



SUCCESS CENTER FOR
OHIO COMMUNITY COLLEGES



Student Perspectives on Guided Pathways Technology

What Can We Learn from the Shift to Remote Learning and Student Support?

Compiled by The Ada Center with Support from the Bill & Melinda Gates Foundation

Who We Are

The Ada Center

Higher Education Technology and Process Support

- Founded on the belief that technology is not a silver bullet to any problem, but with the right planning and implementation, software can play an important role in advancing student success.
- Conducts practical research for partners including the Bill & Melinda Gates Foundation, Achieving the Dream, the Aspen Institute College Excellence Program, AACC Pathways, the State Success Centers and others.
- Work directly with colleges and state systems in need of student success technology evaluation, implementation, and integration support, including the Ohio Success Center.

Meet The Ada Center's Namesake



Ada Lovelace

Founder of Scientific Computing

Learn more at theadacenter.org

Project Purpose and Methodology


A Unique Opportunity to Garner Student Perspectives on Guided Pathways Technology



Our Goal is to lend a student voice to the ongoing dialogue on how Guided Pathways efforts can be strengthened by technology use. This report is intended to inspire conversation and is not an evaluation of any institution, its staff, or faculty.

- ✦ 35 students across 5 institutions were interviewed 1:1 in 45-minute increments about their experiences with technology-enabled engagement and learning.
- ✦ Approximately 50% of students were non-white and 25% represented occupational programs.
- ✦ Student interview feedback was married with previous The Ada Center and OACC information about technology usage.
- ✦ The Ada Center and OACC selected a cross-section of institutions for the interviews, which were conducted remotely from April – June, 2020.

Student Interview Sites

	Size	Type	Location
 Cincinnati State	Medium	Urban	Cincinnati
 Marion Technical College	Small	Rural	Marion
 OWENS COMMUNITY COLLEGE	Medium	Suburban	Perrysburg
 SINCLAIR COLLEGE	Large	Urban	Dayton
 Stark State COLLEGE	Large	Suburban	North Canton

New Environment, Similar Challenges

Virtualization of Student Barriers in the Age of COVID Resemble Brick and Mortar Obstacles



Clarify and Help Students Get on a Path



Help Students Stay on Their Path



Support Student Learning

Pre-COVID Brick and Mortar Focus Areas

- Making it easy to navigate college resources
- Creating a seamless course path to the workforce

- Creating an accessible support network for students
- Personalizing student support and comms

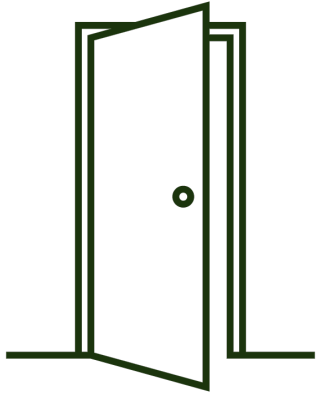
- Ensuring strong pedagogy across classes
- Enabling different types of learners to succeed

COVID Virtual Challenges

*“The **website didn’t have any information** about what was open or closed or how my courses would be delivered.”*

*“I tried **calling my advisor** but the phone lines were jammed. When I finally got through, it was the wrong person to help me.”*

*“I really wish I could have **more interaction with peers** – the faculty member just sent us lecture notes to read.”*



“During this period, I’ve realized that technology is an enabler in so much of my life. I pay the bills as a Lyft driver, my landlord collects rent on Venmo, I chat with my parents on Facetime, and my marriage works because of Netflix.

Education is the one thing where I haven’t really used technology all that much until now. My advisor used to help me register and my classes have all been in-person.

***I feel like a whole new world has opened up to me.** Now that I’ve finally figured out how to do more things online, I feel more in control of my education – it’s not such a black box anymore of where to find information or what to expect with assignments and grades.*

I wish my school knew how helpful these online tools can be when the tools have the right information, and everyone knows how to use them.”

