

COVID-19 impacts on course delivery and student financial wellness in higher education

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ABSTRACT

The COVID-19 viral global pandemic has impacted society in profound ways over the past two years, including transformations to the traditional collegiate journey. Online education became a predominant way of delivering courses during much of the COVID-19 pandemic; however, current student perceptions and preferences are not clear to higher education stakeholders and policy makers. This study explores college course delivery trends, investigates the magnitude of pedagogical shifts during the unprecedented times of COVID-19, uncovers changes in online education perspectives and preferences among undergraduate college students, and addresses various benefits to students when elements of online education are offered.

A quali-quant mixed methods research approach was implemented to expand the study from 12 participants in the original qualitative sample to a total of 351 research participants with the addition of a quantitative sample. Most of the research participants from this sample of the population experienced renewed perspectives toward online learning over the past two years, and most of these undergraduate college students expressed a top preference for hybrid (46.3%) or HyFlex (23.6%) course delivery modalities now and into the future.

Keywords: Online Education, COVID Impacts, Course Delivery, Hybrid, HyFlex, Financial Wellness

INTRODUCTION

Since the onset of the COVID-19 global viral pandemic declared in March of 2020, constituents at higher education institutions have faced significant changes. Many traditional colleges and universities across America pivoted quickly from delivering most courses in-person and in a physical classroom, to remote delivery using online platforms with synchronous and/or asynchronous course delivery modalities. “The COVID 19 pandemic has disrupted education of over 220 million post-secondary students, challenging educators to re-imagine current pedagogies applied” (Phillips, 2021).

Although the COVID-19 pandemic was the catalyst for this rapid transition at-large, most of the technology infrastructure was already in place and being used for various reasons on a smaller scale. This allowed students, faculty, and staff to make a swift shift to online education; many benefits of digital teaching and learning environments are being recognized that will extend beyond pandemic times. “Adoption of online, blended, and hybrid models for course delivery, according to the ebbs and flows of the pandemic, has arguably accelerated the evolution of higher education” (Peimani & Kamalipour, 2021, p. 11). These transformations have led to new and creative realizations for college course delivery by higher education constituents, which is resulting in new perspectives and preferences by many.

SIGNIFICANCE OF RESEARCH

Multiple aspects of society, including higher education, have been changing at an extraordinarily precipitous pace since March of 2020. These understudied topics are especially important to investigate as our world continues to shift in times of, and beyond, the COVID-19 global viral pandemic. With many changes being forecasted to remain in post-pandemic times, it is imperative that we listen to college students’ voices to better understand their perspectives, preferences, expectations, and needs. It is crucial to the future of higher education for these revolutionary topics to be researched in a timely manner to uncover meaningful insights and to provide better guidance to higher education policy makers regarding next steps in shaping the future of higher education.

CONCEPTUAL FRAMEWORK AND OTHER RELEVANT LITERATURE

Although empirical research is scarce for this specific topic as it relates to recent and ongoing outcomes since the COVID-19 global pandemic began, this review of relevant literature provides some context and insight regarding potential impacts of various technology trends and transformations in course delivery modalities associated with higher education costs and benefits. Prior to March of 2020, undergraduate college students who were enrolled at traditional residential universities had much less experience, or no experience, with online education; this scenario changed suddenly and drastically when the COVID-19 pandemic hit, and most traditional undergraduate in-person college courses were transitioned to online/distance learning.

Higher Education Costs and Benefits

There are numerous advantages discussed in the literature regarding various benefits for individuals who make the decision to go to college; in addition, there are various costs associated

with pursuing higher education. “In the United States, it is well established that investment in higher education is beneficial to individuals and society and that it promotes economic development” (Chen & DesJardins, 2010, p. 179). Some of the obvious direct and indirect costs to students include financial expenses related to college tuition and fees, textbooks, supplies, and housing. There are also opportunity costs, such as time and working a full-time job instead of going to college, that individuals who decide to attend college usually give up in the short-term in hopes of long-term gains. Some individual benefits of earning a college degree include improved job prospects, financial security, better healthcare and retirement plans, and healthier lifestyles (College Board, 2019).

