

A PRELIMINARY STUDY OF STUDENTS PERCEPTION AND LEARNING FROM DIFFERENT DELIVERY METHODS

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ABSTRACT

A trend in higher education has been the rapid increase of online classes. In online education, the information is delivered to the learners via telecommunication technology. Economic factors often promote online classes to universities that are seeing a high demand from students for online education. This method of delivery carries both advantages and disadvantages to students. This paper examines the proximate reasons students choose online classes. We survey university students. Although, there is a high demand for online education, our results indicate that online education is not engaging.

Keywords: Online Teaching, Student Perceptions, Information Delivery methods.

INTRODUCTION

As the world continues to experience technological advancements at a rapid rate, changes in how to execute tasks are being experienced in almost all aspects of life. In the field of education, the use of the internet and the World Wide Web has created possibilities for learning online. In simple terms, online learning refers to a form of distance education where all courses are delivered to the learners entirely via the internet (Nguyen, 2015). In this respect, this kind of teaching differs from the conventional face-to-face learning where students must physically attend a classroom.

However, as the use of online learning continues to penetrate education, the question has been whether virtual classes are more effective as compared to physically attended classes. Researchers who have conducted studies in this area have placed more emphasis on the kinds of instructional strategies utilized in online courses (Moore & Kearsley, 2011). Additionally, most studies have also focused on addressing the cost-effectiveness of virtual classes. As a result, most researchers have raised concerns in regards to the educational effectiveness of online classes as compared to in class learning (Kirtman, 2009). This study, seeks to shed some light on the rationale behind increased demand for online learning as well as discussing its potential benefits and drawbacks. Also, by conducting a preliminary study to find the reasons for student's choices for enrolling in online programs through a survey of university students we discovered several interesting insights. The advantages and flaws of online learning cannot be underestimated.

Thus, there is a need for better policies to both streamline and enhance the effectiveness of virtual teaching as changes in demand being experienced are here to stay.

LITERATURE REVIEW

Trends in online learning in higher education and factors that determine what type of class students opt to take!

The number of students enrolling in online courses has been increasing dramatically and steadily. Studies conducted by government agencies and scholars in education and other relevant fields indicate that students joining online classes have been rising since 2000. According to Kirtman (2009), at least 3,077,000 students enrolled in distance learning classes where courses were delivered over the internet between 2000 and 2001. Seven years later, a notable increase in online enrollment has occurred. In 2007, at least 4 million university students participated in web-based classes (Kirtman, 2009). During this time, at least 30% of institutions of higher education in the U.S. that were offering education related degree programs had entire online classes for students. This indicates 30% of students were enrolled in online classes in the mid-teens (National Center for Educational Statistics, 2017; Seaman et al., 2018). The trend appears to be increasing annually and has even been recognized by government institutions. For example, by 2013, the American Council of Education had already approved five online courses for college and university credits (Nguyen, 2015). The research explains why changes being experienced in the education sector in regards to the use of web-based learning are permanent. Additionally, even as higher ed enrollment was decreasing in 2012, 2013 2014; enrollment in online classes at larger schools was increasing (Online Course Report (OCR), 2016; Lederman, 2018).

The increasing demand for online education has been facilitated by numerous factors that are both individual and institutional in nature. One of the factors that have led to increased use of online learning is its cost-effectiveness (Nguyen, 2015). From a learner/parents perspective, costs related to accommodation, transport, and publication of course materials among others are eliminated or reduced in online learning. From an institutional viewpoint, cost minimization is realized regarding infrastructure and human capital. For instance, university administrations do not have to build extra classrooms to accommodate the increasing number of students. Higher ranked schools were even offering online classes in increasing numbers by the mid-teens (Lederman, 2018; Bailey et al., 2014).

Secondly and potentially the ultimate reason for the rapid growth of virtual learning is that online education is not affected by the aspect of time and location. As long as students have access to the internet, they can be provided with quality education from numerous institutions anytime and anywhere (Nguyen, 2015). At a personal level, learners can acquire knowledge without necessarily having to attend classes physically. For universities, they can enroll a higher number of students from across the globe which in turn enhances their reputation. Such reasons explain why the demand for online learning is increasing every year.

Hannay & Tracy (2018) found in a study of criminal justice majors that in a group of all adults working fulltime that the students preferred online and said they learned more with online, however they also stated the work was greater. Our results did not support Hannay & Tracy (2018).

Benefits of Online Classes to both Students and Universities

The higher numbers of online enrollments have seen many scholars shifting their focus towards determining the educational effectiveness of online classes as compared to attended classes. One of the advantages of online learning to students is that they can use it as the foundation for professional development (Nguyen, 2015). In this respect, learners understand the need for being responsible for their learning and time management. For instance, in a survey that involved 120 students (71 learning online and 69 using in class), students attending online classes argued that the approach enables them to plan their time and study effectively as it is more self-guided (Kirtman, 2009). Time management and ability to make sound decisions are among the essential elements of professional development which students are likely to depend on in their future career.

