Higher Education in the Midst of a Pandemic: A Dean's Perspective ~ Revisited

William J. Rowley

Emeritus Faculty, School of Education, Seattle Pacific University, USA

Abstract

This paper is a follow-up to determine the accuracy of the predictions stated in a previously published article titled "Higher Education in the Midst of a Pandemic: A Dean's Perspective" (Rowley, 2020). Those predictions were more like educated guesses since the paper was written in 2020, the year the pandemic was beginning to spread across the country. It was certain significant changes would occur, but the nature and scope of these changes were unknown at the time. As mentioned in the above referenced paper, the difficulty of predicting the future was the fact that there were no predetermined guidelines for how to offer academic programs to students in the midst of a serious, widespread health crisis. College administrators were called upon to flexibly respond to a changed environment they had not previously experienced. This paper will review the predictions made in the areas of college sustainability, financial viability, enrollment, program delivery, technology, library and student services, and the college experience.

Keywords: college sustainability, higher education, financial viability, program delivery, technology, inperson instruction, virtual instruction, student services, library services

Author Note

William J. Rowley 0000-0002-3532-4844

I have no known conflict of interest to disclose.

Correspondence concerning this article should be addressed to: William J. Rowley, Emeritus Faculty, School of Education, Seattle Pacific University, 3307 3rd Ave West, Seattle, Washington, 98119, USA.

Email: wjrcar@comcast.net

Higher Education in the Midst of a Pandemic: A Dean's Perspective ~ Revisited College Closures

Previous Prediction

It was suggested there would be few small, private, liberal arts colleges left standing.

This would be the case for small, private, liberal arts colleges with low enrollment and inadequate endowments to carry them through the pandemic.

Response to Pandemic

The closing of colleges and universities is not a phenomenon unique to a pandemic. In fact, between the years 2016 and 2019, the year prior to Covid's spread worldwide, 47 colleges had either closed or merged according to Higher Ed Dive, which tracks trends in higher education (2022). Richard Ekman, president of the Council of Independent Colleges, observed that the number of small colleges closing or merging has varied between none and 10 each year over the past couple of decades (Gordon, 2021).

However, at the beginning of the coronavirus pandemic, pundits forecast mass closures of colleges and universities because of the loss of tuition and key auxiliary revenues due to a complete shift to online learning. There were closures to be sure, but not nearly the number some expected (Natow, 2021).

There were likely several reasons for fewer closures and mergers, including the creativity, flexibility, and hard work of administrators, faculty, and staff, but no small reason was the federal assistance provided to colleges and universities through the Higher Education Emergency Relief Fund (HEERF), which was part of the Coronavirus Aid, Relief, and Economic Security (CARES) Act of March 2020. This fund initially provided \$14 billion of federal money for direct distribution to colleges and universities during the pandemic to hold off such closures (CARES, 2020).

Nevertheless, there were colleges that didn't survive Covid. Twenty-four colleges either closed, merged, or consolidated during the critical pandemic years of 2020 to 2022. These colleges represented closures in 16 states, with five states having two or more closures. At least 14 of these schools were established over 100 years ago (Higher Ed Dive, 2022).

A review of these institutions indicates they were at risk of closing prior to the pandemic. Covid-19 wasn't the only reason for closure, but it served as the final straw that sent them to their demise. For example, Terry Hartle, senior vice president for government relations and public affairs at the American Council on Education, observed that Mills College, an institution founded before the Civil War, was financially at risk for years, but the pandemic exacerbated matters, and it couldn't survive Covid (Gordon, 2021).

MacMurray College, founded in 1846, is another example of how Covid hastened the closure of institutions that were at risk of closing prior to the pandemic. Charles O'Connell, chairman of the school's board of trustees, indicated that the economic disruptions of the pandemic were factors that worsened the college's financial problems (Aspegren, 2021).

Some small colleges were able to take a different route in order to survive. Tahoe's Sierra Nevada College experienced a 25% decline in enrollment over the past seven or eight years. The situation was made worse when the pandemic led to the online delivery of courses, and students didn't want to pay for an on-campus experience they couldn't experience. Instead of closure, Sierra Nevada College considered merging with another institution. The University of Nevada, Reno became its new partner (Renda, 2021). Although the end game was different, the pandemic made worse an already declining enrollment, which could have led to closure.

