

# Tracking Student (Dis)Engagement Through the Pandemic: What Colleges & Universities Can Do to Foster an Engagement Reset

Jillian Kinzie\*

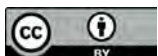
Indiana University Bloomington

## Abstract

The conditions of the pandemic beginning in March 2020 and ensuing changes in mode of instruction and limitations on co-curricular and experiential learning opportunities presented a significant disruption for higher education. Now in the third year of the coronavirus pandemic, we have evidence of the enduring impact on students and learning the identification of a pandemic-induced strain of *student disengagement*. In this essay, I examine evidence for student engagement during the pandemic and discuss what these findings suggest for current claims about disengagement. Documenting student experiences and outcomes of this generation-defining experience is important to higher education history and to addressing current realities in colleges and universities such as the purported problem of disengagement. Student engagement results provide a window into what is contributing to students' struggles and disengagement, illuminate strengths upon which to build, and afford insights for colleges and universities to reset student engagement.

*Keywords:* student engagement, COVID-19 pandemic, disengagement, colleges and universities

\* Contact: [jikinzie@indiana.edu](mailto:jikinzie@indiana.edu)



© 2023 Kinzie. This open access article is distributed under a Creative Commons Attribution 4.0 License (<https://creativecommons.org/licenses/by/4.0/>)

## Tracking Student (Dis)Engagement Through the Pandemic: What Colleges & Universities Can Do to Foster an Engagement Reset

The conditions of the pandemic beginning in March 2020 and ensuing changes in mode of instruction and limitations on co-curricular and experiential learning opportunities presented a significant disruption for higher education. Students struggled with the shift to remote learning, as did faculty and staff who had to instantly move classes and services online and continuously adapt to ever-changing circumstances. The complications of learning remotely while being unexpectedly at home and with new responsibilities created significant stress for college students. Secondary education was similarly disrupted and as education continued online, many school districts reported unprecedented rates of absenteeism. The shift to remote learning also exposed and exacerbated inequities such as food insecurity, homelessness, and barriers to technology that many young people and college students were already facing.

The unprecedented conditions for learning, accompanied by the stress of pandemic protocols, the fear of infection, and real personal loss overwhelmed students, faculty, and staff and has contributed to collective trauma at all educational levels. Now in the third year of the coronavirus pandemic, we have evidence of the enduring impact on students and learning (National League of Cities, 2020; Popa, 2022; U.S. Department of Education, Office for Civil Rights, 2021), including learning loss (ACT, 2022; Institute of Education Sciences, 2022), unfocused students (Gurung, 2022), and a widespread sense of disengagement. Colleges and universities are reporting high levels of student disconnection, elevated levels of anxiety and mental health concerns, drops in class attendance, and dwindling help-seeking behaviors (Abrams, 2022). Faculty members, responding to *The Chronicle of Higher Education*, described students as “defeated,” “exhausted,” and “overwhelmed” (McMurtrie, 2022b). These observations led to the identification of a pandemic-induced strain of *student disengagement*.

The problems of student disengagement, absenteeism, disconnection, and mental and emotional exhaustion affect individual students’ success. They also influence higher education access, persistence and completion, career outcomes, and social and economic mobility for many years beyond the pandemic. Even more, the parallel pandemic of racism, which was fully evident after the murder of George Floyd, laid bare the student engagement and success inequities for low-income students, racially marginalized students, and other vulnerable student populations in higher education. Faced with these compounding effects, many are asking what colleges and universities can do (Koenig, 2022) and this includes addressing a new level of student disengagement.

In this essay, I examine evidence for student engagement during the pandemic and discuss what these findings suggest for current claims about disengagement. Documenting student experiences and outcomes of this generation-defining experience is

important to higher education history and to addressing current realities in colleges and universities such as the purported problem of disengagement.

