

Back on Track: Helping Students Recover From COVID-19 Learning Disruption

By Lindsay McKenzie

INSIDE
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Preface

Face-to-face instruction largely resumed on college campuses in fall 2021, but the ongoing COVID-19 pandemic is still affecting higher education in ways we may not fully grasp for years to come.

Campus closures and the rapid shift to remote instruction in early 2020, followed by two more semesters that were anything but normal, caused months of disruption for college students. But whether (and how much) that disturbance seriously impeded students' academic progress or cognitive growth, and how it may be affecting students and colleges now, remains unclear.

Attempts to quantify learning disruption in terms of "learning loss" or "COVID slide" have proven divisive among educators, with critics describing these terms as negative, unhelpful and vague.

In addition, colleges and universities as a general rule do not systematically “measure” learning in the way educators in elementary and secondary education routinely do. Still, there’s a widespread desire in higher education to better understand how to support students through this challenging time, improve instruction using insights gleaned from new remote teaching experience and technology, and reflect on longstanding college assessment and placement practices.

The stakes are high, amid concerns that students -- especially students of color and those from lower-income families -- may be deterred on their path to graduation, exacerbating existing inequities and achievement gaps.

This report, based on interviews with roughly 20 experts on learning, assessment and student success, examines how instructors and colleges are striving to understand and respond to the learning disruption that different groups of students faced over the past two years in both K-12 and higher education settings.

Based on case studies from a range of colleges and universities, this report discusses efforts to expand student support services to incoming and returning students through initiatives such as peer-to-peer mentoring and summer bridge programs. It will also explore how some instructors have altered their instruction and assessment practices in response to the pandemic with promising results.

This is a challenging time in higher education, as college instructors and staff members have

been in a near-constant professional sprint since March 2020 at the same time they personally endured pandemic-driven strains and worries. So expecting dramatic transformation in student support delivery or instructional or assessment strategies may be unfair.

Rather than a blueprint for what institutions should be doing in response to COVID-19, we hope this report provides a snapshot of this moment -- with early reflections on what seems to be working, what isn't, and discussion of practices that would be helpful to retain going forward.

We hope the ideas and views shared in this report help you in your work on these crucial issues during this unprecedented time, for institutional leaders, instructors and student support employees -- and anyone who cares about students.

--Lindsay McKenzie

Thoughts, comments, suggestions?

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COVID's Impact

The impact of the ongoing COVID-19 pandemic on higher education is yet to be fully understood, but already it is clear that many students, particularly students of color and those from lower-income backgrounds, have been hit hard.

Some effects of the near-term pandemic are clear and acute. Whether students have actually become physically sick with COVID-19 or not, many have suffered health issues because of it. [Student health centers](#) report that demand for both physical and mental health care has increased significantly since fall 2019, with large numbers of students seeking support for stress, anxiety and depression.

Survey after survey reveals significant expression of mental health worries and woes among continuing and new college students. Those needs leave short-staffed college counseling offices, faculty members and others -- themselves often struggling with the same burnout and personal pressures -- straining to monitor and respond to those demands.

Financial stress -- a known predictor of poor mental health -- has also increased among students over the past two years. National unemployment levels reached a record high of 14.7 percent in April 2020, according to the [U.S. Bureau of Labor Statistics](#). Experimental data collected by the [U.S. Census Bureau](#) at the start of the pandemic found that people with some college but no degree were more likely to experience a loss of income

because of COVID-19 than those with at least a bachelor's degree.

Between March and May 2020, two-thirds of students reported that their financial situation had worsened, according to a [survey](#) on the impact of COVID-19 on college student well-being, conducted by the American College Health Association and the Healthy Minds Network. The same survey indicated increased prevalence of depression and higher numbers of students reporting that their mental health had negatively impacted their academic performance.

The pandemic and the economic recession it produced also deterred many students from continuing their educations. Enrollments at many colleges and universities took a significant hit in fall 2020, and a hoped-for rebound in fall 2021 did not materialize, leaving postsecondary enrollment over all about 6.5 percent lower than it was in fall 2019, according to [October 2021 data from the National Student Clearinghouse Research Center](#).

The most vulnerable students -- and institutions -- have struggled the most. Community college enrollments fell by a net 14.1 percent from fall 2019 through fall 2021, and black and white students, male students, and older students were all proportionally more likely than their peers not to enroll in college in fall 2021.

Those data make clear that the pandemic has taken a significant psychological and economic toll on students and impeded their ability to continue their educations. ■



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What About Learning?

Far less obvious is the impact of the pandemic on student learning.

Discussions about disruption to classroom learning in K-12 education are often framed in terms of “learning loss” in the news media, but some educators in both K-12 and higher education object to the deficit-driven terminology.

Learning loss is defined as any “specific or general loss of knowledge and skills or reversals in academic progress, most commonly due to extended gaps or discontinuities in a students’ education,” according to the [Glossary of Education Reform](#), an online resource created by the Great Schools Partnership in collaboration with the Education Writers Association and the Nellie Mae Education Foundation.

“It’s a loaded term,” says Laura Gogia, research director for learning technologies and student success at the Tambellini Group, an independent technology research and advisory firm focused on higher education. To define what learning loss is, you have to first define what students should be learning, and that remains an area of much contentious debate.

“What exactly is *lost*? Do students forget facts? Skills?

Are memories erased? Can they find what’s lost?” John Ewing, mathematician and president of the non-profit organization [Math for America](#), asked in an essay in [Forbes](#) on the “ridiculousness of learning loss.”

Many education technology vendors have latched on to the idea of learning loss so that they may present their products as a possible solution, but the term is problematic, says Gogia. “Learning loss is based on the assumption that there were metrics by which institutions were evaluating progress against specific milestones. In a traditional four-year degree,” she says, “that is rarely the case.”

In K-12 education, standardized testing is widely used to determine, for example, the grade level at which students can read. At the college level, what we want students to gain from their college degree is much more open-ended, Gogia says.

A key objective in attending college for many students is to help them secure a high-paying job afterwards. But it’s tricky to measure how well colleges are preparing students with the necessary skills and knowledge to succeed in the workforce.

As the term “learning loss” has become increasingly

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politically charged, alternatives such as “[unfinished learning](#)” have crept up in reports about the pandemic. On the flip side, there is also increasing focus on learning gained during the pandemic.

There is no doubt that learning experiences were impacted by the shift to remote learning in 2020. Both instructors and students struggled to quickly adapt to a new environment, and issues such as lack of access to high-speed internet and devices did negatively impact some students. But there were also a lot of positives to come out of the experience of learning differently from before, says Gogia.

Students and instructors both learned a lot about teaching and learning with technology, and skills such as online conferencing and self-driven study have given students a lot of valuable real work experience that will serve them well when they get a job, says Gogia. Remote learning has offered many students flexibility and access they didn’t have when learning face-to-face, and it is clear there is demand for a blended approach to learning moving forward, she says.

By focusing on what learning has supposedly been lost during the pandemic we ignore how much students and teachers have learned from the “covid curriculum,” writes Rachael Gabriel, associate professor of literacy education at the University of Connecticut, in an article published by [The Washington Post](#).