The decision-making process of individuals who consider the pursuit of higher education is different for everyone. Ultimately it comes down to weighing the benefits with the costs for most people. “An important and enduring question in the economic literature was whether the benefits from investing in higher education exceeded the cost” (Toutkoushian, et al, 2016, p. 47). It is noteworthy that, while this study focuses more on possible financial gains of online and hybrid course delivery modes, there are also non-financial benefits to consider, such as improved opportunity cost and higher productivity levels. When students can take classes online and work remotely from home, transit times are eliminated with the convenience of not needing to travel back and forth from home to physical classroom spaces, thus saving time and money on gas and other expenditures (Money, 2021). Working and schooling from home typically means spending less money on apparel and eating out as well (Schramm, 2021).

Evolving Technology in Higher Education

It is unrealistic to believe that our society will be transitioning back to exactly how things used to be prior to COVID-19. Evolving technologies are inspiring an expedited series of “new normal” times, which will continue to shift and redefine various aspects of life (Dziuban et al., 2018). Modern-day technology is continuously evolving at an even more accelerated pace since the onset of the pandemic, which has served as a catalyst for further innovative evolutions through disruptive innovation. Technology will continue to transform our world and how we live our daily lives, and this certainly applies to higher education and how universities deliver educational services. “Digital interference is a challenge as well as an opportunity for universities, in terms of defining their place in the market and their role in society” (Mazurek & Malagocka, 2022).

Defining Course Delivery Modes

With several different approaches, or modes, for courses to be delivered, this section addresses and defines the primary course delivery modalities discussed and explored in this study. As indicated in Table 1 (Appendix), traditional classes that are facilitated entirely in-person are referred to as face-to-face (F2F) or in-person and all scheduled class sessions occur live (in real time) in a physical classroom or other designated physical learning space. Online courses are delivered using a computer or other technological device from which the internet can be accessed; online courses can be synchronous, also referred to as virtual/remote (live/in real time) or asynchronous (not in real time). Hybrid courses include a combination of online and in-person, with some of the class sessions facilitated online (usually asynchronously so that work can be completed within a specified timeframe at each learner’s own pace) and other class

sessions delivered in-person (live/in real time). Hybrid, or blended, courses can be offered in a variety of forms, and can also mean that a course has a combination of online asynchronous class sessions and synchronous class sessions through the academic term. HyFlex, or hybrid flexible, delivery simultaneously offers an in-person option and an online option for students so they can choose how they want to attend the session.

Course Delivery Trends and Online Education Benefits

Online education has become increasingly more common throughout the past couple of decades; however, the adoption rate of online learning soared to new heights out of necessity when COVID-19 began. “Nobody could have anticipated the acceleration in learning online driven by a global pandemic” (Chen et al., 2022, p. 2). With the abrupt changes impacting our society in catastrophic ways, life as we knew it was significantly altered. Educators had to make a swift transition from in-person learning to facilitating courses in the digital environment. Although it was difficult at first, faculty and students adjusted relatively quickly, and many began realizing and appreciating the various benefits associated with online education. “While exposing learners to a fully online learning environment might have been challenging at first, there’s a degree of convenience and flexibility that eLearning offers that a large percentage of students will now expect” (Camacho, 2022). Additionally, faculty have increased their skill sets to become more adept with delivering course materials effectively and efficiently from the computer in various capacities, which contributes to a better learning experience for students overall. The results of a recent study demonstrated that faculty who implement “interaction-oriented” practices regularly have greater employment stability and teaching load, greater self-efficacy for using learning management systems, and greater perceived benefits of online learning for students (Orona et al., 2022).

Online education provides numerous benefits to learners, especially related to saving time and money. Students who participate in online or hybrid courses can save monetary resources in various associated categories, such as transportation, clothing, shoes, etc. Although all students can save time, and potentially money, regardless of whether they would normally drive or walk to class, commuter students would arguably save the most money on travel costs, depending on how far their commute might be. When they do not have to go to a physically classroom building on campus to participate in class sessions, commuter students who normally would have to pay more for transportation would likely save a measurable amount of money during a semester or over the course of a year.