## **What Do We Know about Student Engagement and the Pandemic?**

Students need to be engaged in their learning, dedicating time and effort to educationally purposeful activities, being active collaborative learners who are interacting at substantive levels with their peers and faculty. Participation in challenging experiential learning opportunities, such as undergraduate research and internships and leading clubs and organizations, are also valued undergraduate experiences (Kuh et al., 2010; Mayhew et al., 2016). Rich relationships among students and between students and faculty and staff are also essential to engagement and making college a supportive and transformative experience (Felten & Lambert, 2020). There is no denying that the pandemic significantly upended these conditions of student engagement.

The decline in student engagement since the start of the pandemic has been widely reported. Continued accounts of the challenges students and faculty are experiencing and their effect on learning and success are gaining traction in higher education scholarship and popular media (i.e., Abrams, 2022; Kelly, 2020; McMurtrie, 2022a, 2022b; Zaretsky, 2022).

Notably, the claim that students are disengaged is not new. It was a conclusion in Arum and Roksa's (2011) research that found limited learning on college campuses. Hu and Kuh (2002) confirmed the disengaged student type and identified student and institutional characteristics associated with disengagement. The concept of disengagement was further elaborated by Kuh et al. (1991) as the "disengagement compact," a tacit bargain between faculty and students, which allows faculty to ask little of students while providing entertaining teaching and reasonable grades, and in exchange, students ask little of their instructors while providing compliant behavior and favorable course evaluations.

Elements of the extant concepts of disengagement are present in the current concern. However, lessons about student engagement during the pandemic combined with action taken by educators may suggest new approaches to addressing the problem. I draw on student engagement results from annual surveys administered by the Indiana University Center for Postsecondary Research to assess engagement from three perspectives: prior to students' start to college, during undergraduate education, and from the point of view of faculty, and highlight salient findings relevant to the disengagement concern.

## New Students' Pandemic-Era Pre-College Experiences and Expectations for Engagement

Students starting college during the pandemic had a disrupted high school experience and began college amid uncertainty. Data from the Beginning College Survey of Student Engagement (BCSSE), administered to new students prior to the start of classes, demonstrates the influence of the pandemic on a range of educational dimensions including instructional mode, student preparation, mental health, expectations for academic difficulty, and student engagement in activities important to learning and development (Kinzie & Cole, 2022). The following findings about entering students are relevant to the current problem of disengagement in college.

- Students entering college in fall 2021 experienced a range of high school learning environments including in-person, online, and hybrid. However, significantly more (almost double) Black or African American, Hispanic or Latina/o, and Asian students experienced entirely online instruction. Inequitable conditions for pre-college learning notwithstanding, this disparity negatively affected students' transition to and engagement in the instructional mode enacted at their college.
- The pandemic moderately or greatly increased entering student concerns across seven domains: future opportunities, ability to socialize, ability to pay bills, having enough food, personal health and safety, friends' or family's health and safety, and inadequate medical care. First-generation students had elevated levels of concern in comparison to their continuing student counterparts, as did students with racially marginalized identities (American Indian/Native American, Black/African American, and Latinx) compared to their non-racially marginalized peers. This higher level of unease and stress likely affects students' capacity for engagement.
- The majority of entering students suffered increased levels of depression, hopelessness, and loneliness due to COVID. More than half of new students had substantial increases in mental and emotional exhaustion, and 1 in 4 reported increased difficulty sleeping. Mental health concerns were already a rising campus concern (Harris et al., 2022) and the pandemic exacerbated the problem.
- Entering students' level of expected difficulty on routine new student challenges including learning course material, managing time, paying for college expenses, getting help with schoolwork, making new friends, and interacting with faculty was mostly on par with BCSSE results prior to the pandemic. However, our analyses show that because expectations of academic difficulty are linked to mental and emotional exhaustion, we must be concerned about the higher numbers of students with the detrimental combination of high expectations of academic difficulty and a substantial increase in mental and emotional exhaustion.

New students' pre-college experiences including disparities in instructional mode, heightened concerns about the transition to college and difficulty, and increased mental and emotional exhaustion, demonstrate unusual and inequitable circumstances. These findings paint a concerning backdrop for beginning college students and suggest inequitable implications for engagement in the first year and beyond.