“Learning is never lost, though it may not always be “found” on pre-written tests of pre-specified knowledge or preexisting measures of pre-coronavirus notions of achievement,” said Gabriel. “The legacy of the standards movement of the 1990s, and the high-stakes testing it inspired in the early 2000s, is a version of education that is assumed not to exist or matter unless or until it is predicted and measured. The pandemic has illustrated with searing definition how wrong that assumption is. We have all learned, every day, unconditionally.” If more students are experiencing stress and anxiety because of COVID-19, and higher stress is linked to poorer academic performance, it seems plausible if not likely that many students are performing worse in their college

classes and losing ground academically.

This topic -- call it learning disruption, unfinished learning, or the popular but problematic phrase “learning loss” (see sidebar) -- is much discussed in elementary and secondary education, where strategies for monitoring student progress from one year to the next are much more standardized and established than in higher education.

Quantifying the Impact of Learning Disruption

If more students are experiencing stress and anxiety because of COVID-19, and higher stress is linked to poorer academic performance, it seems plausible if not likely that many students have struggled more than they might otherwise and potentially lost ground academically.

“So we know that learning loss happened,” Natasha Jankowski, former executive director of the National Institute for Learning Outcomes Assessment and now a lecturer at New England College, said on [a recent Inside Higher Ed podcast](#). “That’s learning in the sense of, if we had certain things we want you to take away, the likelihood of you as a student getting that, and me as a faculty member teaching it to you really well, was unlikely. More often than not, you probably got something, but not all of it. If I as an institution have designed some programmatic path of learning that grows for my students, then I need to figure out where you are on that path, and how to reinforce what I need you to engage with and where you are as a learner.”

Measuring that learning is another story. Efforts to measure that lost ground are plentiful in elementary and secondary education, where strategies for monitoring

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student progress from one year to the next are much more standardized and established than in higher education.

Emerging research focused on K-12 education suggests that COVID-19 learning loss is significant, [worldwide](#), and could have lasting negative impacts on a generation of students.

Systemic testing in states such as [Colorado](#), where children's performance across grade levels fell in every standardized test subject due to COVID-19, demonstrates that students need additional learning support to get back on their educational paths.

Research from the nonprofit [Urban Institute](#), published in February 2021, suggests that learning losses equivalent to spending three months out of school could lead to decreased lifetime earnings as well as modest declines in associate and bachelor's degree attainment rates.

Similar predictions on the long-term impact of COVID-19 on educational attainment and earning potential were made in a June 2020 report by [McKinsey & Company](#). This research estimated that an additional 232,000 to 1.1 million ninth-to-11th graders would drop out of high school as a result of COVID-19.

School closures left K-12 students approximately five months behind in mathematics and four months behind in reading, according to [subsequent research](#) published by McKinsey in July 2021. Students of color

and students from low-income households were most likely to be behind in their studies, indicating that the pandemic exacerbated existing inequities – a consequence many educators were quick to predict in the early stages of the pandemic.

“The pandemic widened preexisting opportunity and achievement gaps, hitting historically disadvantaged students hardest,” McKinsey said in [its report](#). “High schoolers have become more likely to drop out of school, and high school seniors, especially those from low-income families, are less likely to go on to postsecondary education.”

The statewide standardized testing regimens that make it possible to gauge (however imperfectly) learning disruption in elementary and secondary education do not have equivalents in postsecondary education.

Colleges and universities, by contrast, have historically used grades as a proxy for learning, and while many institutions now utilize some student learning outcome measures, there remains “little to no effort to measure learning, and growth in cognitive ability, systematically in higher ed,” says Richard Arum, author of the 2011 book *Academically Adrift* and an education professor at the University of California, Irvine.

Arum's institution is among those that are taking steps to expressly quantify cognitive development or other measures of actual student learning (see related article on Page 24). But those colleges remain outliers, and

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as a result, calculating the number of students who've experienced disruption in their learning, the severity of any dips in performance, and whether this will negatively affect students in the long term, is challenging.

What is more measurable is academic progress -- "did I pass the class and am I making forward motion through a curriculum?" as Mitchell L. Stevens, professor of education at Stanford University, defines it. "Academic progress is very easy to measure; learning is very difficult to measure."

Higher education's disinclination to measure learning is viewed in some quarters as "a significant problem of the sector," Stevens says -- an effort to avoid accountability. More specifically, Stevens argues, the inability to measure learning allows every college or university to work "from the presumption of excellence," as long as its graduates get an earnings return.

The pressure on higher education to measure learning is likely to grow as more instruction gets delivered digitally, because technology-enabled instruction makes it "possible to observe and measure ... learning at a much finer grain of detail." But meaningful measure of cognitive or other learning gains remain a largely unachieved holy grail.

Which leaves us largely having to focus on whether students have had setbacks in their academic progression -- not a measure of learning per se, but as close as higher education often comes.

In addition to the aforementioned enrollment declines, first-year persistence rates also fell in fall 2020, according to data published by the National Student Clearinghouse Research Center in [July 2021](#). Of 2.6 million first-time freshmen who enrolled in college in fall 2019, only 74 percent returned in fall 2020 for their second year -- an one-year drop of two percentage points in what the Clearinghouse described as an "important early student success indicator."

"We can now add increased attrition of 2019 freshmen to the severe impacts of the pandemic," said Doug Shapiro, executive director of the National Student

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We can now add increased attrition of 2019 freshmen to the severe impacts of the pandemic. These losses erase recent improvements that colleges have made in keeping learners on track early.

Doug Shapiro

Executive director,
National Student Clearinghouse
Research Center

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Clearinghouse Research Center, in an [online statement](#). "These losses erase recent improvements that colleges have made in keeping learners on track early. They will ripple through higher education for years," said Shapiro.

Our collective inability to gauge whether, and how much, COVID has set students back on their learning journeys is, one might say, academic. Whether students have lost ground or not, colleges, learning professionals, and policy makers need to intensify their existing efforts to support students on their educational paths. Additional student support services and changes in instruction and assessment designed to benefit students who are struggling will likely prove universally beneficial.

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The remainder of the report focuses on individual and institutional efforts to try to respond to the learning disruption -- and the non-cognitive struggles -- that logic tells us students have suffered, even if we aren't particularly capable of measuring it.

Reimagining Placement

Higher education's disinclination to use standardized measures to gauge cognitive growth or other forms of academic development is not across the board. Standardized tests have been a central element of judging students in college admissions for decades -- a tradition that eroded slowly in recent years and then dramatically due to the barriers the pandemic imposed on students' ability to sit for the SAT and ACT.

Standardized exams have also been widely used in college placement, with colleges adopting national tests such as ACCUPLACER and ALEKS and many state and institutional exams to determine whether students are ready for college-level courses, particularly in English, math and languages.

Well before the pandemic, many [researchers](#) and policy makers had [embraced the view](#) that it's preferable not to use any *single* tool for determining placement -- but

especially one tools, like certain high-stakes standardized exams, don't successfully predict performance in gateway courses and tend to "underplace" students into remedial courses. Many community colleges and open-access four-year institutions began experimenting with using ["multiple measures"](#) to assess college readiness instead of depending on a single indicator.