Lessening or removing physical classroom requirements also saves time, which can provide an opportunity for increased productivity if students replace the time that they otherwise would have spent traveling to the classroom to more significant tasks, such as studying and improving their academic performance in the course. Taking classes on the computer increases flexibility and convenience factors in general for all students. “The course flexibility and freedom to work at their own pace are additional benefits of distance education that most students embrace” (Lei & Gupta, 2010, p. 623).

Additional advantages include breaking down physical barriers to increase accessibility for individuals with disabilities and special needs. “If students have a physical disability, they do not have to travel regularly from home to a college campus” (Lei & Gupta, 2010, p. 624). Furthermore, online education offers additional platforms for learning course materials in various formats with an added benefit of being able to review more than once as needed to reinforce concepts and better learn and conceptualize course content; this can be even more advantageous

for students with special needs or learning disabilities who can utilize assistive technologies with greater access and ease.

Some further non-financial benefits of online education, which can be beneficial to all learners during their collegiate journey and to apply to their professional careers, include bolstering various skill sets such as increased time management, project management, problem-solving, critical thinking, and technical skills (Lei & Gupta, 2010). When individuals take more ownership and accountability for their own schedules and create a work breakdown structure to plan out their work in a timely manner, their time management and project management skills improve. Using technology more often in different scenarios enhances computer skills and provides a real-life platform for learning how to interact with others gracefully and professionally via virtual technology solutions, such as web/video conferencing applications, which is a norm in the hybrid workforce (Whenham, 2021). Gaining hands-on experience with various technological features and functionality while in college is an added benefit so that students are more technically savvy with performing tasks such as screen sharing, for instance, which they will likely need to know how to do in their future careers. Screen sharing is also an example of how individuals can usually “get closer” to each other's screens to better see the content displayed through a web/video conferencing platform (e.g., Microsoft Teams or Zoom) on their own devices, versus being in a physical classroom and not being able to see projector screen and/or each other's computer screens as well due to the nature of having wide-ranging geographical proximity in a classroom with one instructor podium and student seating being dispersed throughout the room.

Advantages of Improving Cost-Benefit Ratio and Financial Wellness

There are many advantages for individuals, as well as society, when students' cost-benefit ratio of going to college improves. Saving money and being fiscally fit is one way to lessen financial stress for individual students and increases student retention rates at higher education institutions. “The role of education in increasing human capital is important not only for individuals but also for society as a whole” (Toutkoushian, et al, 2016, p. 47).

Students' financial circumstances can impact their general well-being and academic success. Individuals with less financial stress have a higher likelihood of staying in college, earning higher grades, and graduating with a college degree. The Study on Collegiate Financial Wellness (SCFW), a multi-institutional survey, discovered that 74% of college students experience financial stress, and 33% of the same sample of students indicated that they have thought about dropping out of college due to financial concerns (The Ohio State University, 2020). Establishing healthy financial wellness lowers stress levels and improves overall human health. “When you can effectively manage your income and expenses, you are achieving a state of financial wellness” (Dziomba, 2021). While general well-being and overall health factors are important to focus on any time, they are especially necessary to prioritize during heightened times of adversity, such as when society is experiencing a life-altering event such as a pandemic.

Conceptual Framework

Prior to the data collection and analysis processes, it was predicted that most undergraduate college students' perspectives and preferences have likely changed over the past two years regarding college course delivery modalities, with most likely now favoring hybrid

college classes of some sort. Additionally, when students take courses online or in a hybrid format, their cost-benefit ratio of going to college likely improves due to a reduction of costs, which increases the value of their higher education investment.