Online learning also offers convenience as compared to traditional face-to-face learning. For example, Nguyen (2015) noted that flexibility observed in web-based teaching is among the key reasons why there has been a higher demand for this approach. Learners, especially adults with multiple duties and tightly scheduled lives, are still able to attend online classes (Xu & Jaggars, 2013). Fitting conventional face to face classes in such tight schedules would have often been impossible.

Another notable benefit of online learning is that it creates less distraction as compared to face-to-face learning. In a survey conducted by Kirtman (2009), 68% of online students argued that their education was positively impacted by web-based classes as their concentration was solely geared on their studies. One of the students argued their focus is only on class lessons and not on other non-academic related issues such as traffic, parking, and gas, among other items (Kirtman, 2009). Finally, from institutional perspectives, web-based classes enable universities to offer additional courses and course sections to students. In the long run, institutions of higher learning can increase students' access and enhance their ability to serve the nation beyond geographical locations. Given the significant value of such benefits, online learning is likely to become an even more important in higher education.

Potential Drawbacks of Online Classes to Learners

Online learning has also been associated with numerous pitfalls as related to student's capability. In their study, Xu & Jaggars (2013) found that one of the drawbacks of online learning is that there is a low level of teachers' presence, which in turn leads to poor performance. This can be mitigated to some degree with the use of programs like Zoom which provides the platform for student/teacher interaction as well as other ways to introduce live faces

into the mix. The presence of a tutor was shown to create a supportive and motivating environment that is positively related to improved performance among learners. In a similar study, Kirtman (2009) noted that lack of teacher presence negatively impacted learning capabilities of online students. Specifically, the mean scores and t-test for midterm grades were higher for traditional education students as compared to that of web-based learners (Kirtman, 2009). In a more personalized response, four students in the sample for online learners admitted that they missed learning from peers and overall peer interaction observed in face-to-face learning. Such experiences can be potentially detrimental to students' final grades; as well as knowledge carried forth into the workplace; but can be obviated as mentioned above.

Another drawback for online learning is that it is hard for students with poor time management and independent learning skills to thrive in their studies. For example, it is important to determine how many hours a student spent in different course units. In contrast, students attending face to face classes have to attend a certain number of hours that are compulsory (Xu & Jaggars, 2013). Such stipulations mean that students with poor time management skills are placed at a winning edge, an aspect which could have been absent in virtual classes. Finally, taking online classes requires a lot of initiatives from learners. For instance, when a teacher posts questions and answers on the discussion board, it is hard to determine whether students read through the course materials (Xu & Jaggars 2013). On the other hand, discussions held in a face-to-face class are heard by everybody even those who might not take the initiative to learn. Such pitfalls associated with online learning cannot be underestimated. These pitfalls can be somewhat reduced with the use of packages like Blackboard where students can watch videos, view handouts, and take practice exams.

METHODOLOGY

The Survey was conducted on 151 business students attending the University of Houston-Down campus located in Houston, Texas. Two professors surveyed their classes which included students with at least junior standing. The classes surveyed were business courses that included students from different disciplines. The students were given a questionnaire about their choice of selecting the delivery method of classes, and their prospective of how much they were learning from each delivery method. The professors administrating the survey insured that the students were aware that the survey was anonymous and would not affect their grades and that the survey was for a study to determine the effectiveness of each delivery method.

The survey used for this study is a newly created instrument and later some questions were determined as not being clear enough for the students. These questions were eliminated from the analysis. However, most questions were understood clearly when asking about delivery preference, information retention, communication with faculty, and other questions as used to infer the real reason behind the students' choice of selecting a respective delivery method and how much they learned. Thus the word "*Preliminary*" in the title.

RESULTS AND DISCUSSION

From the 151 Students Surveyed the Following Observations were Apparent

In the Table 1, the delivery method the students preferred compared with the delivery method the student retained the most information is detailed in Table 1. We found that 76 students prefer in person classes and in this method they all indicated that they retained the most information from in person delivery. Fifty (50) students preferred hybrid classes and 23 students indicated that they retained the most information from in person classes, and the rest from hybrid classes. Thirteen (13) students preferred online classes with 7 indicating they retained more information from online and 6 from in person classes. Twelve (12) students had no preference and all have indicated they retained the most information from in person classes. Please note that hybrid is a delivery method where the student attends class 50% of the time (75 min/wks. for a 3 semester hour class), and accesses online delivery for the other 50% of the course information. Maybe the most important conclusion in this question was that no matter the delivery method preferred; all students retained the most information with some class time and the more the time in class the more retained. Quality videos and zoom conferences can provide the simulated “time in class” experience. So what they prefer is not the best for them in the long run.