Students Underscore Mission Critical Practices

Even After In-Person Interaction Resumes, Learners Consider Technology Critical to Their Success



Clarify and Help Students Get on a Path



Help Students Stay on Their Path



Support Student Learning

Student Must-Haves

35/35 students consider "highly useful for their success"

- ✓ Website provides current and comprehensive information about key deadlines, activities, and courses

- ✓ Digitally accessible point of contact for support, with whom online appointments can be made

- ✓ Consistent usage of digital learning technologies with the ability for meaningful peer-to-peer interaction

Student Nice-to-Haves

Majority of students listed as "highly useful for their success"

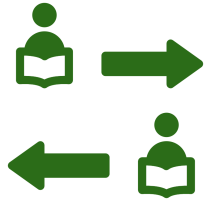
- ✓ Personalized electronic degree plans

- ✓ Proactive and tailored communications

- ✓ User-friendlier technologies

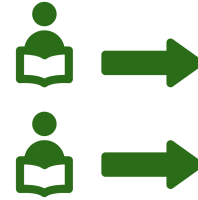
Defining Our Terms

Shared Terminology for Today's Discussion



Asynchronous

- Does not require instructor or students to be online at same time
- Relies on prerecorded audio or video lectures



Synchronous

- Requires instructor and students to be online at same time
- Varying levels of real-time interaction



Remote Learning

- Refers to an environment in which student and educator are not physically present – both synchronous and asynchronous



Learner Management System (LMS)

- Software that permits documentation and delivery of courses
- Examples include Blackboard, Canvas, and D2L

Clarify and Help Students Get on a Path

How Do We Supplement Existing Efforts With Long-Term Digital Infrastructure?

Where We've Been

Making it Easy to Navigate College Resources



One-stop shops for on campus resource navigation



Mandatory orientations



Onboarding specialists as part of multi-tiered advising models

Creating a Seamless Course Path to the Workforce



Developing meta majors and degree plans



Course scheduling analytics to optimize course availability



Investing in occupational certificates and hands-on training



Students' Suggestions on What's Next

✓ Website provides current and comprehensive information about key deadlines, activities, and courses

✓ Personalized electronic degree plans

College Website Still Seen as Beacon of Information

Despite Efforts to Steer Students to Other Channels, 100% of Students Reported Website Reliance

Afraid to Ask

“I check the website because I felt like my advisor thought I was asking too many dumb questions.”

 Nursing Student



Searching for Words

“My question about classes was hard to put into words, so I tried searching on the website before giving up.”

 First-Year Student



Source of Truth

“I love our website - it’s what got me to enroll in the first place. I assume everything I need to know is right there.”

 Liberal Arts Student



Searched Site For:

...But Not All Websites Created Equal

Students Find Comfort in Clear, Reliable, and Continuously Updated Information



Explain Jargon and Acronyms

“The website had terminology that was new to me. I search the website by key word when I’m confused, like transfer plan, dates, etc.”

“The website is intimidating, particularly for a returning student. It made me ask myself – am I ready for this?”

Regular Updates from All Key Departments

“Once they started updating the website with regular information about what was open and closed or how to reach people, I started to feel okay again.”

“I checked the website, and it said the library was open. It wasn’t!!! I had to turn in my paper late. I don’t trust that website anymore.”

Make it a Searchable Clearinghouse

“I didn’t need to consult anything other than the website before enrolling, it had all the information on majors, courses, and jobs that I needed.”

“The online FAQ’s didn’t really answer my new questions about financial aid or course registration (maybe it was old info?) so I gave up.”

Can You Speak Student?

A Free Resource to Audit Website Language for Readability



Gunning Fog Index

- Linguistics algorithm to test readability of English text
- Available as a free online tool that estimates the years of formal education a person needs to understand a given piece of text on the first reading.
- Developed by an Ohioan, Robert Gunning!

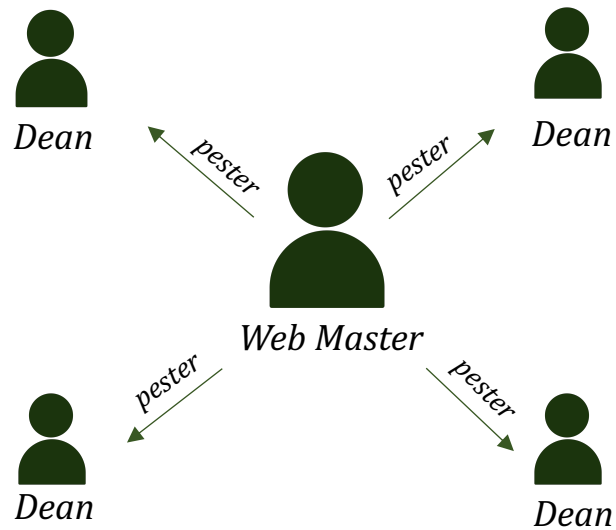
Recommend for auditing website language

Fog Index	Reading level by grade
17	College graduate
16	College senior
15	College junior
14	College sophomore
13	College freshman
12	High school senior
11	High school junior
10	High school sophomore
9	High school freshman
8	Eighth grade
7	Seventh grade
6	Sixth grade