Covid was a contributing factor but not the only one that pushed at-risk colleges to close or merge with another institution. Higher education can celebrate the fact that closures were kept

at a minimum, but it would be too soon to think the risk is over. Richard Ekman, president of the Council of Independent Colleges, warns that a small increase in college closures can be expected due to issues brought on by the pandemic (Gordon, 2021).

Financial Viability

Previous Prediction

It was suggested that college administrators would need to be aggressive in order to maintain their institution's bottom line due to a loss of income resulting from the closure of campuses to students. It seemed reasonable to assume that colleges would freeze faculty hiring, leave staff positions open, lower salaries and fringe benefits, and reduce benefit packages to remain financially viable during the pandemic.

Response to Pandemic

Maintaining the financial viability of colleges and universities proved to be a challenge.

Andrew Pietro (2020) described the difficult environment in which college administrators had to work to maintain their institution's bottom line. "For both students and colleges, the coronavirus crisis has created a massive disruption in the financial 'norm' of higher education. With schools closing, switching solely to online, restructuring classes, cutting costs and so much more, some of the most basic assumptions about college and college life have already been thrown out the door."

Many colleges and universities reverted to tuition discounts in hopes of attracting more students. Kerr and Wood (2022) reported that tuition discounts were on the increase prior to the pandemic. John Moody (2022), citing the most recent Tuition Discounting Study conducted by the National Association of College and University Business Officers (NACUBO), reported that the average discount for first-time undergraduates was estimated to reach 54.5%, an all-time

high. Over 82.5% of undergraduate students at all colleges surveyed received financial aid, coming from unallocated general funds, college reserves, and either withdrawals or interest from endowment funds.

Discounting tuition was a commonly used strategy to attract students, but it raised the question as to the long-term sustainability of a college. Skladany (2020) suggested that tuition discounts reduced the availability of financial aid in the future.

Although every college was financially impacted by the pandemic, some schools were impacted more heavily than others. According to a survey conducted by NACUBO (2021), it was necessary for most four-year, private, non-profit colleges to take more dramatic business decisions than public colleges in order to survive. For example, these schools were more likely to take an endowment withdrawal than public colleges. The most frequently anticipated budgetary challenges were declines in auxiliary revenue, delays in deferred maintenance, decreases in annual fund giving, declines in athletic revenue, and across-the-board budget cuts.

Public universities anticipated a decline in state funding. According to a survey of state higher education agencies completed by New American and the State Higher Education Executive Officers Association (2021), the effects of the COVID-19 pandemic on state funding for public higher education varied from state to state. Although the results were preliminary, some states reported sharp cuts to their budgets, while others had not seen a significant relationship between the pandemic and state higher education funding.

A hiring freeze was announced by many institutions, including faculty positions, and capital projects were postponed in order to prevent future layoffs. Institutions making these decisions included elite schools with large endowments, less well positioned private schools, and public institutions (Flaherty, 2020). Other strategies like minimizing overtime pay, freezing merit

pay, and employing short-term furloughs could be found (University of Rochester, 2020). What could not have been predicted was Congress providing approximately \$14 billion to the Office of Postsecondary Education as the Higher Education Emergency Relief Fund (CARES Act, 2020).

It had been suggested that college administrators might have to evaluate and cut some curricular programs that weren't self-sustainable. In fact, according to a survey conducted by NACUBO (2021), some private, four-year, nonprofit institutions planned to either increase the number of their academic offerings or restructure their academic programs.

Enrollment Decline

Previous Prediction

Prior to the pandemic, enrollment in higher education had been declining for several years, as reported by the National Student Clearinghouse Research Center (Fain, 2019). It was reasonable to suggest that this decline would continue as a result of Covid-19.

Response to Pandemic

Unfortunately, the decline in enrollment continued during the pandemic with significant numbers of high school seniors choosing not to enroll and students already in college delaying their return to college. There was a decline of undergraduate enrollment by 3.6% in fall 2020 and by 3.1% in fall 2021. Total undergraduate enrollment fell by 6.6% from fall 2019 to fall 2021, a loss of just over a million students. In the fall of 2020, there were 20.7% fewer students since 2019 (Conley & Massa, 2022). At the same time, colleges experienced the largest two-year decline in 50 years (Dickler, 2021).