Table 1					
DELIVERY METHOD PREFERRED VS. WHERE MOST INFORMATION WAS RETAINED					
Delivery method preferred		Delivery method preferred & Information Retained the most			
		Online	Hybrid	In person	No preference
Online	13	6	1	6	0
Hybrid	50	0	27	23	0
In Person	76	0	1	75	0
Mixed	12	0	1	8	4

In Table 2, the actual delivery method the students took, as opposed to the one they preferred, compared with the delivery method where the students learned the least. Eighty-six (86) students reported that a majority of their classes were in person and 73 of those students admitted that they learned the least in online classes. 36 students indicated that a majority of their classes taken were hybrid and 29 of them reported that they learned the least from online classes. 15 students took a majority of their classes online and 10 of those students said that they learned the least in online classes. These results are not surprising when the results presented in Table 1 are considered. Please note that all students had experienced all delivery methods.

Table 2					
METHOD TAKEN THE MOST VS. METHOD WHERE THE LEAST WAS LEARNED					
Delivery method taken the most		Delivery method taken & type of class where they learned the least			
		Online	Hybrid	In person	No preference
Online	16	10	1	4	0

Hybrid	36	29	1	6	0
In-Person	86	73	8	4	1
Mix	14	0	1	8	4

In Table 3, the delivery method the student found most challenging as compared to their answers regarding the method where the faculty was the least helpful and in which communication with faculty was more difficult. 104 students indicated that online delivery method was the most challenging and 97 of those students stated that faculty was the least.

Delivery method Most challenging		Delivery method Most challenging & Communication with faculty harder's			
		Online	Hybrid	In person	No preference
Online	104	97	3	4	0
Hybrid	26	18	8	0	0
In person	19	14	2	2	1
No Preference	2	1	0	0	1

The fourth comparison (Table 4), reported the delivery method with the greatest amount of work, compared with the delivery method the student found most challenging. 47 students indicated that in person classes had the heaviest work load and 30 of them indicated that online classes were most challenging in terms of workload. 37 students reported hybrid classes had the most course work load and 23 of them indicated that online classes are most challenging delivery method. 60 students answered that online classes have the heaviest workload and 48 of them indicated that online classes were the most challenging classes. So a heavy workload may not translate into a bigger challenge.

Class with most course load		Class with most course load & class most challenging			
		Online	Hybrid	In person	No preference
Online	60	48	7	4	1
Hybrid	37	23	10	4	0
In Person	47	30	7	10	0
No preference	7	3	2	1	1

Conclusion from these comparisons acquired from the students is they are more likely to register for In-person classes. The reason is due to the lack of communication between the students and faculty. Thus, students feel that they have not learned as much due to lack of connections made from the faculty or instructor. At the same time lack of communication with the instructor could make assignments seem more tedious or harder as the students will need to put more work into understanding the material or completing the assignment at hand.

CONCLUSION

The comparisons made by the students in the survey reveal that 78% of the students prefer an in-class interaction with the faculty whether its delivery is in person or hybrid. The reason for this could be due to the fact that students feel they retain more information from classes where there is a direct interaction with the faculty as well as other students. Also, it was noted that faculty are easier to communicate with in a class delivery method with some in person delivery. Comparisons with virtually all previous studies, this paper supports the findings of previous research in that students prefer online above all else. By contrast, face to face is preferred by some because students feel more connected to the faculty and to other students. By contrast, there is little difference in our findings as opposed to other studies. Additionally, virtually all previous studies focused on non-business majors in CONTRAST to our respondents being all business majors. As it turns out, students have mostly the same feeling regarding the method of delivery when COMPARING face to face with online and hybrid. The use of web-based classes has many benefits and drawbacks that cannot be underestimated. On the merit side, online learning offers students' great flexibility, creates a platform for them to nurture professional skills such as time management and minimize possible forms of distractions associated with face-to-face learning. For the universities, online learning enables them to offer more courses to learners across the globe. On the negative side, online creates virtually no teacher presence, which might negatively affect student's performance due to reduced support and motivation. However, as it is noticeable from the emerging trends, the number of students' enrolling in online classes has been increasing steadily. As a result, there is a need to formulate and implement better strategies that will make the approach more effective.

The main lesson may be that online classes can be improved dramatically by introducing the teacher into the mix via platforms such as Zoom as well as provide opportunities for students to interact. Additional research into online teaching where programs like Zoom are used versus not used might shed some light on this problem of lack of interaction. It might be noteworthy that our sample was the first to use only business majors as the subjects.

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