Small Changes to Web Processes Make Big Differences in Usability

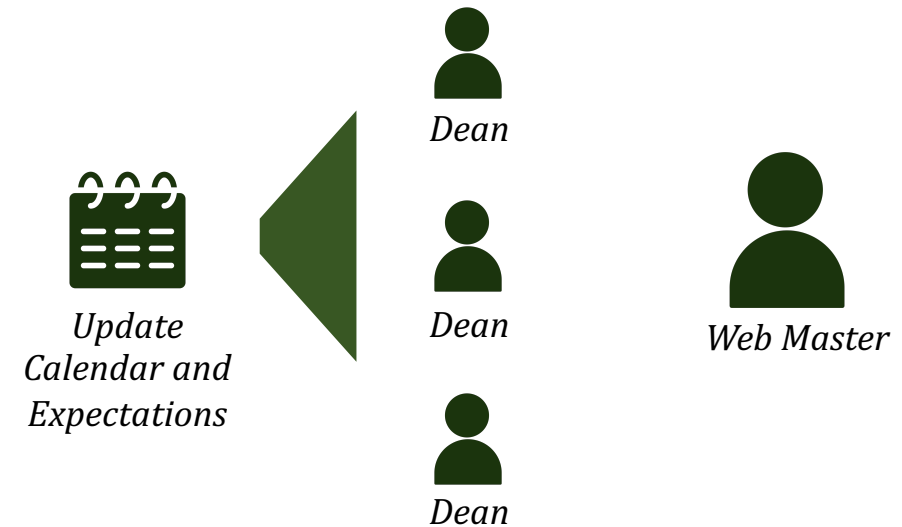
Exemplar Colleges Set Calendar for Content Updates in Critical Sections

Common Practice



- Web updates are irregular and uncoordinated
- Significant heckling of “content owners” to populate site
- Limited editing and standardization of web content
- Website not seen as priority

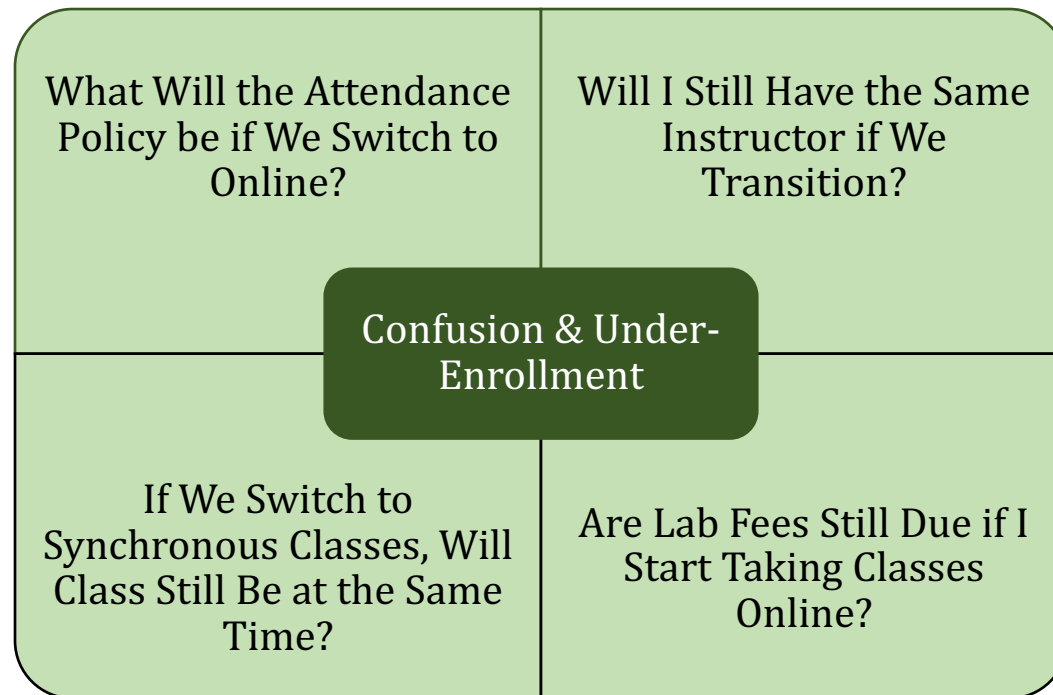
Ideal Practice



- Web updates follow enforced calendar schedule
- Roles and responsibilities of web master and content owners clearly defined
- Expectations conveyed upfront; content edited
- Website seen as priority due to high student use

Growing List of Questions About Course Offerings

Students Cite Lack of Online Course Information as Major Barrier to Enrollment and Success



Students enrolled in occupational programs report significant confusion over the “how” and “when” of fulfilling required practice-based hours. College websites should contain information on physical availability, modality, timing, and reductions or substitutions for required lab and clinic hours.