The numbers for community colleges were worse. Enrollment in one community college in the suburbs of Washington fell 19% (Anderson, 2021). According to the National Student Clearinghouse Research Center, there were 15% fewer students in the nation's public two-year

Higher Education in the Midst of a Pandemic

colleges in the fall compared with two years earlier (2021). This stunning decline doesn't bode well for four-year colleges that anticipate students from these schools to eventually transfer to them.

Moody (2022), citing the most recent data from the National Student Clearinghouse Research Center, reported that enrollment decline has fallen for five straight semesters, with community colleges taking the hardest hit. Across all levels, enrollment for spring 2022 fell 4.1%. Enrollment from spring 2020 declined by 17.1 million students and now stands at 15.9 million.

Following decades of increases, the number of international students studying in the United States significantly declined. First-time students declined by a stunning 45% from the 2019-2020 school year to the next, and in 2020-2021, there was an additional drop of 15% (Svrluga, 2021).

While many prospective students could visit a campus virtually during the pandemic, the majority of students, or 56%, made their college decision during the pandemic having taken an in-person campus tour (Ezarik, 2022).

It was previously suggested that some colleges and universities would extend the application deadlines due to the pandemic. Many schools in 2020 extended their deadline into September, well past the traditional date of May 1 (Moody, 2021). However, it should be noted that many are returning to the May 1 deadline but encouraging students to continue applying after that date.

Program Delivery

Previous Prediction

As the pandemic was at its beginning, it was suggested that not only was virtual instruction here to stay, but colleges and universities would learn that technology could be used far more effectively and extensively than in the past.

Response to Pandemic

The Chronicle of Higher Education (2020) reported that schools were ready with multiple plans for delivering instruction, including in-person, online, and hybrid instruction. It would only take a decision to implement them. They were just waiting for a decision on how they would deliver instruction to their students.

Most courses employed the use of Zoom classes, a video-conferencing method developed in the late 1990s. Most institutions adopted cloud-based software, but few adopted a cloud-based infrastructure or platform. Although IT services were becoming the rule, limited resources set the pace for moving in new direction (McKenzie, 2019).

When the decision was made to close campuses to ensure the health of students, staff, and faculty, online learning was the learning platform of choice. Gallagher and Palmer (2020) suggested Fall 2020 was an inflection point, resulting in higher education seriously considering multiple platforms for course delivery.

Distance learning education increased by 93% between Fall 2019 and Fall 2020 across the 2,300 colleges and universities participating in SARA, a voluntary agreement which establishes comparable standards for U.S. states and territories regulating postsecondary distance education (Lederman, 2020).

Online learning expanded across all levels of education. Expanding the use of virtual education ensured delivery of academic programs if schools were unable to resume face-to-face education (Masalimova et al., 2022).

It was previously suggested that institutions would have to distinguish themselves from other similar institutions order to combat enrollment decline. Three small colleges—Hampshire, Goddard, and St. John's—are examples of this (Schwartz, 2020). Hampshire was near closure in 2019, but since then has revamped its academic offerings, allowing students to organize their programs around current societal problems. Goddard, on probation since 2018 by its creditor, has lowered its cost to students and is significantly investing in and expanding its digital infrastructure in order to attract students. St. John's has cut tuition by 33% and is attempting to move from a tuition-based model to a philanthropy-supported mode. It has seen an increase in applications from prospective students and alumni donations. All three schools, in the midst of a pandemic and enrollment decline, have instituted fundraising campaigns. Each college is betting on the future that students will return.

The Chronicle of Higher Education (2021) surveyed 600 college and university senior administrators to understand how the pandemic changed or hastened the ways higher education used technology to fulfill its institutional mission. The report noted that the most significant change in the short-term was changing from in-person learning to on-line instruction.

Technology

Previous Prediction

The use of technology was predicted to have an increased role in the teaching/learning process. Institutions will have learned they can use technology effectively and extensively.

Result of Pandemic

In a very short time, institutions developed a technology infrastructure that would support remote instruction. Faculty members quickly shifted to teaching online instead of in the classroom (Chronicle of Higher Education, 2020).

According to Lederman (2019), federal data prior to the pandemic indicated only 34.7% of college students were enrolled in at least one online course in 2018, compared to 33.1% in 2017. That was less than the 2% increase from 2016 to 2017, but it was still an upward trend.