### **First-Year Students and Seniors Engagement During the Pandemic**

How were students engaged in college during the pandemic? Results from the National Survey of Student Engagement (NSSE), administered annually to first-year students and seniors during the spring term, revealed significant changes in engagement, including shifts in instructional mode, increased mental health concerns, and a dip in engagement across several engagement indicators compared to pre-pandemic levels (National Survey of Student Engagement, 2021a). The following findings point to specific shifts and shortfalls that help illuminate larger concerns about the problem of disengagement in college.

- Students in their first college year in 2021 generally struggled, particularly those participating in remote learning. First-year students taking mostly remote courses were more likely than their in-person peers to report that the pandemic interfered with their college plans and their preferred living situation. The unplanned combination of remote learning and pandemic-required restrictions on campus life depressed expectations and limited engagement.
- First-year students in in-person courses were more likely than their peers in remote and hybrid courses to feel that their professors were meaningfully responsive to students' needs.
- About two-thirds of both first-year students and seniors felt the pandemic substantially increased their mental or emotional exhaustion, and nearly half experienced increases in anxiety and inability to concentrate.
- Women students and those with nonbinary gender identities struggled with greater mental health and emotional burdens of the pandemic.
- The pandemic had a negative impact on students' educational plans, with more than 50% expressing interference with participation in experiential learning opportunities such as internships, study abroad, or field experiences.
- Certain forms of student engagement shifted from prior years at many institutions. Understandably, the declines were in dimensions that have historically relied on face-to-face interactions of accessing services and participating in events, including measures of collaborative learning, interaction with diverse others, interaction with faculty, and perceptions of a supportive environment. In addition, given the deferral of many campus-sponsored experiential opportunities including internships, study abroad, and service-learning, student engagement dropped for these measures. Yet,

other measures including deep and higher order learning skills, reflection, and exposure to effective teaching practices remained stable.

- Student involvement in events and activities was lower than past years and students bemoaned limited opportunities for social connection and meaningful involvement in clubs and organizations. While students pivoted under these circumstances, comments about the desire to reclaim some sense of normalcy through involvement in clubs and activities, and campus events, were strong.
- Even though instructional practices were being adapted to suit changing campus conditions, students rated teaching practices including clear and organized instruction, consideration of students' perspectives and personal goals, and opportunities to engage with different learning strategies, relatively high. These results provide some acknowledgment of faculty and staff responsiveness to student needs, while also demonstrating student resilience and capacity to engage.
- Students' sense of belonging was not significantly lower in 2021. While small variations were found among some student identity groups, particularly racial/ethnic groups, it is heartening that, overall, students felt valued and cared for by their institution. Students' strong sense of belonging may be affirmation of the attentiveness of faculty and staff and support for shared pandemic conditions.

Evidence of engagement a year into the pandemic disruption demonstrates the realities of a modified, subnormal undergraduate experience. Students who were on campus and experiencing a mix of in-person and remote learning were only slightly more sanguine about their college experience than students who were fully remote and living at home. The normal bonds to peers and campus that are fostered through the provision of programming, campus-wide events, advising, and recreational sports were largely missing, and students suffered. With limited activities and traditional campus experiences, weariness, skepticism about the value of college, and mental health concerns preoccupied undergraduate life. Yet, students' grief about missed campus life and learning opportunities signals potential for re-engagement, while strengths, including appreciation for effective teaching and the responsiveness of faculty and staff to student needs, suggests assets upon which to build.

## **Faculty Engagement and Perceptions of Student Engagement During the Pandemic**

Since the onset of the pandemic, teaching and learning has demanded significant flexibility by faculty. Instructional modes and practices had to adapt quickly, and institutions provided varying levels of customized support to faculty to make this happen. Results from the Faculty Survey of Student Engagement (FSSE) 2021 point to strengths and shortcomings in faculty experiences and present considerations for

rethinking approaches to teaching, learning, and student engagement (National Survey of Student Engagement, 2021b).