One anticipated result is that traditional college undergraduate students likely did not prefer, or did not put much thought into, taking college courses via the computer in some capacity before the COVID-19 global viral pandemic started, nor had positive sentiments associated with online education at the beginning of the pandemic. However, after being thrust into the online educational environment and having to adapt to it, more college students likely preferred more online course delivery components or options of some sort and grew to value the increased flexibility and convenience that comes with digital course delivery options. This conceptual framework is based on the knowledge that as the pandemic progressed and more courses were offered in an online or hybrid modality, students adapted and acclimated more to online education, which likely altered their perspectives and preferences as more benefits were realized and experienced from each learner's first-hand viewpoint.

Another factor that was thought to possibly contribute to students' shifting perceptions and preferences could be that faculty became more technically savvy and were able to adapt and facilitate college courses over the computer more effectively and efficiently. The technology likely evolved to include additional features and functionality to aid in more effective facilitation of online education. As professors adjusted and broadened their technological skill sets, their comfort level likely increased as well, providing more opportunities to develop and integrate active learning methods into their class sessions to increase student engagement.

Many aspects of course delivery trends that have been experienced with increased frequency in higher education over the past couple years will likely carry over and become expected by college students, beyond pandemic times. With most college students across the country now having first-hand experiences with online education in some capacity, the benefits of online and hybrid course delivery are being realized by many. One of these benefits may be related to personal finances and saving money by taking some or all classes online or in a hybrid format. "Going to college requires students and their families to make a substantial investment of both their time and money" (Toutkoushian, et al, 2016, p. 45). According to the cost-sharing theoretical perspective, as well as recent higher education data, higher education financial burdens have been increasingly shifting from the government and taxpayers onto students and families (Johnstone, 2006). Online education offers unique ways to save time and money, which is more beneficial and important now than ever before for students and their families.

The cost-benefit ratio of attending college improves for students who take courses with an online component, and this leads to a healthier level of financial wellness. Although the exact costs savings may be difficult to calculate, costs of going to college can be estimated, and various factors can be taken into consideration to determine if online education saves students money overall. "The true costs of attending college are hard for students to determine a priori due to the confusing way in which colleges and universities price their services" (Toutkoushian, et al, 2016, p. 46).

Financial expenses related to higher education, especially indirect costs, can be estimated and compared with various circumstances to discover whether costs are reduced for traditional college students when participating in online education. For example, a college student who lives with family and takes all classes on the computer is likely to save a much higher amount of money than a student who lives on or near campus, away from their childhood home.

When a student's financial expenditure level decreases and they save money, the value associated with the benefits of going to college increases; in this scenario, the student's cost-benefit ratio of pursuing higher education increases. When individuals improve their cost-benefit ratio, their overall financial wellness should also improve and provide additional advantages for themselves and society as a whole. Improved financial wellness leads to healthier individuals and lower college dropout rates; this results in higher student retention and increased college graduation rates, which contributes to overall society with countless benefits of higher education (Chen & DesJardins, 2010).

Colleges and universities can improve culture and strengthen their value proposition by listening to their students. Today's college students want a choice and increased flexibility. Being more open and agile to alter pedagogical practices according to student majority preferences and expectations, so long as course objectives are continuing to be met, can go a long way in preserving and sustaining the higher education industry. "A university, open to serving others and widening access to education, is an institution that provides flexible modes of learning to suit personal goals" (Mazurek & Malagocka, 2022, p. 290).

PROBLEM STATEMENT

There is still much to be learned about how these recent changes are impacting students and higher education institutions. Online education became a predominant way of delivering courses during much of the COVID-19 pandemic; however, current perceptions and preferences are not clear to higher education stakeholders and policy makers. This under published topic is important to better understand from the viewpoint of college students, who are directly affected by these transformations in higher education. Uncovering insights regarding this topic is needed to provide data and guidance to decision makers.

RESEARCH QUESTIONS

This research aims to present modern-day insights on this topic based on the following research questions, using a quali-quant mixed methods research design:

1. Have course delivery perspectives and/or preferences changed for traditional college-aged students since the onset of the COVID-19 pandemic?
2. Do online and/or hybrid learning course delivery modalities affect the financial wellness of undergraduate college students?