"I worried that we'd see a lot of the institutions that were experimenting roll back because of the pandemic, but if anything, we'd seen some of them use the pandemic to push through some reforms they had intended to implement," says Bruce Vandal, a consultant who worked on college remediation and completion issues for Complete College America and the Education Commission of the States.

COVID-19 made it difficult if not impossible for many colleges to conduct in-person placement exams or to reliably proctor remote tests, Vandal says. "The pandemic further revealed something that was already true: the placement systems [colleges] had set up were cumbersome," as well as not very predictive.

Sam Houston State University was among the institutions that accelerated a move away from sole reliance on standardized exams because of the pandemic.

Mary Catherine Breen, executive director of the Academic Success Center at the Texas public university, says her institution had already begun discussing whether the Texas Success Initiative Assessment, the

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statewide exam used to gauge college readiness, accurately predicted student performance in college-level English and math.

Sam Houston State's review found little correlation between performance on the TSI exam and in gateway courses, especially in English, prompting Breen and her colleagues to examine student data to identify what high-school GPA best predicted a C or higher in entry-level math and English at Sam Houston State.

Once the pandemic hit, the lack of available testing forced the university to embrace high school GPA as its core measure sooner than it had planned to do so. Students who achieve a sufficient score on the statewide test move directly into college-level work, but for those who don't (or who don't have a score), Sam Houston State uses high-school GPA to decide on placement.

Sam Houston State made another significant change as well, to inject more nuance into the process of deciding which students should be placed directly into college-level courses and which should be taking developmental and college-level courses concurrently (an approach known as co-requisite enrollment). The university created what it calls "zero-credit-hour courses," which are non-credit courses that provide tutoring, study skills training and other assistance to students alongside their college-level courses.

Instructors in math and English courses send out

progress reports at the four- and eight-week mark of a term to help the Academic Success Center "know if we need to turn up the heat" and provide more help to those students, Breen says.

"Imagine it as a scaffold," she says. "If they don't need it, we'll tear it down. "If they need it, we'll build it up higher."

Rethinking Grading and Assessment

The idea of [scrapping letter grades](#) in higher education has been around for years, but during COVID-19, many institutions put it into practice – switching multiple courses to pass/fail grades.

These flexible assessment policies were meant to lessen the pressure on students amid new and changing COVID-19 measures, but many institutions have now reinstated their previous [grading policies](#), despite pleas from students to [extend them](#) – either keeping a blanket pass/fail grading policy, or enabling individual students to [opt in](#) for pass/fail grades following receipt of a letter grade.

Jesse Stommel, an academic and advocate of the "[ungrading](#)" movement, wrote in June 2021 that institutions that continued grading during the pandemic weren't measuring student learning or content

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knowledge. Instead, he argued, they were measuring how well students and instructors pivoted to online, students' ability to perform in a crisis, and whether students had the necessary access and support at home to succeed.

Stommel, like other educators who have spoken out against assigning summary grades to student work, suggests that instructors ask students to reflect on their own work and offer feedback, guiding the grading of their own work. For this approach to work, instructors must have trust in their students, said Stommel, a faculty member in the writing program at University of Denver.

"Ungrading starts with teachers just talking to students about grades," Stommel wrote. "Demystifying grades (and the culture around them) gives students a sense of ownership over their own education."

Amid reports from proctoring companies such as ProctorU that cheating on tests and exams has [increased](#) during the pandemic, trust in students' academic honesty appears to be at a premium. Rather than encouraging suspicion, this could be a moment to encourage discussion about how to change institutional policies and teaching practices to promote academic integrity.

"As another academic year gets underway amid continuing uncertainty from COVID-19, it's clear that the lessons about academic integrity we've learned from emergency teaching remain top of mind," David Rettinger and Kate McConnell wrote in an essay for [Inside Higher Ed](#) in September. "One of them – the perception that cheating is more common in online learning than in the traditional classroom – is of particular importance to us," they continued. (Rettinger is professor of psychological science and director of academic integrity programs at the University of Mary Washington and president emeritus of the International Center for Academic Integrity. McConnell is vice president for curricular and pedagogical innovation and executive director for VALUE at the Association of

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Jesse Stommel

Faculty member in the writing program,
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American Colleges and Universities.)

In response to the perception that cheating has increased, McConnell and Rettinger suggest that instructors try designing assessments that “promote academic integrity rather than pay top dollar to police your students.” Those changes would entail focusing less on high-stakes summative exams and more on frequent low-stakes quizzes, limiting standardized assessments, and making assignments relevant to students' lives.

McConnell and Rettinger wrote that they are not dismissive of concerns about academic integrity – they believe that academic misconduct is an existential threat to higher education. They suggest that institutions work

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to develop a culture of integrity – one where faculty and students talk about the importance of authentic scholarship. They also encourage institutions to offer faculty development that will equip instructors with teaching techniques “that motivate robust student learning while preventing cheating,” among other solutions.

“None of the solutions we propose can be implemented overnight, but none are prohibitively expensive or “time consuming either,” wrote Rettinger and McConnell. “When we return to a new normal after COVID, our commitment to authentic learning requires us to evaluate and change our institutional processes and individual pedagogy to best serve our students.”

There can be multiple reasons why a student is doing poorly in class, says Laurie Fladd, director of [Holistic Student Supports](#) at Achieving the Dream, a nonprofit that works with community colleges to support student success. She notes that before students can be expected to do well academically, it’s important for institutions and instructors to understand who their students are and consider the circumstances they may be facing.

“There’s this dorky saying in higher ed that you ‘can’t bloom until you Maslow,’ which means you have to address students’ basic needs before you can expect them to succeed academically,” says Fladd. “For example, if your students live in a community with no broadband, institutions can give out all the devices they

want, but students are still not going to be able to connect and complete their work.”

Student success is multidimensional, and though grades can be a useful indication of how students are doing, they are not the only metric institutions should be considering. The number of students being connected to student support services such as tutoring, mental health counseling, and food pantries could paint a fuller picture. Other metrics to consider could include whether the number of part-time students is increasing because students have to juggle other priorities, whether students are registering for the next semester, and are students able to meet the academic requirements to retain scholarships and grants.

It is too early to know whether more students have lost federal Pell Grants during the pandemic than was previously the case, says Debbie Raucher, director of education at John Burton Advocates for Youth, a nonprofit group that is working to support youth in California who have been in foster care or experienced homelessness.

Raucher recently wrote [a report](#) arguing that satisfactory academic progress (SAP) policies – the standards that students must meet to retain their federal Pell Grants – impede student success and equity.

Raucher wrote that many institutions in California have institutional policies that go beyond the federal minimums, and that these policies can be the difference

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between a student staying in college or not. The SAP includes a two-part assessment -- grade-point average minimum and course completion requirements. Students must also complete their program within 150 percent of the published time frame.

“While much attention has been paid to the need to expand financial aid access at the beginning of a student’s academic career, virtually no attention is given to whether students are subsequently able to maintain financial aid once enrolled,” the report said.

Of 78,125 Pell Grant recipients in the California Community Colleges system who were attending college for the first time in fall 2017, the report estimated a quarter were at risk of losing their grants without successful appeal. Black students and students with experience in the foster care system were more likely than other students to fall into this category, the report found. Students who lose access to financial aid after one year of college are unlikely to return, says Raucher.