- The vast majority of faculty (87%) felt that they did a good job helping students adapt during the pandemic. Nearly all faculty adjusted the nature of course assignments and were more flexible about assignment due dates. These results demonstrate the kinds of modifications and supports students found helpful.
- Despite ever changing teaching conditions, faculty reported high use of effective teaching practices. For example, nearly all faculty reported teaching in an organized way, using examples and illustrations to explain difficult points, and clearly explaining course goals and requirements. These results align with student responses on teaching practices and suggest that students recognized the efforts faculty made to create meaningful classroom experiences.
- Decades of engagement results demonstrate the strong relationship between what faculty do and students' level of engagement. This persisted during the pandemic. For example, students who experienced more effective teaching practices also perceived more institutional support to help them succeed and were more likely to feel valued by their institution. These results show the important relationship between faculty engagement practices and what students do, and the value of relationships between students and faculty to students' perceptions of support for their success.
- Faculty members were also stressed with competing teaching and family responsibilities during the pandemic. About 1 of 3 faculty felt their relationships with students worsened.

Overall, results from FSSE and NSSE reflect how faculty and students worked together through the changing campus conditions for teaching and learning. Moreover, despite the personal difficulties faculty experienced during the pandemic, they dedicated themselves to effective instruction and were present and supportive of their students.

### **Student Engagement Rebounding in 2022**

Evidence from BCSSE, NSSE, and FSSE during the height of the pandemic show declines in student engagement, and some noteworthy strengths. As pandemic restrictions lifted and conditions returned to a more typical college experience, undergraduate education did not just revert to what it was pre-pandemic. Instead, students' pandemic experiences continued to influence their engagement in college and many students were carrying with them a sense of loss. While some colleges and universities saw pent-up demand for student interaction and a surge of involvement in experiential learning and campus life events, others realized a significantly altered or diminished student experience. College students continued to juggle pandemic-influenced challenges, including to coursework, relationships, and re-adjustment to campus life, along

with economic strain, social injustice, and various forms of loss related to COVID-19 (Lee et al., 2021). This led colleges and universities to implement a range of practices to foster students' transition and to apply trauma-informed practices to support students and address more widespread mental health issues (Abrams, 2022).

Now two years since the onset of the pandemic, NSSE 2022 results confirm the shift from predominately online learning during the 2020–21 academic year to more in-person instruction in 2021–22. For example, results show that engagement in several activities typically requiring face-to-face interaction that declined in 2021 are rebounding in 2022. This includes increases in collaborative learning, discussions with diverse others, student-faculty interaction, perceptions of campus support, and participation in service-learning courses and undergraduate research. Yet, some high-impact practices, including study abroad and internships, are lower than pre-pandemic, particularly for seniors who may have missed the window for such opportunities.

Results for student participation in campus events and activities, hours spent in co-curricular activities, and perception of institutional emphasis on opportunities to be involved socially, are all up from 2021, but are still slightly lower than in the past, suggesting depressed engagement in typical campus activities.

NSSE 2022 overall results seem to be aligned with the perspective that students are participating more actively in academic and co-curricular life. However, when interpreted alongside BCSSE findings about entering students, results hint that a disrupted high school experience including fears about lapses in academic preparation and expected difficulty, the development of ineffective learning habits in relaxed circumstances, and mental exhaustion may still be influencing first-year student engagement. On the other hand, seniors may be struggling with regret about missed college opportunities, uncertainty about the value of their degree, and issues of mental health.

## The Pandemic as a Turning Point: Student Engagement and Implications

The crises of the pandemic and enduring trauma are present even as the rhythms and routines of college life return to a more typical pace. Yet, throughout history, the crisis of a pandemic also presents opportunity, and as novelist Arundhati Roy (2020) suggests, can be “a portal, a gateway between one world and the next” and a chance to imagine something different. The pandemic exposed truths and can help us imagine new approaches to engagement. What follows are several observations about what the pandemic revealed about student engagement and implications for practice:

- Students, faculty, and staff are more mindful of what they value and what gives them purpose and this influences engagement. Students may need



more structured opportunities for reflection to find meaning and value in their education and their way back to engagement.