Many faculty members were unfamiliar with putting their courses online or teaching students online. This included many tenured professors who were challenged by virtual teaching (Chronicle of Higher Education, 2020). They needed immediate help from IT experts. Without IT experts, higher education would have come to a complete stop, which placed IT experts at the forefront of academic delivery.

Prior to the pandemic, less than 5% of college budgets were allocated to IT spending (Gallagher & Palmer, 2020). However, this health crisis was responsible for the acceleration and transformation of digital learning. Four and a half billion dollars was invested in ed technology, with more expected over the next 10 years (Stoltz-Loike, 2020).

Gallagher and Palmer (2020) reported that new platforms and technologies were emerging, which involve the use of cloud computing, large data sets, and artificial intelligence. MOOC make use of data from millions of learners and billions of course datapoints, which in turn use machines to grade assignments and deliver content and assessments.

That colleges and universities were able to move so quickly from primarily in-person instruction to remote teaching and learning is remarkable. IT experts were called upon to help higher education institutions manage this health crisis. Technology came out of the background and became a point of success for colleges and universities. This unparalleled success was the result of many people working together (O'Brien, 2020).

Kelly (2021), citing an Educause Horizon Report, noted three possible trends in regard to the future of technology: the adoption of hybrid learning models, increased use of learning technologies, and online faculty development. As previously stated, virtual learning is not going away.

Library Services

Previous Prediction

It was predicted that the demands for library services by students and faculty would expand. Additional and significant investments would be necessary to keep pace with technological advances related to the teaching and learning process.

Response to Pandemic

At the onset of the pandemic, the demand for library services was felt immediately. This included patron visits and the use of library services and facilities. The use of virtual support to patrons also increased, which included reference interactions and virtual consultations (De Groote & Scoulas, 2021).

Libraries served faculty and students through Zoom, and fortunately for faculty and students, online catalogs and interlibrary loans were still available (Connell et al., 2021).

Library services were pushed to the forefront of providing electronic and digital services, and faculty and students became more aware of these important services to colleges and universities. At the same time, Covid-19 gave library personnel opportunities to improve their own technical and collaborative skills. The use of digital library services will continue to increase after the pandemic (Zareef & Ahmad, 2021).

Frederick and Wolff-Eisenberg (2020), citing an Ithaka S+R survey of 638 library directors, noted that funds were redirected towards digital resources and services as a result of the pandemic. At the same time, the survey indicated challenges. The survey found that 75% of

the library directors surveyed were operating on reduced budgets of 1-9% for the 2020-2021 school year.

Notably, the deepest budget cuts occurred at public institutions with doctoral programs. Cuts to the budget were least likely to occur at private, undergraduate colleges. Difficult decisions had to be made regarding digital resources and resources, organizational finances, personnel cuts of those who worked in the physical libraries, and the health and welfare of staff (Frederick & Wolff-Eisenberg, 2020).

Health Services

Previous Prediction

Health services will have an enlarged role on campus. Staff members will provide professional expertise in planning an institution's response to the pandemic. They will continue to keep institutions apprised of the latest health directives.

Response to Pandemic

According to a survey conducted by the American College Health Association (2020), college and university health services stepped up to form emergency response teams and provide medical expertise to their institutions in light of the pandemic. Significantly, they used telemedicine technology to reach students with significant health concerns.

According to a survey by Montclair State University of 4,700 college students in New York and New Jersey in the spring of 2020, students were negatively impacted by academic, financial, pandemic-related, and mental health factors. Additionally, students of color were particularly stressed by financial issues (Montclair State University, 2022).

It is well known that colleges and universities sent students home in an effort to prevent the spread of Covid-19. According to a study by Lee et al. (2021), this change of learning environment, coupled with the quality of their education, negatively impacted the mental health of students. Their report indicated that those students who were closer to graduation faced increased anxiety, feeling of loneliness, and depression. Many found it difficult to complete their semester's work at home. Notably, first-generation students took time off from school more often than other students.

As students returned to campus, the use of health services on campus increased (Redden, 2021). One of the reasons presented is that addressing students' health problems was delayed while campuses were closed. Reasons for visits to health services included physical and mental health and Covid-19 concerns. Attendant problems for health services due to this increased demand for services was being short-staffed and having overworked and exhausted health professionals.

In a survey published by the American College Health Association (2020), financial stress was of concern to students. Two-thirds of the students in the survey indicated concern over finances. The fact that students were not on campus created financial hardships due to the loss of jobs on campus and in the community (Lederer et al., 2021).