The report recommends that institutions evaluate their SAP policies and ensure they are not imposing deadlines or requirements beyond those required by federal law. Many institutions have not reviewed their policies for some time, and staff may not be aware that their requirements exceed those mandated by law, says Raucher. Though there is little movement in relaxing satisfactory progress policies at the federal level, Raucher says that she is encouraged to see that many

community colleges in California are planning to review their policies.

Reviewing these policies and giving students as much notice and guidance as possible if they are at risk of losing essential financial support, is important at any time – not just during the pandemic, says Raucher.

COVID-19 has had an enormous negative impact on students, but many of the problems students face existed before the pandemic and will continue after, says Raucher. “Our systems are set up such that when a crisis hits – whether that’s a worldwide pandemic crisis or an individual student-level crisis -- students are not in a situation to easily continue their academic journey once that crisis has passed.”

Changing Instructional Practices

The rapid shift from face-to-face to emergency remote instruction during the pandemic was rocky, to say the least.

Faculty had to adapt quickly to new technologies with limited institutional support, and some students who were sent home from campus felt that the quality of

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their educational experience [had declined](#).

In the long term, however, exposing instructors and students to new technologies and pedagogical approaches could be a good thing, says Russ Poulin, executive director of the WICHE Cooperative for Educational Technologies.

“The COVID shake-up was very healthy because it made a lot of faculty members think about what they are doing in their courses. Faculty are taking what works for them and their students and leaving the rest,” he says.

“Whether you call it learning science or something else, faculty are learning from others -- they’re pulling in good practices from their colleagues and surveys and research, that’s a real positive in the long run.”

The shift to digital course materials accelerated during the pandemic, and many faculty members, particularly younger ones, are realizing this can work to their benefit, says Poulin.

“Increased use of instructional technology has some good and some bad.”

“If we become reliant on technology, what does that mean for equity and the digital divide?” It’s possible that any negative impact on students won’t be obvious right away and may only become evident in four-year or six-year graduation rates. Poulin adds that training for instructors, particularly adjuncts, is highly variable.

“At some institutions faculty have everything they need, and in others, they’re getting almost nothing in terms of support,” says Poulin. College leaders can’t expect instructional quality to improve if they’re not adequately supporting those doing the teaching.

At some institutions, faculty have embraced elements of remote instruction – including the freedom it gives them to live wherever they want. In the past, some faculty unions have fought the introduction of online pedagogy and technology; Poulin says he is now aware of at least one faculty union at a large community college that is fighting not to force instructors who moved

out of state to return to teaching in person. “It’s an interesting flip,” Poulin says.

“I think this generation of educators will never be going back to the ‘before times’ – they have seen first hand the ways that technologies can better support their teaching and their students,” says Norman Bier, director of the Open Learning Initiative at Carnegie Mellon University. That said, Bier suggests that faculty members have also seen first hand the ways in which these technologies can fall short.

“This will lead to more faculty demanding better tools, better interfaces and better approaches,” Bier says. This will be transformational, he adds.

“Too often we’ve seen ed-tech prioritize the perspective of technologists over educators,” says Bier. “Coming out of COVID, we already see our faculty demanding tools that better prioritize student and educator needs.”

A [2020 report](#) on the impact of the pandemic on instructors teaching introductory courses, published by Every Learner Everywhere and Tyton Partners, suggests that the pandemic increased interest in digital learning techniques and tools, but also “heightened awareness of the racial and socioeconomic inequities that need to be addressed in classrooms,” the report said.

For the past few years, instructors teaching large introductory-level courses have increasingly adopted digital courseware – online curricular materials that often include in-built assessments and self-guided learning exercises.

Adoption of digital courseware among faculty teaching introductory courses at two-year institutions rose from 29 percent in 2019 to 45 percent in 2021, according to a [2021 report](#) on the state of digital learning and courseware adoption by Every Learner Everywhere, Tyton Partners and Bay View Analytics.

Adoption of courseware in introductory courses also increased at four-year colleges, from 22 percent in 2019 to 35 percent in 2021, according to the survey.

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About three-quarters (74 percent) of instructors using courseware believe it has a positive impact on learning outcomes.

Digital courseware can assist student learning in several ways, says Benny Johnson, director of research and development at VitalSource. Not only are faculty members able to track student data and progress, students have the opportunity to practice applying what they have learned in class or in remote self-study with low-stakes exercises, such as questions where students are asked to fill in the blanks.

Carnegie Mellon's Open Learning Initiative has conducted research on [the "doer effect"](#) – the principle that students who do online practice activities while reading new content have better learning gains than those who just read.

OLI research found that practicing knowledge has a learning benefit approximately six times that of reading text and three times that of watching video.

The pandemic also forced faculty members at many institutions to experiment with a brand of instruction new to many of them -- [hyflex learning](#). They did so with mixed success.

Hybrid or blended courses, in which an instructor incorporates a mix of in-person and virtual elements to deliver the course in the most effective way, had gained ground in recent years. A few instructors also experimented with hyflex courses, in which students toggle between in-person, synchronous and asynchronous instruction as they wish.

Numerous colleges [turned to hyflex approaches](#) during the pandemic. An instructional model that allows students to alternate between educationally comparable in-person and virtual formats depending on the circumstances at the moment resonated in an era in which students might be on campus but forced to quarantine, for instance. And as campuses tried to limit the size of gatherings to avoid the spread of COVID, many divided courses up into two sections, having half the students

attend in person and half remotely one day, and then switching the groups the next day.

Hyflex is difficult. It requires institutions to outfit classes with technology to connect instructors with learners who are right in front of them and remote. It requires instructors to create a curriculum that can be delivered in two modes at once, with comparable learning outcomes whether it is encountered in person or virtually, and to teach in two modes simultaneously.

And as with so many instructional innovations, the ability to pull it off depends on how well colleges prepare their faculty members to succeed, through high-quality training and support. Many colleges ramped up their faculty instructional training on a range of fronts during the pandemic, and their leaders say they plan to sustain that support going forward. ■

Case Study

Summer Programming at Georgia State

Georgia State University is well known for [boosting the graduation and retention rates](#) of learners over the past 15 years with a data-driven approach to student success. But even at Georgia State, an institution where staff have years of experience identifying students who are most likely to struggle academically, the pandemic still had a significant negative impact.

Following the rapid [shift to remote learning](#) in the spring of 2020 due to COVID-19, Georgia State saw a 20 to 30 percent increase in the number of students failing or dropping out of [core courses](#), says Timothy Renick, executive director of the National Institute for Student Success at the university.

“We knew that hundreds of our first-year students failed or dropped significant courses,” says Renick. Drawing on years of data and predictive analytics, Renick and his colleagues realized the students who had a bad year might never catch up. “They would be constantly behind,” he says.

To support these first-year students, Georgia State introduced a new summer accelerator program in the summer of 2021. Invited students were encouraged to come back in the summer and retake one or two failed courses with the support of peer mentors and hand-picked instructors. The program was offered at no cost to students using [Higher Education Emergency Relief Funds](#), which were allocated to colleges and universities by the U.S. Congress to assist students affected by the pandemic.