- Human connections and relationships matter more than ever to quality education. Structured and informal opportunities to deepen interpersonal connections can help normalize the social dimension of learning.
- Inequities in student engagement revealed during the pandemic are perpetuated by systemic racism and injustice. The pandemic can be the impetus to re-double efforts to redress inequities and make success possible for all students.
- All aspects of student and faculty engagement can safely and efficiently be conducted remotely. Whether remote is preferred, or necessary for health and safety, it is possible to participate in remote learning with a high level of engagement—it is not a second-rate context for learning.
- Maintaining flexibility while holding students accountable can help lower student stress and increase student agency. By increasing opportunities for students to determine learning processes and how they can best demonstrate learning gains hold promise for increasing engagement and learning outcomes.
- Education and engagement must be enacted holistically by designing student-centered operations that address students' unique academic and personal needs.

## **The Pandemic as a Turning Point: What Colleges and Universities Can Do**

The conditions of the pandemic have left an indelible influence on all levels of education. While some dimensions of the student experience will likely return to routine, aspects including students' sense of purpose and motivation, holistic support needs, mental health, need for interaction and flexibility in teaching and learning, and enthusiasm for eliminating injustice, require ongoing attention in higher education. By applying aggregate findings about students' experience and local information acquired during the pandemic, institutions can reflect on current policies and processes. What might colleges and universities do to meet the needs of current students, faculty, and staff and imagine a different way of supporting student engagement and success? What might help mitigate concerns about student disengagement? In this section I discuss five ideas salient to the disengagement concern.

### **Embrace Educational Flexibility**

Teaching and learning during the height of the pandemic was generally characterized by adaptation, leniency, accommodations, and flexibility. Students appreciated the support faculty offered in terms of flexible deadlines and alternative approaches to

demonstrating what they know and can do. Accounts of learning gains and effective support for learners demonstrated that when done right, students can work at their own pace and many faculty saw engagement improve and stress lessen with flexibility (McMurtrie, 2022a). Beyond the pandemic, the effectiveness of these practices may signal the potential for greater student agency in undergraduate education. This may be immediately appealing for very academically motivated students as well as students who work, are parents, or have significant responsibilities.

Although flexibility appears to help all students—provided there are clear expectations, some scaffolding, and opportunities to learn through metacognition—the fast shifts and continual pivots in flexible expectations for assignments and deadlines may also have led some students to develop habits that may be less effective. This gap could explain some student disengagement and in particular students' struggles to meet deadlines and perform at past levels. Maintaining flexibility and agency, while increasing support and accountability might need to be more intentionally addressed in course design, assignment expectations, and through formal means including contract grading.

Relatedly, flexibility also inspired the replacement of high-stakes tests and papers with smaller, more frequent assignments. This approach helped students stay on top of their learning, notice when they were falling short, and helped reduce anxiety. Flexibility accompanied by more opportunities to practice and demonstrate learning is worth retaining.

## **Explicitly Address New Students Preparation**

### **Concerns and Expected Difficulty**

Students' study skills atrophied in the shift to remote learning, especially during high school. Workloads tended to be lighter, and deadlines were more fluid. Some new students entered college expecting this to continue, while others expressed considerable trepidation about college including expectations for difficulty and fear that they would be starting behind. Many institutions designed and delivered learning bootcamps, online modules, or supplemental instruction to help students get up to speed. These efforts may need to continue along with greater use of peer mentors to promote human connection while providing students the academic support they need.

Notably, colleges and universities need to be even more mindful of variation in academic preparation, expectations of difficulty, mental exhaustion, and help-seeking behaviors among entering student groups, specifically first-generation, racially marginalized, and other vulnerable student populations, given evidence of inequitable pre-college experiences.

### **Emphasize Relationships**

We have learned a lot during the pandemic about the value of relationships. Practices of relationship-rich education (Felten, 2022; Felten & Lambert, 2020) help increase connections between students and faculty and among students, in online and hybrid

courses. Learning environments must prioritize social learning, affording students opportunities to work in groups, get to know and support each other, and feel supported by faculty. Pedagogies and technologies must be used to foster connection. Faculty are encouraged to take time to check in with students in class, ask how they are doing, encourage active participation, and contact students when they skip class. A deliberate atmosphere of care and support can help students feel motivated to come to class because they feel like it matters when they are present.