Students Praise Accurate and Updated Course Information

Answers to Basic Course Questions Go A Long Way at Owens Community College



Must-Address Student Questions on Course Listings



*In what **format** is this course being offered?*



*What **equipment** is required?*



Who do I contact if I still have questions about the class?



Ohio Community College Course Catalog Provides Vital Information

Accounting 101
Web-Based Course (Synchronous)

Requires computer, camera, and internet access.

Instructor Email:
Betsygreene@owens.edu

Field for modalities along with description of acronyms

Equipment requirements

Where to go for additional information

Electronic Degree Plans Go One Step Further

Worth Adding to Tech Wishlist Due to Limited Utility of Static and Generic PDFs



Among Most Challenging Tools to Implement...

- Significant integration requirements with degree audit data
- Degree audit clean-up requirements should not be underestimated
- Consensus-building required among faculty and advisors to configure



...Yet Students Value Them Deeply

- Students with PDF degree plans cited inaccuracies and outdated information concerns
- Part-time students struggled to make use of generic plans
- 10 students suggested electronic degree plans as high priority for their success



Lessons Learned from the Field




- Ellucian the easiest ERP to add on degree planning module
- Many Jenzabar and PeopleSoft colleges consider third-party partner
- Google Sheets is sub-optimal but preferable to paper

Help Students Stay on Their Path




How Do We Supplement Existing Efforts With Long-Term Digital Infrastructure?

Where We've Been

Creating an Accessible Support Network for Students

-  Multi-tiered advising models with topic specialists and peer support
-  Queue management systems for financial aid and registrar
-  Student success courses

Personalizing Student Support and Communications

-  Hiring student communications specialists
-  Exploring customer relationship management systems
-  Student mobile apps and texting technologies



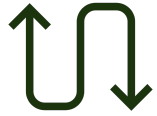
Students' Suggestions on What's Next

- ✓ Digitally accessible point of contact for support, with whom online appointments can be made

- ✓ Proactive and tailored communications

COVID-19 Brings Into Focus Previous Challenges

College Leadership Sheds Light on Student Support Progress and Remaining Challenging



Ping Pong Effect

“We’re still working through that balance of having topic experts for student needs and creating a single point of contact to help students navigate. Ping-ponging between offices has decreased, but it’s still a problem.”

Student Services



Heavy Caseloads

“Despite additions of success coaches, our advisor to student ratios are higher than we’d like. It’s tough to provide personalized attention to everyone, and the faculty advising experience is uneven but improving.”

Career Services



Coordinating Care

“Our departments have slightly different processes for note-taking. We also have a lot of CRMs and weird co-opting of our ERP. Without a record of student interactions, it’s hard to be coordinated.”

Institution Research



Detecting “Off Path”

“Due to our data silos and absence of electronic degree plans, it’s hard to tell when students go off track, especially in this remote environment. LMS data has been helpful but isn’t the full picture.”

Academic Affairs

Student Support Needs Have Grown Exponentially

All While Students Are Lacking a Critical Support Resource

Equipment Needs

come into focus, as computer labs close and students become self-reliant for remote classes.



Aid Eligibility grows in importance, with layoffs and family needs dominating financial decisions.

Degree Progress

takes new dimensions, with some required classes canceled or rescheduled.

Basic Needs once addressed through campus resources are going unmet as working from home requires sharing increasingly limited space, time, internet access, and even food while juggling competing demands (e.g., childcare, shifting job hours).

Mental Health a challenge for all in today's landscape, with many reaching out to faculty and staff for help.



Students have lost a key source of support where many questions were answered – other students. Interviewees reported that fellow students were resources for course selection, financial aid, and tutoring information.

