

Back to the old school: Student preferences in online and face-to-face classes.

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Abstract

As advances in technology become increasingly relevant in the present-day world, online learning is becoming more popular than ever. Online learning is becoming commonly used for many courses across schools in the country, but especially in colleges and universities. Online learning is the use of technology to deliver course material to students and have them learn it remotely without the need to attend classes on campus. As the technology becomes more advanced through time, we want to understand why some students preferred online learning, while others preferred face to face instruction.

Keywords: online learning, face to face instructions, satisfaction, performance, preference

Introduction

Online learning is changing the way many students learn, but many universities, colleges, and schools across the country, and the world are now adapting to this new way of learning.

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Because of the many issues surrounding higher education such as school/work life balance, increasing tuition prices, along with other factors such as scheduling conflicts has led many students to turn to online learning. As online learning is still evolving, studying and learning more about why students prefer each type of classroom will help many instructors to adjust some of their teaching methods or style to promote an increased satisfaction and performance in each type of classroom setting. Background Information: Due to advances in technology, online learning is becoming more popular than ever before. Currently in the United States, there are over five million students enrolled in distance education courses at degree-granting postsecondary institutions. (nces.gov). Even at the University at Albany, a fully online degree in informatics is offered. These courses are becoming a more significant part of the university experience. It is important to understand students' feelings towards these online classes and if they feel there is any benefit or harm in taking their classes online. Problem: As more students are opting for online classes, the flaws in these courses become evident. It is important to understand why and when students prefer each classroom setting. Learning more about this issue will help to improve the quality of education being offered in both settings, and also allows instructors to find ways to enhance the overall learning experience. Research question: Does the type of learning environment impact the quality of education that is provided, and does it have an influence on a student's performance and satisfaction with the course.

Literature Review

To enhance our knowledge, along with the credibility of our findings, a handful of literature reviews were conducted. Based on the overall summary of the literature reviews, some of the most common themes that were stated in the literature reviews was that while more students are taking online classes, there are still concerns in many areas such as student

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satisfaction, effectiveness of learning, academic dishonesty, along with a student's overall perception of a course. There are many challenges that are faced in both classroom formats. According to many of the literature reviews that were conducted, different teaching methods and approaches were used to measure the effectiveness of learning, such as individual and team quizzes, along with team or group work. The overall conclusion of the literature reviews is that the teaching methods and approaches have been used to study student performance, learning effectiveness, and satisfaction, while the consensus is that face to face learning is still preferred, the performance of students in both versions of the class did not differ much. Variables: Dependent -Student satisfaction and performance. Independent Variable- Class format (Classroom and Online). Control Variable: All students surveyed are enrolled in University at Albany courses.

Methodology

The first step that was taken was to create a set of compressive survey questions that allowed us to better understand our participants and their habits and feelings towards education. Once the questions were made and agreed upon, a survey was created and promptly sent out to as many University at Albany students as possible. Once responses were gathered, we used built-in analytics services from the survey website to quickly analyze the quantitative data that we had gathered. We began to use this analyzed data to start the process of drawing conclusions on our research question, patterns began to arise between how students preferred to learn and what type of learning environment they enjoyed more. To better understand this initial data, it was necessary to conduct compressive interviews with University at Albany students. After the questions were decided upon, during the qualitative process, a total of 30 interviews were conducted, using the interview data it was decided that the best way to code for our answers

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would be to look for how students felt about learning and how it related to the environment that they felt most comfortable learning in. Once again, we were able to use this data to further understand our research question and finally we were able to develop more comprehensive conclusions and understand our subjects. After analyzing the data, we had more significant and meaningful data on the relationships between how students preferred to learn and how that related to their preferred environment. Consistent patterns began to arise such as the use of in class examples and problem walkthroughs being the most prevalent reason students enjoyed their traditional classes more.

Discussion

The results from an informatics course taught by the instructor in both the online and face to face version were collected. The bar graph displays the comparison of average and median grades between online and in-class versions of the course. The graph shows that while there were no significant differences in the average grade between the two courses, students in the face-to-face section did perform slightly better than those in the online section. The pie chart consists of the results that were obtained during our qualitative process. A total of 30

University at Albany students were interviewed about various questions pertaining to how they learn, their learning habits and why they prefer a certain classroom format. The study indicated that 66% of the students stated that they prefer in class learning while the remaining 34% preferred online learning. Majority of them preferred the in class setting because of the access of being in a physical surrounding, along with the ability to interact and ask questions in person. These participants stated that having a face to face instructor and having group projects with fellow class mates helped to enhance their learning and performance. On the other hand, online learning is preferred because of its convenience and flexibility, but one disadvantage of it is the

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inability to interact with the teacher and other students in person in order to better their understanding of the course material. Due to challenges faced in both classroom setting, the overall conclusion from the study is that most students still prefer in class learning to online learning. Limitations and future work: Limitations include not having a large enough sample size; a larger sample size with random sampling across multiple universities with different class standings would generate better results as they would be more generalizable. The quantitative study questions were very general; strong conclusions about student engagement and performance of students in an online and classroom setting could not be formed using the questions. Not considering the effectiveness of online and face-to-face classes based on subjects is a major limitation of this research. This reduces the scope of our results to similar subjects taken by the sample of students studied in this research. Asking students to voluntarily provide their grade is a limitation; students with very low grades might be dishonest about their grades. This will make the results and conclusions from the study inaccurate.

Suggestions to improve the study being conducted is to include students from multiple universities across the United States or the world; this approach would increase the generalizability of the research. Suggestions for future research include comparing online classes to hybrid classes in which a major portion of the class is conducted online, and the rest is conducted face-to-face. This research is important to the current education system to conclude whether hybrid classes are a potential solution to help improve the learning experience, but at the same time cater to students who prefer online learning. Using the results of this research, the best method of instruction can be determined. This would help educational institutions to form informed decisions on how to enhance each learning format, whether it is online or face to face, to improve the student experience and performance.

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Another suggestion for future research could be to concentrate on specific subjects and the effectiveness of teaching that subject using online classes. This research is significant as a study which pertains to one subject might not be applicable to another one. The results of this research would help education institutions to avoid mistakes and provide online classes for only those subjects that can be effectively communicated through an online medium. Conclusion: The significance behind how different classroom formats are perceived by students is that it allows instructors, along with companies that produce educational material to help better adapt their teaching methods to ensure a student's success and adapting to evolving world of education. Based on the methodology used for this study and the results that were collected. We concluded that preferred learning style of students in our research was face-to-face instruction rather than online classes. The participants who chose face-to-face instruction said that they prefer traditional face to face communication and prefer verbal hearing when learning about a new topic.

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As for online classes, those participants preferred visual learning such as reading through PowerPoints or watching videos, along with reading about the topic material. Based on a study that was taken from an informatics class that was taught in both the online and face to face format by the same instructor. It showed that students who took the face to face version did better than people who took the online version in terms of student performance. However, as with any type of research, there will be limitations in our research, so no definite conclusion can be reached but based on the data that we collected, we can conclude that the students tend to do slightly better in face to face classes, versus online classroom, and more students prefer face to face instruction.

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