The College Experience

Previous Prediction

The college experience is predicted to be unlike any other in the past. College is a unique experience for most students, especially new freshmen. It provides new experiences and significant challenges. For most students, it all adds up to a positive and life-changing experience. It may be the first time away from home for an extended period of time. Students meet new friends, adapt to new roommates, have coffee with some of their professors, eat in the

Commons, participate in clubs and organizations, and attend athletic events. However, until the coronavirus is under control, none of this will be the same.

Response to Pandemic

Life was not the same for college students during the pandemic. In addition to being away from campus and taking courses on zoom, there was the matter of missing out on internships, outside-of-class learning experiences, eating with friends in the Commons, and losing campus jobs that helped pay for tuition, books, and other supplies. At the university where I served, there were no informal groups of students sitting under towering trees on the Loop in the fall.

A normal part of the college experience is participating in extracurricular activities.

These activities were not available as long as campuses were closed (Lederer et al., 2021). These activities could include participating in an on-campus club, attending a concert or drama, playing for an athletic team, eating in the Commons, and many other social activities. More significant was the cancellation of graduation ceremonies.

With campuses closed in order to maintain the health and safety of students, colleges and universities closed their on-campus residence halls and food services during the height of the pandemic. In those instances where exceptions were made in housing, social distancing, wearing masks, and other safety measures were enforced. These had been places where students could learn to live together and bond during their college years. However, by the fall term of 2020, many higher education institutions were planning to open these facilities again (Pierce, 2020).

Some students chose to take time off from school, known as a gap year. Not wanting to

Higher Education in the Midst of a Pandemic

miss all the opportunities of a typical college experience, they chose to wait until things returned to normal. Some felt the need to take time off due to the stress of the pandemic (Rodriguez, 2021).

The prediction that the college experience would not be the same during the pandemic was an understatement. As the pandemic plays itself out, perhaps life on campus will once again return to normal.

References

- American College Health Association. (2020a, April). *The Covid-19 pandemic's effect on campus health services: A snapshot of operating status and response, April 6-9, 2020.*Retrieved June 7, 2022, from

 https://www.acha.org/documents/Resources/COVID_19/COVID
 19 Effect On Campus Health Services June2-5 Survey Report.pdf
- American College Health Association. (2020b, July 9). *The impact of Covid-19 on college student well-being*. Retrieved June 11, 2022, from

 https://www.acha.org/documents/ncha/Healthy-Minds_NCHA_COVID
 19_Survey_Report.pdf
- Anderson, N. (2021, December 28). Community colleges continue major enrollment decline. *The Washington Post*. https://www.washingtonpost.com/education/2021/12/28/community-college-enrollment-drops/
- Aspegren, E. (2021, January 28). These colleges survived World Wars, the Spanish flu and more.

 They couldn't withstand Covid-19 pandemic. *USA Today*.

 https://www.usatoday.com/story/news/education/2021/01/28/covid-19-colleges-concordia-new-york-education/4302980001
- Bresnick, P. (2022, February 8). *Colleges and universities increase tuition after Covid-19 freeze*. Fierce Education. https://www.fierceeducation.com/leadership/colleges-and-universities-increase-tuition-after-covid-19freeze
- Chronicle of Higher Education. (2020, October). "On the verge of burnout": Covid-19's impact on faculty well-being and career plan. https://connect.chronicle.com/rs/931-EKA-218/images/Covid%26FacultyCareerPaths Fidelity ResearchBrief v3%20%281%29.pdf

- Chronicle of Higher Education. (2021, May). Strategic tech decisions during the pandemic. New America. https://www.newamerica.org/education-policy/highered-public-opinion-hub/strategic-tech-decisions-during-the-pandemic/
- Conley, B., & Massa, R. (2022, February 28). The great interruption. *Inside Higher Ed*. https://www.insidehighered.com/admissions/views/2022/02/28/enrollment-changes-colleges-are-feeling-are-much-more-covid-19
- Connell, R. S., Wallis, L. C., & Comeaux, D. (2021). The impact of COVID-19 on the use of academic library resources. *Information Technology and Libraries*, 40(2). https://doi.org/10.6017/ital.v40i2.12629
- Coronavirus Aid, Relief, and Economic Security Act, 116 U.S.C., Pub. L. No. 116-136. (2020). https://www.congress.gov/116/plaws/publ136/PLAW-116publ136.pdf
- De Groote, S., & Scoulas, J. M. (2021). Impact of COVID-19 on the use of the academic library.