Online Appointment Scheduling Capabilities a Top Request

Accessibility of Student Support Staff a Must-Have for Students



Key Capabilities

- ✓ Ability for students to view advisor calendar availability and make appointments
- ✓ Clear articulation of student points of contact for key inquiries
- ✓ Appointments synced with advisor calendars
- ✓ Automated and clear student reminders for upcoming appointments
- ✓ Advisors can enter brief notes in appointment reminders

Example Vendors



Cranium Cafe
Because Human Connections Matter™

ConexED



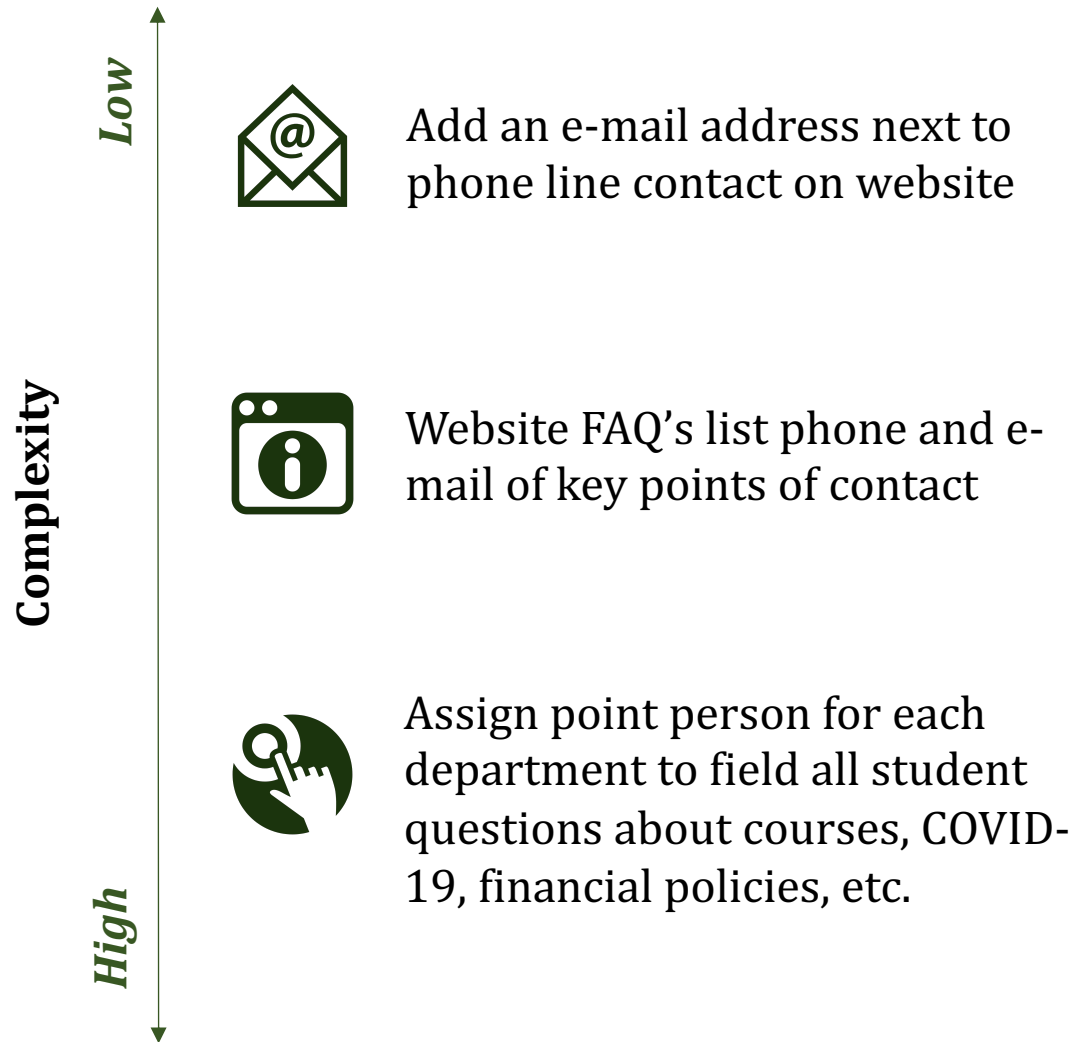
Hobsons Starfish



EAB - Navigate

Pricing often starts around \$25,000, though scheduling capabilities may be part of larger bundle of services

If Online Appointment System Isn't Viable, Explore Low-Tech Solutions



Tip: Students reported significant concern sending e-mails into a “black hole,” without a sense of whether their e-mail has been seen or when they will receive a response.

Make sure to enable automatic responses to student advising inquiries, ideally with an estimated response time and links to important information resources.

Video Appointments Not Always Necessary

Students Value Privacy and Multitasking Capability of Phone Calls

Students Prefer Phone Appointments...



Multi-Tasking

"I can put my advisor on speaker and register for classes at the same time."