METHODOLOGY

Sample

This research study utilized both qualitative (in-depth interviews) and quantitative (survey) methods. With the target population for this study being undergraduate college students, the convenience sampling method was utilized at a traditional public four-year university in the Midwest and yielded a total sample size of 351 research participants within this demographic. Twelve undergraduate college students participated in the qualitative research studies, and 339 students participated in this research using the quantitative method.

Data Collection Procedures

To begin with, the research proposal was developed and submitted to the institutional IRB Office. Once approved by the IRB Office, and consent forms were sent via email as part of the IRB process. For the qualitative research component, twelve one-hour in-depth interviews (IDIs) were set up and posted in a research pool where interested individuals self-registered in the system by selecting a timeslot. This research participation system contains undergraduate students who can sign up to participate in various research studies for an opportunity to earn a small amount of course credit. Each qualitative research participant was individually interviewed with a total of twelve in-depth interviews being conducted using a discussion guide, which included a series of open-ended questions that aligned with the primary research objectives and questions. This document helped to guide each conversation and ensured that the main questions were asked; the questions were formatted in an open-ended fashion to help uncover more elaborate and descriptive details through the use of probing and laddering techniques. This design was helpful to best understand each person's perspectives, experiences, and preferences.

For the quantitative research study, an online survey was created in Qualtrics and made available to students who were enrolled in various Marketing courses.

Benefits

The qualitative research method has been ideal and best suited for the personal financial questions so that each research participant could be interviewed individually, and their privacy protected and respected due to the personal nature of this topic. This method also allowed for more in-depth data to be collected, which revealed a deeper understanding of topics, insights, and valuable descriptions and explanations at a level that quantitative methods cannot easily achieve.

The quantitative research method has been valuable in expanding the sample size to collect more responses regarding undergraduate college students' top preference for course delivery, and efficiently interpreting the results using a statistical software tool; an added benefit to this method is that the risk for manual calculation errors is greatly reduced.

The Analysis

A thematic analysis approach was used to analyze the qualitative data gathered from the research participants, which included transcribing each interview, identifying common themes that emerged from the data, and setting up a thematic framework to categorize key information and major findings. To conclude the thematic analysis, the data was interpreted and meaningful findings from the research were reported as they aligned with the research objectives and questions. Verbatim quotes were taken directly from the qualitative research to further reinforce and support the findings reported from this research.

The quantitative data was exported from Qualtrics and cleaned before analyzing it with Jamovi, a statistical software tool that is like SPSS. Descriptive statistics were run on the variables, and the relevant descriptive statistics were reported and interpreted.

RESULTS

When in-person classes shifted to the online environment across the nation in March of 2020, there was a common feeling of shock expressed by people in our society on a national and global scale that many of the qualitative research participants reflected upon during the individual in-depth interviews. It was the first time that most of the students in this study had ever experienced education being delivered online. During his interview, a 21-year-old Junior said, “It was quite shocking at first to move completely online from going in person.” Largely due to having little or no experience with online education prior to March of 2020, most students recalled that, at that time, they had not really thought about taking college courses completely through the computer, although a few mentioned that they considered it for a summer class because they did not plan to be on campus or near campus during the summer months. A Junior in college mentioned, “The only thought I had on it was before becoming a Freshman at OU was, I knew that some courses were offered in the summer that are generally online.”

Two survey questions about online education sentiments were asked using the seven-point Subjective Happiness Scale (SHS) Likert scale, where one signifies the lowest agreement level (not very happy), seven indicates the highest agreement level (very happy), and the middle number, four, represents a neutral score of neither happy nor unhappy (Lyubomirsky & Lepper, 1999). When asked how they felt about online education (taking classes online in some capacity) before the COVID pandemic hit in March of 2020, 41.2% of the students reported that they were not very happy, moderately unhappy, or slightly unhappy, compared with 29.2% who indicated they were slightly happy, moderately happy, or very happy. When responding to the survey question regarding how they felt about online education (taking classes online in some capacity) amid the COVID pandemic, 30.7% indicated that they were not very happy, moderately unhappy, or slightly unhappy, compared with 47.2% who reported they were slightly happy, moderately happy, or very happy. As the pandemic persisted and further experiences were had with online education, 18% of the respondents in the quantitative study became happier about taking classes on the computer. This data reveals that college student perspectives have started to trend toward a more positive outlook when it comes to online education.