Convincing students to come back in the summer,

particularly when many are already working to support themselves and their families, was “an uphill battle,” said Renick. Around 1,500 students were targeted to participate in the accelerator program. Of these, around 700 enrolled, and 500 passed their course with a C grade or higher.

The percentage of students who received a D or F grade or who withdrew from the accelerator program, also known as a DFW rate, was higher than Renick and his colleagues had hoped for. That said, they had never offered a program like this to students who had already failed an essential course. “Getting 70 percent of these students through a second time is positive,” says Renick. “Rather than sit back and wait passively for them to fail, we have most back on pace to where they needed to be,” he says.

Summer programming is not a new concept at Georgia State. In 2012, the university began offering a [Summer Success Academy](#) for incoming first-year students. Instead of deferring their studies until the spring semester, incoming first-year students identified as academically at-risk are invited to complete seven weeks of non-remedial college-level classes before the fall semester begins.

During the summer academy, students are encouraged to take advantage of the university’s tutoring, advising, financial literacy and academic skills programs. Students learn in small groups so they can get to know their peers and can take up to seven credits’ worth of courses.

It was important that this model of teaching in small groups was replicated when the university introduced the free summer program for students retaking foundational courses, says Renick. By seeing familiar faces in each class students are more likely to form bonds and support each other, he says.

Now mid-way through the first semester of the new academic year, far fewer first-year students are on track to fail or drop out of their core courses. “The early

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indicators are encouraging,” says Renick. Most courses have returned to in-person instruction, and students that are learning online are largely doing so by choice, he says. Given this positive trend, it isn’t clear if Georgia State will need to offer the acceleration program again in the summer of 2022.

Students who are struggling during the pandemic are not experiencing the same challenges as students who fell behind in classes in the past, says Renick. “They aren’t saying they don’t want to go to college, but they don’t want to deal with the added stress or necessarily have a fully online experience,” he says. Without additional support, colleges run the risk of seeing students drop out and never come back, causing national retention rates to potentially plummet.

Services that address students’ mental health have become increasingly important at Georgia State, said Renick. Since the pandemic began, the counseling center has seen a significant uptick in attendance for group counseling sessions, he said.

By offering counseling online, it became much easier for students at Georgia State’s urban campus to attend group sessions on topics such as substance abuse and eating disorders. “There’s a stigma in taking yourself into a room,” said Renick. “In the online environment, the bar is lower. It’s less intimidating.”

Aside from support services for mental health, Renick recommends that all institutions hire more students to mentor their peers through federal work-study programs. “Undergraduates who are successful are a great resource. You can hire them for less money than a professional and they can often better support students who are struggling. It’s a win-win.”

Another key to keeping students on track is to check in with them early and often. Institutions often use online

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Tim Renick

Executive director,
National Institute for Student Success
Georgia State University

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platforms and learning management systems that provide lots of data on student engagement. Students not logging on to access course materials is almost always a warning sign that they need help, said Renick. Additionally, he recommends that college staff members actually follow up with students who drop classes. “Students often have to go to a registrar to drop a class, but very few campuses actually have staff sit down with students to find out what’s going on and talk about whether it’s really necessary to drop the class.” ■

Hybrid Instruction at Lake Washington Institute of Technology

On February 28, 2020, a group of nursing and physical therapy students at Lake Washington Institute of Technology in Kirkland, Wash., visited a nearby nursing home to practice their clinical skills.

The next day, local news media reported two confirmed cases of COVID-19 at the nursing home – marking the [first known outbreak](#) of the virus in a long-term care facility in the U.S.

Lake Washington Institute of Technology, a public technical college with around 6,000 students, found itself [on the frontlines](#) of the U.S. COVID-19 outbreak.

“Our college was the first to go fully remote,” says Suzanne Ames, vice president of instruction at Lake Washington. “Our signature is hands-on learning, so we had the added challenge of continuing programs such as welding, nursing and everything in-between.”

The college, along with other institutions in Washington State, finished the winter semester completely online, with any labs that couldn't be held remotely scheduled for the summer. Two years later, many courses are planned to continue permanently in a hybrid format, with lectures held online and hands-on training held in person.

“I think we'll see higher quality teaching and learning,” Ames says of the shift to hybrid. “Faculty and students are realizing there are benefits to online learning and building quality human connection in the classroom.”

Students also seem to appreciate having more freedom to choose their preferred teaching modality, says Ames. Demand for fully online general education courses has remained high among students now that they have the choice between on-campus, hybrid and fully online. “Students are taking advantage of picking and choosing

how they want to study, and we'll continue to track where there is student demand,” she says.

After Lake Washington switched to fully remote instruction, it lost 20 percent of its students. Ames and her colleagues feared they might not return. Fortunately, they did.

“The vast majority of those students said they would be back when they could learn again in-person and 19 percent have now come back,” Ames says. “Clearly those students were biding their time until they could have the learning experience that was best for them.”

There are two distinct types of students at Lake Washington – those who thrived on their own, and those who needed to be on a campus, says Ames. “Some of our students really appreciated learning in the comfort of their own home. We're seeing higher attendance in our online classes than we did on campus.”

Completion rates for courses and certificates “have stayed strong because of the work of the faculty in engaging students,” says Ames. “Faculty have added more content, more interactive features in their classes. They've really bent over backwards.”

Several professors at Lake Washington have shared that students are performing better in hybrid classes than they did previously in-person.

Andrea Westman, a professor of physical therapy and president of the faculty union, told [Inside Higher Ed](#) in March 2021 that her students' mastery of tough topics had significantly increased since she started requiring that students review class materials and listen to recorded lectures online before meeting with her in-person.

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Gregory Bem, library coordinator and a professor at the college, says he has heard similar positive reports from other faculty members, many of whom are looking to continue incorporating elements of online instruction in their classes moving forward.

The library at Lake Washington has always played a central role in connecting students and employees to technology, but faculty members have not always known about the instructional design support the library offers, says Bem. Now, demand for library services has increased, and with it, he says, a willingness among instructors to work with new course materials, experiment with new pedagogical approaches, and experiment with creative assessments.