As Felten (2022) cautions, faculty do not need to build personal relationships with individual students to create relationship-rich learning environments. Rather, faculty must intentionally deploy interactive pedagogy, reach out proactively to students who are disconnected, and learn what is going on and how to help.

### **Encourage Reflection on Purpose and Value**

The tumult of the pandemic spurred a collective reckoning with our values, lifestyles, and goals. Students' perceptions of college value and the utility of their education was also thrown into question. To help address this, faculty members, advisors, and student affairs staff should identify opportunities to emphasize the concrete links between what students are learning with other aspects of their lives, such as their job and future, and design assignments and activities that require students to demonstrate how to use what they are learning in other settings. Increasing experiential learning, redesigning courses to connect more closely to students' lived experiences and prospective careers, and ensuring that assignments connect to students' interests, are more likely to facilitate student engagement.

### **Address Holistic Student Success**

Address the personal and holistic needs of students—from their food, childcare, financial, and academic needs to their social-emotional needs—and center the student perspective and experience in institutional decision-making processes. Increased mental health demands have prompted more colleges and universities to implement approaches such as group therapy, peer counseling, and telehealth to meet need, and to incorporate a broader culture of wellness into institutional policies and routine campus life. Holistic student success must also include the needs of students, faculty, and staff dealing with long COVID. The symptoms of fatigue, brain fog, and shortness of breath can be disabling conditions like other chronic illnesses. Colleges and universities must address this issue generously and respond through flexible accommodations.

## **Conclusion**

Two plus years of pivoting and reliance on remote learning have taken their toll on students' mental health, their social skills, and their ability to adapt to traditional academic

expectations. On top of these stresses is the projected deficit frame of disengagement. Student engagement results provide a window into what is contributing to students' struggles and the condition of disengagement, while illuminating strengths upon which to build. Considering the pandemic as portal, or a turning point, provides colleges and universities the opportunity to reset student engagement. Adapting to add flexibility, promote student agency, address entering student concerns, encourage relationship building and reflection on purpose, and address holistic student success, may help reset engagement. It may also improve overall conditions of student life, helping students make healthier choices, relieving them of pressures including to double major, participate in a host of co-curricular activities, among others, and thrive as they pursue their goals. The attributes of flexibility and compassion are vital to rebuilding student engagement and inclusive campuses where all students can flourish. We can respond to the frame of student disengagement with annoyance, frustration, and blame, or learn from the pandemic and take steps to re-engage students in ways that support their path to success.

## References

- Abrams, Z. (2022, October 12). Student mental health is in crisis. Campuses are rethinking their approach. *Monitor on Psychology*, 53(7). <https://www.apa.org/monitor/2022/10/mental-health-campus-care>
- ACT. (2022). Average ACT score for the high school class of 2022 declines to lowest level in more than 30 years [Press release]. <https://leadershipblog.act.org/2022/10/GradClassRelease2022.html>
- Arum, R., & Roksa, J. (2011). *Academically adrift: Limited learning on college campuses*. University of Chicago Press.
- Felten, P. (2022). From pandemic to endemic pedagogy: Being clear in our teaching. *New Directions for Teaching and Learning*, 2022(169), 39–46. <https://doi.org/10.1002/tl.20481>
- Felten, P., & Lambert, L. M. (2020). *Relationship-rich education: How human connections drive success in college*. Johns Hopkins University Press.
- Gurung, R. A. R. (2022, February 16). Accommodating stress: Coping with student requests. *Inside Higher Ed*. <https://www.insidehighered.com/advice/2022/02/16/advice-offering-accommodations-student-requests-opinion>
- Harris, B. R., Maher, B. M., & Wentworth, L. (2022). Optimizing efforts to promote mental health on college and university campuses: Recommendations to facilitate usage of services, resources, and supports. *Journal of Behavioral Health Services & Research*, 49(2), 252–258. <https://doi.org/10.1007/s11414-021-09780-2>
- Hu, S., & Kuh, G. D. (2002). Being (dis)engaged in educationally purposeful activities: The influences of student and institutional characteristics. *Research in Higher Education*, 43, 555–575. <https://doi.org/10.1023/A:1020114231387>