Most undergraduate college students in this study reported hybrid or HyFlex course delivery as their top preference (69.91%), 16.81% of the survey respondents prefer online asynchronous classes, 6.19% prefer completely in-person classes, 5.60% expressed their ideal course delivery is online synchronous, and 1.47% chose not to respond to this question. More specifically, out of the 339 individuals who completed the survey for this study, 237 students indicated that Hybrid or HyFlex is their ideal course delivery mode; the specific breakdown was 46.3% of the students prefer Hybrid and 23.6% of the students prefer HyFlex course delivery. This shows that about 70% of undergraduate college students prefer their higher education services to be delivered in a Hybrid or Hyflex format. This notable finding aligns with a recent national survey that reported 1,413 college student responses, collected in Fall Semester 2020 and Spring Semester 2021, which revealed that “68 percent indicated they would be interested in taking courses offering a combination of in-person and online instruction” (McKenzie, 2021).

Ten out of the twelve individuals interviewed (83.3%) for the qualitative part of this study said that their perspectives of online instruction have changed with seven of the students now preferring hybrid courses and three students indicating that HyFlex delivery would be ideal for their college courses. A Junior college student interviewed declared, “I would like mostly hybrid classes.” Some of the students elaborated on the Hybrid course delivery model during

their interviews, and most preferred a 50% ratio for a course that is scheduled twice per week, thus having one class session each week in-person and the other class session on the computer. For courses scheduled three days per week, multiple students stated that meeting in person in a physical classroom once per week would be ideal, with the other two scheduled class sessions being on the computer. In the latter scenario, there were mixed opinions as to whether the other online class sessions should be asynchronous or synchronous. A Sophomore interviewee suggested the following mix for a class that is scheduled three days per week, “So Monday asynchronous, and then Wednesdays in person, and then Friday remote workday.”

With flexible hours, workplace arrangements, and remote job opportunities being much more prevalent in the workforce today, many businesses offer and expect employees to work in a hybrid format; therefore, it is advantageous for college students to learn and collaborate in a hybrid environment to be better prepared and succeed in their future careers (Whenham, 2021). A college Senior explained, “What I have enjoyed most was the flexibility and being able to work on my own time. It allowed me to get a job in my hometown that fit my schedule and allowed me to save up enough to pay off the rest of my student loans so I will be graduating debt free. Some people cannot handle the freedom it gives as it requires more responsibility and determination to stick to a self-made schedule, but I embraced the freedom.” A Junior research participant stated, “The benefits of taking different versions of classes is that the hybrid format of working where you have to work both in person, and online, that's probably going to be reflected in the work world, no matter what your major is.” During his in-depth interview, a Senior elaborated on the future of higher education by asserting, “I'm hoping that the University will lean towards kind of what I talked about with just an option for every student.” A Sophomore interviewee said, “I sincerely really do love having a choice.”

Improved Cost-Benefit Ratio of Attending College (Improved Financial Wellness/Benefits)

The research suggests that there are financial benefits for students who take some or all classes online. When more courses shifted to online or hybrid delivery, many students saved money and their cost-benefit ratio of going to college improved. All twelve undergraduate student qualitative research participants are enrolled in college full-time, and none of them are first generation students.

Although parents or grandparents are taking care of most of the college expenses for the majority of the students who participated in this qualitative study, five of the students (41.7%) indicated that they still do feel somewhat stressed about their personal finances in general, and seven (58.3%) of the twelve students reported that they do not have financial stress. Ten out of these individuals are in-state students and pay in-state tuition, while two of the students pay out-of-state tuition, as one is a resident of a different state and the other is an international student. Additionally, ten of these students currently do not have a wage-earning job, and only four of them said they do follow a financial budget.