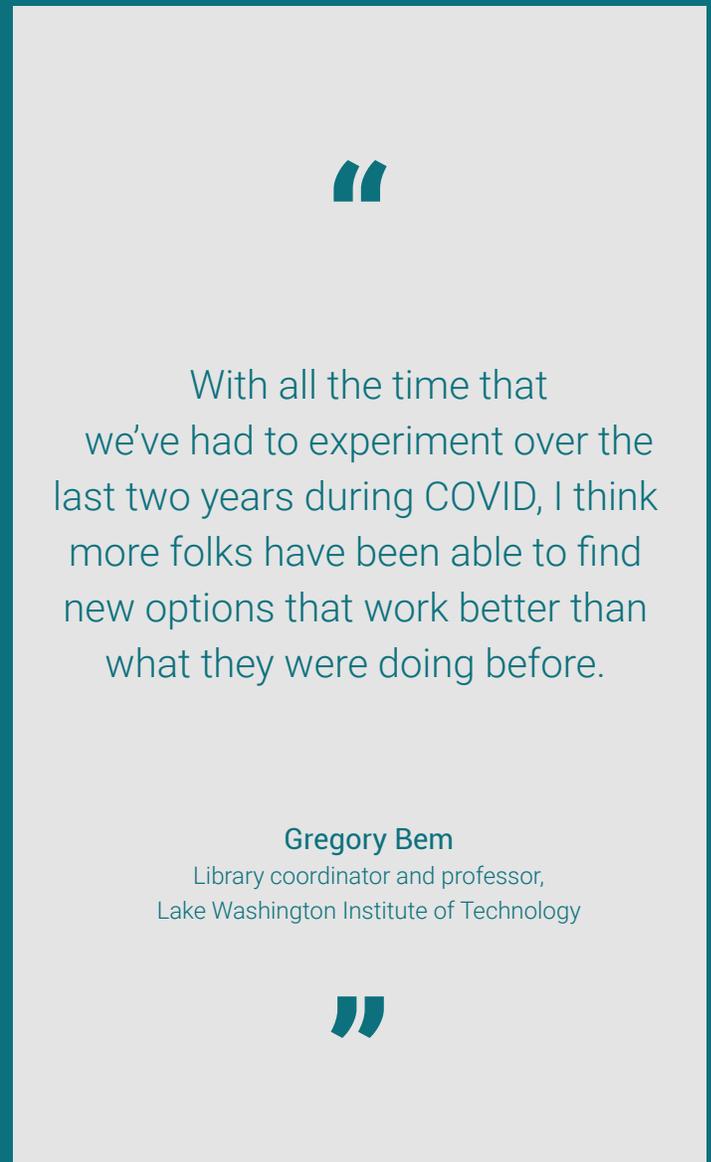
“With all the time that we’ve had to experiment over the last two years during COVID, I think more folks have been able to find new options that work better than what they were doing before,” says Bem. Even as instruction on campus resumes, many instructors are looking to continue hybrid or fully online instruction.

“We have a lot of adult learners that have very busy lives outside of school,” says Bem. “I’m really excited to see that we’re able to do more asynchronously and ensure that synchronous sessions really add to the educational experience with support and engaging activities.”

Rex Jacobsen, accounting professor and department chair at Lake Washington, is one faculty member who has embraced this mostly asynchronous model and seen student performance increase as a result.

Just before the pandemic, Jacobsen began recording short instructional videos for his students. When his classes moved online, those videos became an important instructional tool.

When he taught on-campus, many students struggled to make it to class due to work and family commitments, Jacobsen says. When that happened, students had no way to review the content they missed. Now students are able to work through lectures in their own time at their own pace, supplemented by more than a thousand short



videos which Jacobsen has created, many of which are available for anyone to view on [YouTube](#).

In the 2019 academic year, over 90 percent of Jacobsen’s students successfully completed his [Introduction to Accounting II](#). In fall 2020 and winter 2021 – after the course became asynchronous and fully online – course completion reached 100 percent.

“I surprised to find that students struggle much less in my online classes,” says Jacobsen. He believes that with the option to pause, rewind and rewatch content, students are able to take much better notes and internalize the material.

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For Lake Washington students, the flexibility and convenience of asynchronous instruction seems to be working very well, says Jacobsen. Live Zoom lectures would be difficult for student parents to attend without interruption, and many of Jacobsen's students have kids.

Though he is no longer teaching students live, Jacobsen says he makes responding quickly to students' emailed questions a priority. "It helps that I'm attached at the hip to my phone," he says.

Jacobsen also plans to incorporate scheduled one-on-one Zoom meetings into his teaching – an improvement over his previous strategy of sitting next to students after they completed assignments in class and asking them questions such as "Do we have a profit? How much was it? What are our best and worst selling items?"

"Accounting students tend to be reserved, so the prospect of being asked questions on the fly with other students within earshot was often terrifying," says Jacobsen. With one-on-one Zoom meetings, students won't need to feel that pressure. They also won't have to wait while Jacobsen talks to their peers.

Working as an accountant involves more than inputting data correctly into a spreadsheet; it is also about interpreting the data – something that accounting textbooks often ignore, says Jacobsen. It doesn't matter if students get the answers to his ad-hoc questions wrong – the focus is on doing it and learning, rather than being perfect.

"In the end, our goal is to continue tweaking things to better provide students with the knowledge needed to secure employment," says Jacobsen. ■

Case Study

Measuring Learning at UC-Irvine

Measuring learning isn't a higher education core competency, so it's not surprising that most colleges and universities can't quantify whether and how much COVID-19 set their students back academically.

But if it any place could, you'd expect it to be an institution that employs someone like Richard Arum.

Arum is best known as co-author of [Academically Adrift](#), the 2011 book that asserted how little learning was happening on many college campuses. The analysis was controversial, largely because of its dependence on a standardized learning assessment that ran against the grain in higher education at the time.

A decade later, it still does. That's one reason why gauging the level of learning disruption due to COVID (or anything else) remains a largely unfulfilled holy grail. But the University of California, Irvine, where Arum just completed a five-year run as education dean, has gone further in that direction than most, [undertaking a project](#) aimed at using a set of new and existing tools to understand what students get out of

higher education – including in the all-important realm of learning.

Irvine began closely tracking students' academic behavior and performance in a wide range of ways in 2019, when it also began testing students' learning gains in areas such as critical thinking and collaborative problem-solving using a new set of assessments from the Educational Testing Service.

Because Irvine began gauging its students' gains in learning only a semester before the pandemic began, it will be some time before the university will be able to draw conclusions about how environmental changes like a pandemic have disrupted their learning.

For now, instead, UC-Irvine is left to assess the impact on its students in the same way other colleges and universities might be – by looking at their levels of academic progress and engagement.

On those fronts, Arum says, the situation at Irvine looks fairly good.

Students who enrolled at the start of the 2019-20 academic year (and had their first year in college interrupted by COVID) had lower term-by-term attrition rates in their first two years than did their peers who started the year before.

Irvine students collectively accumulated more academic credits and had a higher overall grade-point average during the COVID-affected semesters than they did the two terms before the

UCI University of California, Irvine		Completed credits and term GPA			
Completed Credit and Term GPA in Spring 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021					
	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Spring 2021
Term Completed Credits	13.96 (3.84)	13.85 (3.62)	14.08 (4.25)	13.76 (4.27)	13.86 (4.20)
Term GPA	3.13 (0.78)	3.11 (0.81)	3.44 (0.85)	3.28 (0.90)	3.32 (0.83)
Observations	27,661	30,365	28,390	30,348	26,869

Note: Numbers in the parenthesis are standard deviation.

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pandemic landed, as seen on the previous page.

Students' academic engagement also grew during COVID, as measured by their interactions with Irvine's learning management system. The average student spent more

time online, posted more to online course discussions, and took various other academically desirable actions.

"We can say very clearly, about students at UCI, that their academic progress on average was not negatively impaired by the pandemic," Arum says.

He attributes that result to several factors. First, Irvine – which Arum notes is a "relatively affluent" Research I university – "threw all sorts of resources" at helping its faculty deliver good remote instruction, and its faculty members "clearly adjusted their instructional techniques."