- Institute of Education Sciences. (2022). *Monthly school survey dashboard*. U.S. Department of Education. <https://ies.ed.gov/schoolsurvey/>
- Kelly, K. (2020). Making sense of the many college student COVID-19 surveys. <https://philonedtech.com/making-sense-of-the-many-college-student-covid-19-surveys/>
- Kinzie, J., & Cole, J. (2022). Education disrupted: Students beginning college during the COVID-19 pandemic. *New Directions for Higher Education*. Advance online publication. <https://doi.org/10.1002/he.20449>
- Koenig, R. (2022, June 8). As student engagement falls, colleges wonder: ‘Are we part of the problem?’. *Ed Surge*. <https://www.edsurge.com/news/2022-06-08-as-student-engagement-falls-colleges-wonder-are-we-part-of-the-problem>
- Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2010). *Student success in college: Creating conditions that matter*. Jossey-Bass.
- Kuh, G. D., Schuh, J. H., Whitt, E. J., & Associates. (1991). *Involving colleges: Successful approaches to fostering student learning and personal development outside the classroom*. Jossey-Bass.
- 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, Article 95 (2021). <https://doi.org/10.1186/s40359-021-00598-3>
- Mayhew, M. J., Rockenbach, A. N., Bowman, N. A., Seifert, T. A. D., & Wolniak, G. C. (2016). *How college affects students: 21<sup>st</sup> century evidence that higher education works* (3rd ed.). Jossey-Bass.
- McMurtrie, B. (2022a, June 9). Teaching: These professors found benefits in pandemic flexibility. *The Chronicle of Higher Education*. <https://www.chronicle.com/newsletter/teaching/2022-06-09>
- McMurtrie, B. (2022b, April 5). A ‘stunning’ level of student disconnection. *The Chronicle of Higher Education*. <https://www.chronicle.com/article/a-stunning-level-of-student-disconnection>
- National League of Cities. (2020). Resource guide: Addressing student reengagement in the time of COVID-19. [https://www.nlc.org/wp-content/uploads/2020/11/Resource-Guide-Addressing-Student-Reengagement-in-the-Time-of-COVID19\\_10302020.pdf](https://www.nlc.org/wp-content/uploads/2020/11/Resource-Guide-Addressing-Student-Reengagement-in-the-Time-of-COVID19_10302020.pdf)
- National Survey of Student Engagement. (2021a). The pandemic and student engagement: Trends, disparities, and opportunities. Annual results 2021. <https://nsse.indiana.edu/research/annual-results/2021/story1.html>
- National Survey of Student Engagement. (2021b). Flexible and adaptable: Teaching and learning in a year of disruption. Annual results 2021. <https://nsse.indiana.edu/research/annual-results/2021/story2.html>
- Popa S. (2022). Taking stock: Impacts of the Covid-19 pandemic on curriculum, education, and learning. *Prospects*, 51(4), 541–546. <https://doi.org/10.1007/s11125-022-09616-7>

Roy, A. (2020). The pandemic is a portal. *Financial Times*. <https://www.ft.com/content/10d8f5e8-74eb-11ea-95fe-fcd274e920ca>

U.S. Department of Education, Office for Civil Rights. (2021). *Education in a pandemic: The disparate impacts of COVID-19 on America's students*. U.S. Department of Education. <https://www2.ed.gov/about/offices/list/ocr/docs/20210608-impacts-of-covid19.pdf>

Zaretsky, R. (2022, May 20). Yes, students are disengaged. What else is new? *The Chronicle of Higher Education*. <https://www-chronicle-com.proxyiub.uits.iu.edu/article/yes-students-are-disengaged-what-else-is-new>