Zoom Fatigue

"I spend all day on Zoom. If I have a quick question, I don't need to physically see my advisor."

Efficiency for All

"It's easier to do a phone call, especially if I'm on the go. There are too many steps for video."

...With A Few Exceptions

Screen-Sharing Vital

Teaching students how to use new software capabilities

In-Depth Counseling

Conversations concerning mental health, housing insecurity, and childcare

Peer-to-Peer Connections

Creating community through activities such as career fairs, special programs, orientations



Second to Online Appointments, Students Pushed for Better Communication

Simple Tactics Go a Long Way

From Known Sender

From: Department Chair
Subject: CARES Act funds

Just a reminder that you are eligible for \$300 because of the CARES Act money that was awarded to us!

“This e-mail from our Chair was a life saver and came at just the right time. I would have never known about the \$300 without it!”

Subject Line to the Point

From: School Job Network
Subject: PSST! You should really have one of these...

NEWSFLASH: Career portfolios aren't just for interviews anymore.

“I got this and thought, ‘why are they trying a millennial thing on me?’ Just say what the e-mail is about in your subject line.”

Personalized Context

From: Department Chair
Subject: Lab Requirements

Reminder – PT Lab II must be completed prior to registering for upper level PT classes.

“I hate it when I get e-mails about something I've already done. It makes me feel like I'm missing something.”



Students are divided on text versus e-mail communications from their college, but all students encouraged their college to regularly update student contact information and preferences.

Support Student Learning

How Do We Supplement Existing Efforts With Long-Term Digital Infrastructure?

Where We've Been

Ensuring Strong Pedagogy Across Classes



Course release time for faculty professional development



Instructional design and teaching and learning centers



Revisiting student learning outcomes

Enabling Different Types of Learners to Succeed



Analyzing student course-taking data and disaggregating that data to uncover patterns



Investing in Access Services and supporting resources



Students' Suggestions on What's Next

✓ Consistent usage of digital learning technologies with the ability for meaningful peer-to-peer interaction

✓ User-friendlier technologies

Many Faculty Going Above and Beyond to Support Student Learning

Students Share Many Examples of Effective Technology-Supported Instruction

Inventing for Class

“Our physics professor had us simulate labs at home with household items. It was great!”

Accessibility

“My instructor offered extra evening classes for those of us with childcare needs – it made it possible for me to stay enrolled.”



Preparing Students

“My instructor explained how we were going to do classes remotely along with how to use the software – I use those skills in all my classes now!”

Providing Support

“My instructor knew I didn’t have a working camera or microphone, so he helped me get them through a college grant.”

Common Missteps

Students Cite Top Pitfalls of Remote Learning



Limited Peer Interaction

“I would really like to be able to ask questions of my peers, but that doesn’t ever seem to be an option. There’s not even a break for questions from our professor during live lecture.”

Community Chats

Lecture Format

Group Projects



Inconsistent Tech Usage

“All my teachers are using slightly different tools or different parts of Blackboard. I’m spending so much time trying to keep track of faculty preferences rather than learning new material!”

LMS

Proctoring Software

Digital Equations and Labs



Failure to Set Expectations

“I had no idea that I would need to take pictures of my surroundings before my exam – it really threw me off because I was in PJs and embarrassed – I wish someone had told me.”