During the interviews, students discussed various types of indirect costs that are associated with them attending college, and how many of these costs have been reduced for them and their families during times when they participate in online education. Saving money on various expenses were brought up, such as reduced housing and utilities, transportation, clothing, shoes, meals and beverages, personal hygiene and household consumables (e.g., soaps, detergents, grooming products), textbooks, supplies, and even social life costs that are common in traditional college students' lifestyles, etc.

Out of the twelve students who participated in the individual in-depth interviews, eleven of them (91.7%) indicated that their cost-benefit ratio has improved when they are taking college courses in an online or hybrid format, and the twelfth interviewee said that his cost-benefit ratio may have improved. A lower cost-benefit ratio increases the value of higher education and improves overall financial wellness; this is advantageous to students for more many reasons, including lowering stress levels, lowering college drop-out rates, and improving opportunity costs that can reduce the need to work more hours at wage-earning job, which helps to make more time available to focus on studies and make time for wellness practices.

LIMITATIONS AND FUTURE RESEARCH

A limitation of this research is that participants self-reported how they remember feeling about online education before the declaration of the COVID-19 pandemic in March of 2020; all students were asked to answer this question in 2021 and early 2022, which required them to think back one or two years and try to remember what their sentiments were at that point in time. Another limitation is that this sample of the population included students enrolled in undergraduate courses at only one Midwestern university.

With limited modern-day research being available on this topic, additional future research should be further explored and conducted amid and beyond the pandemic with larger sample sizes of the undergraduate college student population, and ideally at different higher education institutions across the country and globe.

CONCLUSION

With the higher education landscape evolving at an even more expeditious pace than ever before, largely due to disruptions brought on rapidly by the COVID-19 global viral pandemic, it is important for research to be conducted during and after the pandemic to help policymakers better understand and proactively address current and future challenges and opportunities. This specific research has been conducted during the pandemic to identify various impacts on undergraduate college students' learning journey and their personal financial wellness.

The results show that college students' perspectives regarding online education are changing, as are their preferences for various course delivery formats. Numerous benefits are being realized when it comes to online and hybrid education that have been eye-opening and appealing to a greater number of undergraduate students than ever before, and this generation of college students desire more flexibility, convenience, choice regarding how their higher education services are delivered. The majority of traditional college students still want an in-person component for most of their classes part of the time; however, they strongly prefer hybrid or HyFlex course delivery.

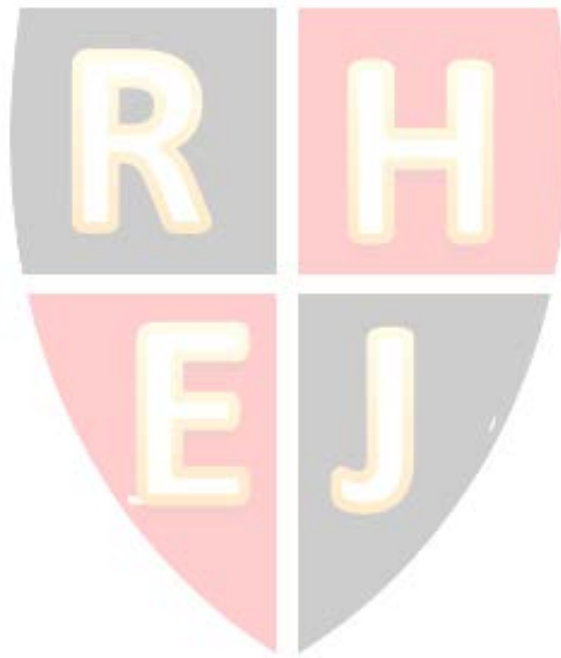
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Delivery Modes table

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APPENDIX

Table 1. Defining Course Delivery Modes (University at Buffalo, 2021)

Delivery Mode	Online	In-Person	Live/Real Time
Face-to-Face (F2F or in-person)	No	Yes	Yes
Online Synchronous (or virtual/remote)	Yes	No	Yes
Online Asynchronous (work at own pace)	Yes	No	No
Hybrid	Yes (mostly asynchronous)	Yes	Yes: In-Person No: Online
HyFlex (hybrid flexible)	Yes	Yes	Yes