 *Reference Services Review, 49(3/4), 281–301. https://doi.org/10.1108/RSR-07-2021-0043
- Dickler, J. (2020, October 30). *Colleges are slashing tuition to entice students back*. CNBC. https://www.cnbc.com/2020/10/30/colleges-are-slashing-tuidtion-to-entice-students-back.html
- Ezarik, M. (2022, March 28). Virtual or in person, students say campus tours could achieve more. Inside Higher Ed.

 https://www.insidehighered.com/admissions/article/2022/03/28/covid-called-colleges-offer-more-campus-tours
- Fain, P. (2019, January 16). Takedown of online education. *Inside Higher Ed*.

 https://www.insidehighered.com/digital-learning/article/2019/01/16/online-learning-fails-deliver-finds-report-aimed-discouraging

- Flaherty, C. (2020, April 1). Frozen searches. *Inside Higher Ed.*hiring-freezes-response-coronavirus
- Frederick, J. K., & Wolff-Eisenberg, C. (2020, December). Academic library strategy and budgeting during the COVID-19 pandemic: Results from the Ithaka S+R US Library Survey 2020. *Ithaka S+R*. https://doi.org/10.18665/sr.314507
- Gallagher, S., & Palmer, P. (2020, September 9). *The pandemic pushed universities online. The change was long overdue*. Harvard Business Review. https://www.hbr.org/2020/09/the-pandemic-pushed-universities-online-the-change-was-long-overdue
- Gordon, L. (2021, March 17). *Mills College announces plans to close, triggering debate about other schools' futures*. Ed Source. https://edsource.org/2021/mills-college-announces-plans-to-close-triggering-debate-about-other-schools-futures'/651489
- Higher Ed Dive. (2022, April). *A look at trends in college consolidation since 2016*.

 https://www.highereddive.com/news/how-many-colleges-and-universities-have-closed-since-2016/539379/
- Kelly, R. (2021, April 26). 3 tech trends shaping the future of post-pandemic teaching and learning. Campus Technology.
 https://www.campustechnology.com/articles/2021/04/26/3-tech-trends-shaping-the-future-of-post-pandemic-teaching-and-learning.aspx
- Kerr, E., & Wood, S. (2022, January 5). *Colleges giving tuition discounts*. U.S. News. https://www.usnews.com/education/best-colleges/paying-for-college/articles/these-colleges-are-giving-tuition-discounts-this-fall

- Lederer, A. M., Hoban, M. T., Lipson, S. K., Zhou, S., & Eisenberg, D. (2021). More than inconvenienced: The unique needs of U.S. college students during the COVID-19 pandemic. *Health Education & Behavior*, 48(1), 14–19.
 https://doi.org/10.1177/1090198120969372
- Lee, J., Solomon, M., Stead, T., Kwon, B., & Ganti., L. (2021). Impact of COVID-19 on the mental health of US college students. *BMC Psychology*, *9*, 95. https://doi.org/10.1186/s40359-021-00598-3
- Masalimova, A. R., Khvatova, M. A., Chikileva, L. S., Zvyagintseva, E. P., Stepanova, V. V., &
 Melnik, M. V. (2022). Distance learning in higher education during Covid-19. Frontiers
 in Education, 7, Article 822958. https://doi.org/10.3389/feduc.2022.822958
- McKenzie, L. (2018, July 5). *Reaching for the cloud*. Inside Higher Ed.

 https://www.insidehighered.com/news/2018/07/05/cost-concerns-keep-cloud-services-out-reach-many-small-colleges
- McKenzie, L. (2020, December 9). Library leaders brace for budget cuts. Inside Higher Ed.

 https://www.insidehighered.com/news/2020/12/09/university-library-leaders-prepare-uncertain-financial-future-amid-pandemic
- Moody, J. (2021, April 28). *College application deadline that extends past May 1*. U.S. News. https://www.usnews.com/education/best-colleges/articles/college-application-deadlines-past-may-1
- Moody, J. (2022a, May 20). *Tuition discounts hit another record high*. Inside Higher Ed. https://www.insidehighered.com/news/2022/05/20/tuition-discounts-hit-all-time-high-nacubo-study-finds