Test-Taking

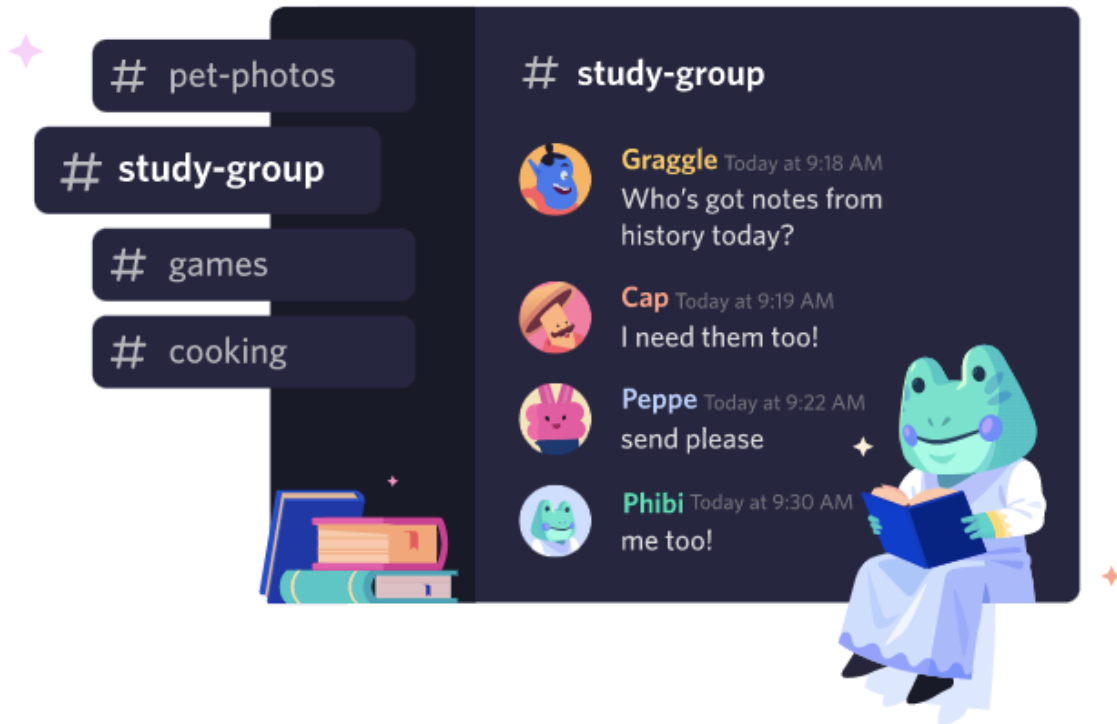
Assignments and Grading

Material Requirements

Designing for Student Interaction

Most Cited Challenge with Remote Learning is Lack of Peer-to-Peer Engagement

Ohio Students Give Glowing Reviews of Discord Platform



But Students Also Offer Ideas for How Best to Use Existing Tools

- ✓ Virtual Career and Networking Panels with Breakout Rooms, Organized by Departments
- ✓ Weekly Zoom Office Hours, Attendees Add Email to Log-In Name
- ✓ Asking Consent to Post Student Contact Information (Teams or Hangouts) in LMS
- ✓ Setting Clear Ground Rules for Discussion Boards and Group Projects

Consistent Technology Usage

Circumstances Right to Develop and Incentivize Common Suite of Learning Technologies

Unnecessary Access Obstacles

“One of my instructors is using EquatIO for math equations – it’s super easy. In that same department, one of our instructors insists on having us print and scan all assignments. I had to buy a printer for the class.”

STEM Student

Faculty Benefits, Too

“I redesigned all of my mid-term exams to account for academic integrity challenges, but I just found out from another department that we have licenses for LockDown Browser – I just spoke with IT and I’ll be using that for finals season.”

STEM Faculty

Creating the Long-Procrastinated Central Licensing Database

- 1 Department Chairs List Current Software Licenses and Capabilities

Request from senior leadership
- 2 Tools Socialized Across Departments, Surfacing Duplication and Expansion Requests

Faculty sourcing
- 3 Senior Leadership Selects Centrally Sponsored Tools

To be updated by academic technology team
- 4 Usage Migration Campaign from Academic Affairs and IT Leaders, with Real Incentives

Rationalize selected tools

Example Learning Technology Database

Model Processes from Exemplars



LockDown Browser

Vendor: Respondus

Point of Contact: Margaret Thatcher (English Department); mthatcher@10downing.st

IT Lead: Pablo Neruda

What: A method of ensuring academic integrity during online exams to “lock down” students’ browsers

Why We Chose It: Academic senate selected among vendors due to intuitive interface, compatibility with Blackboard, and affordable fees

Purchase and Renewal Date: March 1, 2018 purchased; Annual Renewal

Cost: \$4000 in year 1; \$8000 after for 3000 seats



Capability	Software
Remote Testing	LockDown Browser
Online Tutoring	Smart Thinking
Videoconferencing	Zoom

- ✓ Faculty can click into specific software tools for the information provided to the right
- ✓ Database regularly updated by academic technology team, with help from deans

...And Don't Forget Consistency *Within* the LMS

Most Underutilized Education Technology Now Vital to All

Pre-COVID, Students Caught the LMS Bug Faster than Faculty

90%

Students claim they strongly prefer to take classes with faculty that use the LMS calendar, grading, and discussion board features

The Ada Center Student Focus Groups, 2019

12%

Faculty teaching face-to-face courses reported using LMS for more than syllabi and mid-term grades

The Ada Center, National Faculty Interviews with Frontier Set, 2018 - 19

COVID Brings Major Surge in Usage...