As seen in the table above, UC-Irvine professors lectured less and more than doubled the amount of discussion and non-lecture class activities in their courses.

It's also true, though, that the comparatively affluent and academically well-prepared undergraduate students at a selective university like Irvine had less competition

UCI University of California, Irvine Classroom Activities and Study Time			
% of class time used for different activities in Fall 2019 and Fall 2020			
	Fall 2019	Fall 2020	Difference
Lecture	79.07	57.12	-21.95
Groupwork	4.54	3.57	-0.97
Discussion/Other Class Activities	16.39	39.3	22.91
Study Time	6.51	8.84	2.33

Note: 1. Amount of Class time on Lecture, Groupwork, Discussions/ other: How much of the time while you were in class for your course was spent on instructor lecture; Group projects; Class discussion; Other activities in %
2. Studying (out of class): How many hours did you spend studying out of class for your course in a typical week?

for their time, given the relative lack of socializing available to them.

Arum's relative optimism about COVID's impact on students at places like his own university doesn't mean he isn't worried

about how the pandemic affected students across the higher ed continuum.

Students whose colleges and universities didn't promote major changes in course pedagogy might well have struggled to stay engaged with Zoom University, and as we well know, many students struggled with the illness or death of family members, suffered lost jobs or other financial setbacks, or both.

Any assessment of whether and how much students were "set back" by the pandemic must take into account not just traditional conceptions of academic learning but "give a nod to the broad human development that we know higher education strives for, including social and civic development," Arum says.

"We know there was a lot lost there." ■

--Doug Lederman

Case Study

Expanding Access to Course Materials at the University of California, Davis

Affordable and accessible course materials have become an important factor in discussions around student success. Despite textbook prices [coming down](#) in recent years, some titles can still run hundreds of dollars.

During the pandemic, 65 percent of students surveyed by the [U.S. Public Interest Research Group](#) reported that they had skipped buying a textbook because of cost. U.S. PIRG, a nonprofit that campaigns for more affordable higher education and free or low-cost course materials, found that 90 percent of students were concerned that not purchasing materials would negatively impact their grade.

Colleges have embraced various approaches to driving down student spending on curricular materials over the past few years, including adoption of freely accessible open educational resources and low-cost [“inclusive access”](#) programs that bill students for course materials as part of their student fees.

The inclusive access model ensures that students have all necessary course materials on their first day of class. It also allows institutions to negotiate bulk discounts if a high percentage of students participate. U.S. Department of Education [regulations](#) on inclusive access programs require that colleges must offer course materials below a competitive market rate and must also offer students a way to opt-out of the program.

The University of California, Davis, an early adopter of inclusive access, has taken the model further – introducing an [“equitable access”](#) program where all undergraduate students pay the same flat fee for textbooks, regardless of their major.

“Prior to *Equitable Access*, textbooks were an outlier

compared to most other student costs on our campus,” says Jason Lorgan, executive director of the Council and Student Affairs and Fees at UC Davis Stores. “For nearly every other student expense, students were charged the same rate. However, when it came to textbooks, costs not only varied widely by major, but sometimes even within the same class.”

While some students in a class might have luck finding a low-cost used textbook, many paid several hundred dollars for new print copies, says Lorgan. Equitable access has changed textbook costs from an “unpredictable expense to a predictable low flat rate for everyone,” he says.

The equitable access program, delivered via VitalSource and Canvas, has been under development since 2018, but when COVID-19 hit, distributing digital textbooks to scattered students became a necessity and the pilot launched a quarter ahead of schedule.

“The equitable access program is digital by default because of the dramatic cost savings the campus can achieve compared to what we used to pay for new and used textbooks,” said Lorgan.

“During our first year, we focused on ensuring the technology functioned well as it relies on sharing data between numerous campus systems. Thankfully, the technology has exceeded our expectations and we can now focus on the analytics we might provide to our faculty in the future [to assist in monitoring student success]. We believe this is an area worth exploring and that process is under way.

“While there is still work ahead of us, the success of the initial launch has already enabled the program to lower the per term rate by 15 percent, from \$199 per term to

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\$169 per term,” Pablo Reguerin, vice chancellor for students affairs, said in the [2020-21 annual report](#) on the program, which included student survey data.

Prior to the launch of the equitable access program, 78 percent of UC Davis students reported they did not have access to all of their required textbooks. After launching equitable access, only 27 percent of students reported not having access to all of their required content. Whether this improvement in access is also improving students’ grades is “currently under examination by our student affairs assessment team,” Lorgan says.

The two biggest benefits of the equitable access program reported by students were greater convenience and lower prices. But the program has not been welcomed by all. Some students taking programs with low-cost course materials have objected to subsidizing the course materials of other students.

A student advisory council, launched in mid-fall 2021, will provide advice on ways to improve the program, according to the first annual report on the project. Though there is still work to be done, Lorgan says he is encouraged by progress so far and noted that dozens of institutions have reached out for information about the program.

“Seven out of 10 UC Davis students are now participating in *Equitable Access*,” Lorgan says. “As participation rises, it will allow us to continue to lower the price and fund more textbook grants for our lowest-income students.” ■

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The equitable access program is digital by default because of the dramatic cost savings the campus can achieve compared to what we used to pay for new and used textbooks.

Jason Lorgan

Executive director of the Council and Student Affairs and Fees UC Davis Stores

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Key Takeaways

Advice from learning and student success experts on how colleges and instructors can respond to potential learning disruption:

Ask students how they are doing

Act on early signs of waning student engagement

Share stress management strategies

Consider financial strain students are under

Evaluate institutional student support services

Define desired learning outcomes

Introduce interactive classroom activities

Explore more frequent, lower-stakes assessment

References

Achieving the Dream, Inc. "Holistic Student Supports." Accessed November 12, 2021. [<https://www.achievingthedream.org/resources/initiatives/holistic-student-supports>].

Blagg, Kristin. "The Effect of COVID-19 Learning Loss on Adult Outcomes." Urban Institute, February 2021. [<https://www.urban.org/sites/default/files/publication/103549/the-effect-of-covid-19-learning-loss-on-adult-outcomes.pdf>].

Blum, Susan D. "The Significant Learning Benefits of Getting Rid of Grades (Essay)." *Inside Higher Ed*, November 14, 2017. [<https://www.insidehighered.com/advice/2017/11/14/significant-learning-benefits-getting-rid-grades-essay>].

Brundin, Jenny. "Kids' Performance Across Grade Levels Fell in Every Standardized Test Subject Due to Covid-19." Colorado Public Radio. CPR News, August 12, 2021. [<https://www.cpr.org/2021/08/12/kids-performance-across-grade-levels-fell-in-every-standardized-test-subject-due-to-covid-19/>].

Burdman, Pamela. "Where to Begin? The Evolving Role of Placement Exams for Students Starting College." Achieving the Dream, Inc., August 2012. [<https://www.achievingthedream.org/>].

Burke, Lilah. "Richard Arum and UC Irvine Study Student Experiences and Outcomes," September 27, 2019. [<https://www.insidehighered.com/news/2019/09/27/richard-arum-and-uc-irvine-study-student-experiences-and-outcomes>].

