *Time.com* Retrieved 1 October 2016, from <http://nation.time.com/2012/10/18/can-an-onlinedegree-really-help-you-get-a-job/>.
- [8] McElfresh, Terry. COO, Alliance Cost Containment, Personal Interview. November 2016.
- [9] Rogers, Tom. CEO, VendorCentric, Personal Interview. November 2016.
- [10] Eom, Sean B and Wen, H Joseph and Ashill, Nicholas. The determinants of students' perceived learning outcomes and satisfaction in university online education: An empirical investigation. vol. 4, no. 2, pp. 215-235, 2006.
- [11] Kim, Mi-Ryang. Factors influencing the acceptance of e-learning courses for mainstream faculty in higher institutions. *International Journal of Instructional Technology and Distance Learning*. vol. 5, no. 2, pp. 29-44, 2008.
- [12] Stewart, Cindy and Bachman, Christine and Johnson, Ruth. Predictors of faculty acceptance of online education. *Journal of Online Learning and Teaching*. vol. 6, no. 3, pp.597, 2010.