25x

D2L Brightspace's Virtual Classroom usage increase in April 2020, while Canvas and Blackboard saw similar surges (*Phil on EdTech*).


...But Still Uneven

35/35

OACC Students interviewed reported **huge variation in LMS usage among faculty members**, with many courses still not using critical functionality.


Basic LMS Usage Policies Key for Learning Equity

Students Testify to How Tool Can Help Explain the What, When, and How of Course Success

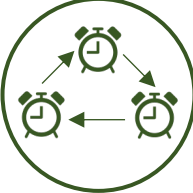


Welcome!


"When I logged in, my instructor had a 'Start Here' orientation page..."



"...her syllabus deadlines were uploaded to the calendar, and she'd update them when things shifted...I knew I could trust what was there..."



"...and the fact that everything followed a pattern made it easy to plan out my week in advance. I knew discussion boards were always Thursday, homework Friday, grades posted Tuesday..."



"And the reminders made me a lot less anxious about missing things while juggling everything else right now..."

- ✓ Set clear expectations about how to use the LMS for a given course, especially the discussion board
- ✓ Ensure syllabus and assignment calendar match; changes are communicated
- ✓ Create and post a predictable cadence of assignments
- ✓ Provide updated and programmable grade and assignment deadline notifications

A Nuanced Interview Observation

First-generation students and those from racially minoritized groups cited consistent usage of the LMS gradebook, assignment calendar, and discussion boards as especially critical to their ability to learn effectively.



“

It's really helpful for me to have a clear place to get answers about when assignments are due, how I'm doing, and what to expect.

- Pre-Nursing Student ”

Faculty Guideposting Leads to Student Confidence

Stories of What Encourages and Discourages Students from Enrolling in Remote Learning

	Syllabi	Test-Taking	Discussions	Assignments	Grades
 Yes Please	Syllabus is current and aligns with student calendar feature and access to facilities.	Instructor provides students with orientation to proctoring software one week before exam.	Instructor is clear on what qualifies as a “quality” and timely response on discussion board.	Students receive explicit instructions on how and when to submit assignments electronically.	Instructors set expectations for when grades will be shared or uploaded and how to keep track of class performance.
 No Thanks	Syllabus has outdated and conflicting information across features.	Students surprised by mandatory orientation videos and activities that must be performed before taking test.	Instructor “likes” each discussion board response without further feedback.	Students struggle to complete assignments by hand, figure out how to submit their work and interpret conflicting due dates.	Students receive grades on irregular schedule and are confused by cumulative grade computations.

Bountiful Resources for Remote Learning Pedagogy

For Some Instructors, It's Overwhelming to Know Where to Start



everylearner
everywhere

ACUE Association of College
and University Educators

Achieving the Dream™



*"I know there are a lot of great resources out there for remote learning pedagogy, but **it's been tough to create space for any type of learning or creativity.** Juggling childcare, trying to help students troubleshoot crises, and the struggles of the pandemic, **I need a very curated approach to professional development.**"*

English Faculty Member

The Golden Hour for Leading on Pedagogy

Institution culture plays a large role in how best to approach faculty professional development. Yet, today's equity conversation and digital learning imperative create a unique opportunity for leadership to engage more deeply in at least one key aspect of student learning: creating technology usage policies (and supporting infrastructure) that promote more equitable student outcomes.

User-Friendlier Tech Can Largely Be Achieved by Work-Arounds

Students Flag Tech Deficits, Most of Which Can be Mitigated without IT Resources



Device Compatibility

Many students reported discrepancy between information displayed on desktop and mobile devices, especially grade information.

“Blackboard Mobile doesn’t show all of my professor’s uploads!”

- ✓ Make sure department run faculty trainings include computer to mobile information transition information and common sticking points.



Opportunity for Accommodations

Despite flagging with Access Services, some students have lost the ability to tackle tech accessibility concerns across classes.

“I used to follow up with instructors in-person; now, it’s a lot harder for me to reach out!”

- ✓ Faculty create space for students’ private correspondence with Access Services regarding accessibility accommodations at start of term.



LMS Troubleshooting

LMS “times out” and requires new login, impacting student access to class materials.

“I’m always late to class, which counts against me, because the LMS times out so often!”

- ✓ Set expectations of when LMS requires new login and how this impacts class.

Students Underscore Mission Critical Practices

Even After In-Person Interaction Resumes, Learners Consider Technology Critical to Their Success



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Help Students Stay on Their Path



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Student Nice-to-Haves

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- ✓ Proactive and tailored communications

- ✓ User-friendlier technologies