Burke, Lilah. "The First College Impacted by COVID-19, One Year Out." *Inside Higher Ed*, March 3, 2021. [<https://www.insidehighered.com/news/2021/03/03/first-college-impacted-covid-19-one-year-out>].

Cullinan, Dan. "Rethinking College Course Placement during the Pandemic." MDRC, June 2020. [<https://www.mdrc.org/publication/rethinking-college-course-placement-during-pandemic>].

Donnelly, Robin, and Harry A Patrinos. "Is the COVID-19

continued ▶

References

Slide in Education Real? World Bank Blogs, December 8, 2020. [<https://blogs.worldbank.org/education/covid-19-slide-education-real>].

Dorn, Emma, Bryan Hancock, Jimmy Sarakatsannis, and Ellen Viruleg. "COVID-19 and Education: The Lingering Effects of Unfinished Learning." McKinsey & Company, July 27, 2021. [<https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-education-the-lingering-effects-of-unfinished-learning>].

Dorn, Emma, Bryan Hancock, Jimmy Sarakatsannis, and Ellen Viruleg. "COVID-19 and Student Learning in the United States: The Hurt Could Last A Lifetime." McKinsey & Company, June 1, 2020. [<https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime>].

Ewing, John. "The Ridiculousness of Learning Loss." Forbes, December 28, 2020. [<https://www.forbes.com/sites/johnewing/2021/12/28/the-ridiculousness-of-learning-loss/?sh=4c9a9e577c32>].

Georgia State University. "Summer Success Academy: Georgia State Student Success Initiatives." Student Success Programs. Accessed November 12, 2021. [<https://success.gsu.edu/initiatives/summer-success-academy/>].

The Glossary of Education Reform. "Learning Loss Definition," August 29, 2013. [<https://www.edglossary.org/learning-loss/>].

The Healthy Minds Network, and American College Health Association. "The Impact of COVID-19 on College Student Well-Being," July 9, 2020. [https://www.acha.org/documents/ncha/Healthy-Minds_NCHA_COVID-19_Survey_Report.pdf].

John Burton Advocates for Youth. "The Overlooked Obstacle: How Satisfactory Academic Progress Policies Impede Student Success and Equity," July 2021. [<https://jbay.org/wp-content/uploads/2021/07/Overlooked-obstacles-1.pdf>].

King, Michael D, Neil Bennett, and Lindsay M Monte. "COVID-19 Adds to Economic Hardship of Those Most Likely to Have Student Loans." U.S. Census Bureau, August 18, 2021. [<https://www.census.gov/library/stories/2021/08/student-debt-weighed-heavily-on-millions-even-before-pandemic.html>].

Koedinger, Kenneth R, Elizabeth A McLaughlin, Norman L Bier, and Julianna Zhuxin Jia. "Is the Doer Effect a Causal Relationship? How Can We Tell and Why It's Important." Carnegie Mellon University. Accessed November 12, 2021. [https://www.case.org/system/files/media/file/Carnegiemellonuniversity_This%20is%20for%20the%20Founders_Commemorative%20Book.pdf].

Lederman, Doug. "Dealing with College Students' Learning Loss: The Key Podcast." *Inside Higher Ed*, October 7, 2021. [<https://www.insidehighered.com/news/2021/10/07/dealing-college-students%E2%80%99-learning-loss-key-podcast>].

Lederman, Doug. "Grading in a Pandemic (Still)." *Inside Higher Ed*. Accessed August 12, 2020. [<https://www.insidehighered.com/digital-learning/article/2020/08/12/many-colleges-will-return-normal-grading-fall-will-semester-be>].

Lieberman, Mark. "Introducing a New(-ish) Learning Mode: Blendflex/Hyflex." *Inside Higher Ed*, January 24, 2018. [<https://www.insidehighered.com/digital-learning/article/2018/01/24/blendflex-lets-students-toggle-between-online-or-face-face>].

Marken, Stephanie. "College Students Report Quality Experience amid Covid-19." Gallup, December 15, 2020. [<https://news.gallup.com/opinion/gallup/327713/college-students-report-quality-experience-amid-covid.aspx>].

continued ▶

References

McKenzie, Lindsay. " 'Inclusive Access' Takes off as Model for College Textbook Sales." *Inside Higher Ed*, November 7, 2017. [<https://www.insidehighered.com/news/2017/11/07/inclusive-access-takes-model-college-textbook-sales>].

MDRC. "Multiple Measures Assessment Project." Accessed November 12, 2021. [<https://www.mdrc.org/project/multiple-measures-assessment-project#overview>].

Nagle, Caitlyn, and Kaitlyn Vitez. "Fixing the Broken Textbook Market." U.S. PIRG, February 2021. [<https://groups.google.com/d/topic/openoregon/y8yEz-hskss>].

National Student Clearinghouse Research Center. "Persistence & Retention," July 8, 2021. [<https://nscresearchcenter.org/persistence-retention/>].

Newton, Derek. "Another Problem with Shifting Education Online: Cheating." *The Hechinger Report*, August 7, 2020. [<https://hechingerreport.org/another-problem-with-shifting-education-online-cheating/>].

Redden, Elizabeth. "Student health centers report high demand for services". *Inside Higher Ed*, October 14, 2021. [<https://www.insidehighered.com/news/2021/10/14/student-health-centers-report-high-demand-services>].

Rettinger, David, and Kate McConnell. "Is Cheating a Problem at Your Institution? Spoiler Alert: It Is." *Inside Higher Ed*, September 22, 2021. [<https://www.insidehighered.com/views/2021/09/22/cheating-problem-your-college-spoiler-alert-it>].

Riley, Betsy. "How Georgia State University Delivers Opportunity for All." *Atlanta Magazine*, August 25, 2020. [<https://www.atlantamagazine.com/great-reads/how-georgia-state-university-delivers-opportunity-for-all/>].

Sedmak, Todd. "College Persistence Rate Drops an Unprecedented 2 Percentage Points." National Student Clearinghouse, July 8, 2021. [<https://www.studentclearinghouse.org/blog/college-persistence-rate-drops-an-unprecedented-2-percentage-points/>].

Stommel, Jesse. "Ungrading: An Introduction," June 11, 2021. [<https://www.jessestommel.com/ungrading-an-introduction/>].

Strauss, Valerie. "What 'Learning Loss' Really Means." *The Washington Post*, March 10, 2021. [<https://www.washingtonpost.com/education/2021/03/10/what-learning-loss-really-means/>].

Tyton Partners, and Every Learner Everywhere. "Time for Class: Covid-19 Edition," January 2021. [<https://www.everylearnereverywhere.org/resources/time-for-class-covid-19-edition/>].

UC Davis Stores. "Equitable Access: 2020-21 Annual Report." Accessed November 12, 2021. [<https://ucdavisstores.com/StoreFiles/143-SchoolFiles/143-pdf/143-ea-2020-21-annual-report-100721-web.pdf>].

Whitford, Emma. "College Enrollments Continue to Drop This Fall." *Inside Higher Ed*, October 26, 2021. [<https://www.insidehighered.com/news/2021/10/26/college-enrollments-continue-drop-fall>].

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