- Moody, J. (2022b, May 26). *A 5th straight semester of enrollment declines*. Inside Higher Ed. https://www.insidehighered.com/news/2022/05/26/nsc-report-shows-total-enrollment-down-41-percent
- Montclair State University. (2022, February 17). New study shows COVID-19 impact on college students. https://www.montclair.edu/newscenter/2022/02/17/new-study-shows-covid-19-impact-on-college-students/#:~:text=A%20new%20study%20conducted%20by,financial%20and%20COVID-0%2Drelated%20stressors.
- National Association of College and University Business Officers. (2021, January 27). *Business officers share steps taken to weather pandemic pressures*. https://www.nacubo.org/
 Research/2021/COVID-19%20Research/Weathering%20Pandemic%20Pressures
- National Student Clearinghouse Research Center. (2021, November 18). *Covid-19: Stay informed with the latest enrollment information*. https://www.nscresearchcenter.org/stay-informed/
- Natow, R. S. (2021, March 1). Why haven't more colleges closed? The Chronicle of Higher Education. https://www.chronicle.com/article/why-havent-more-colleges-closed
- O'Brien, J. (2020, May 5) *More than a lifeline*. Inside Higher Ed.

 https://www.insidehighered.com/views/2020/05/05/covid-19-has-demonstrated-how-technology-higher-ed-major-strategic-asset-opinion
- Pierce, F. W., IV. (2020, May 11). *How is COVID-19 impacting student housing?* University Business. https://www.universitybusiness.com/how-is-covid-19-impacting-student-housing/

- Redden, E. (2021, October 14). *The view from student health services*. Inside Higher Ed.

 https://www.insidehighered.com/news/2021/10/14/student-health-centers-report-high-demand-services
- Renda, M. (2021). A merger that was meant to be. *Tahoe Quarterly*.

 https://tahoequarterly.com/around-town/a-merger-that-was-meant-to-be.
- Rodriguez, C. (2021, June 9). College interrupted: Many students chose to take time off instead of remote learning during the coronavirus pandemic. CNBC.

 https://www.cnbc.com/2021/06/09/many-college-students-chose-time-off-over-remote-learning-during-covid.html
- Rowley, W. J. (2020). Higher education in the midst of a pandemic: A dean's perspective.

 *International Dialogues on Education: Past and Present, 7, 108–215.

 https://files.eric.ed.gov/fulltext/EJ1278853.pdf
- Schwartz, N. (2020, May 11). *How 3 small colleges in turnaround mode are adapting to the pandemic*. Higher Ed Dive. https://www.highereddive.com/news/how-3-small-colleges-in-turnaround-mode-are-adapting-to-the-pandemic/577703/
- Sessums, C. D. (2020, March 20). Online learning can help weather the storm of the Covid-19 pandemic. Higher Ed Dive. https://www.highereddive.com/spons/online-learning-can-help-weather-the-storm-of--the-covid-19-pandemic/574498/
- Skladany, M. (2020, August 24). *Tuition discounts don't make sense, increased funding for financial aid does*. Brookings. https://www.brookings.edu/blog/brown-center-chalkboard/2020/08/24/tuition-discounts-dont-make-sense-increased-funding-for-financial-aid-does/

- State Higher Education Executive Officers Association. (2021, May 26). New report finds despite eight years of increases in state support, public colleges entered the 2020 recession with historically low funding. https://sheeo.org/new-report-finds-despite-eight-years-of-increases-in-state-support-public-colleges-entered-the-2020-recession-with-historically-low-funding/
- Stoltz-Loike, M. (2020, November 24). *Ed tech upgrades will outlast the pandemic*. University Business. https://www.universitybusiness.com/ed-tech-upgrades-will-outlast-the-pandemic
- Svrluga, S. (2021, November 15). After decades of increases, a drop in the number of international students in the United States. *The Washington Post*.
 https://www.washingtonpost.com/education/2021/11/15/international-college-student-enrollment-covid/
- University of Kansas (2020, September 17). *The evolution of distance education in 2020*. https://educationonline.ku.edu/community/distance-education-evolution-in-2020
- Zareef, J. & Ahmad, P. (2021, July). The impact of COVID-19 on university library services: A systematic literature review. *Library Philosophy and Practice*, Article 6062. https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=11308&context=libphilprac



This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License.