

TOP HAT

The Ultimate Guide to Online Teaching

Tips and tools to motivate and engage students in the virtual classroom

Contents

The Online Learning Paradigm Shift Page 4

Part One

Why Active Learning is Essential in Virtual Classrooms Page 5

- The Difference Between Remote vs. Online Instruction
- The Importance of Active Learning in Online Environments
- TOOLS for Creating Active Learning Exercises

Part Two

How to Plan and Design Any Online Course Page 10

- Curriculum Design Methods
- Adapting vs. Replicating Content
- Incorporating Active Learning into an Online Classroom
- Equity and Accessibility
- Organizing Principles
- TOOLS for Planning and Designing Your Course

Part Three

Best Practices for Synchronous and Asynchronous Learning Page 19

- Making Synchronous Lectures Engaging
- Making Asynchronous Lectures Engaging
- Keeping Students Motivated Outside of the Virtual Classroom
- TOOLS for Teaching in Real-Time and Self-Paced Learning Environments

Part Four

How to Keep Students Connected, Motivated and Engaged Page 29

- Creating an Online Learning Community
- Shifting from ‘Instructor’ to ‘Community Manager’
- Fostering Social Connections Among— and With—Your Students
- Leveraging Insights

TOOLS for Engaging Your Students

Part Five

10 Strategies to Make Online Learning Stick Page 39

- The Big Five Learning Science Tactics
- Putting Learning Science into Practice

Part Six

How to Assess Students Remotely Page 46

- Three Reasons for Assessing Students
- Examples and Applications of Formative and Summative Assessments

TOOLS for Choosing the Right Remote Assessments

The Importance of Creating New Learning Experiences Page 53

The Online Learning Paradigm Shift



In the face of the COVID-19 pandemic, higher education institutions around the world have closed their physical doors and opened virtual ones in an effort to help students complete their studies. Educators and students alike have had to adapt at a rapid pace, and with mixed results. According to a [Top Hat survey](#) of more than 3,000 undergraduate students, 68 percent felt the emergency online instruction they had received was worse than the in-person instruction they are used to.

The pandemic is not responsible for the shift to online learning, or the desire among students to see a greater return on their college investment. It has only served to accelerate a shift already well underway—bringing a greater sense of urgency to institutions to demonstrate greater value. Colleges and universities now face new pressures to provide an educational experience that is engaging, motivating and effective, regardless of how it is delivered.

In the rush to move teaching and learning online, those new to the medium have come to appreciate that adding ‘virtual’ in front of the word ‘classroom’ isn’t the only difference

between a face-to-face course and an online one. Technology aside, teaching methods that work well in one type of learning environment may not succeed in the other.

While there is much to figure out, it’s important to note that regardless of circumstance, effective learning shares many common attributes: it is collaborative, explorative and experiential. Above all, it embraces active learning techniques to engage students, creating a sense of accountability for their own learning. Engaging and challenging students is arguably even more important in virtual classrooms where oversight is minimal and the opportunities for distraction seemingly endless.

The good news is that with the right approach, and the right technology, educators can turn their virtual classrooms into places of relevance, vitality and community. We’d like to help you—the educator—do just this. In this guide, we’ll explore the fundamentals of teaching online and share tools and best practices to help you accelerate your journey—and drive student success.



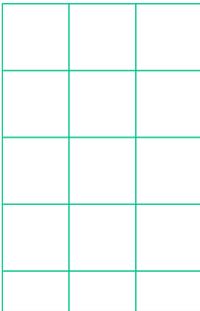
PART
ONE

Why Active Learning is Essential in Virtual Classrooms

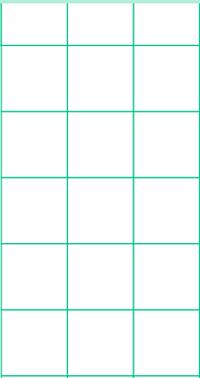
The rapid pivot to online instruction due to the COVID-19 pandemic was unprecedented. While the student response shows definite room for improvement, the perception that online learning is inherently less effective than face-to-face learning is misleading, at least compared to the experience of students enrolled in well-designed digital courses. ➔

Numerous studies suggest that many students have positive feelings about their online learning experiences. In one comprehensive study from the [SUNY Learning Network](#), 94 percent of students said they learned just as much or more in their online courses as they did on campus. The difference of course lies in developing a thoughtfully planned curriculum that plays to the strengths of the digital classroom and puts active learning at the very center of the learning process.

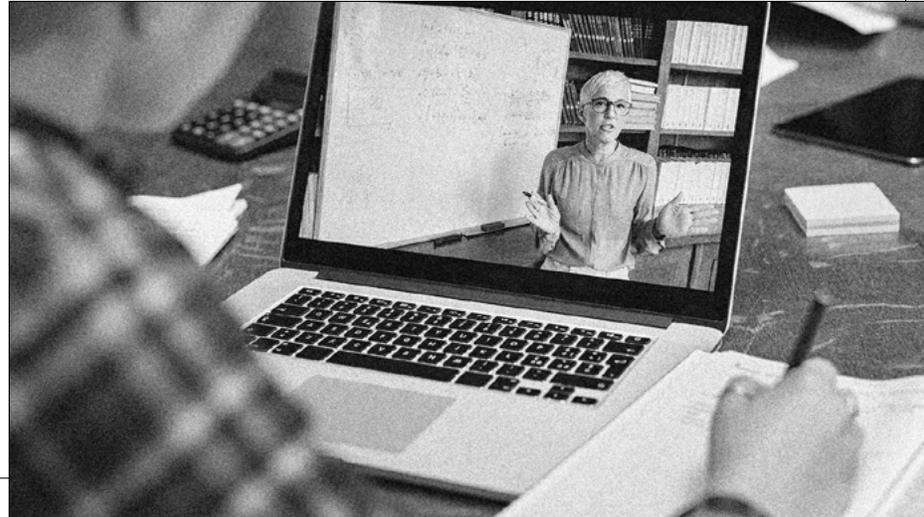
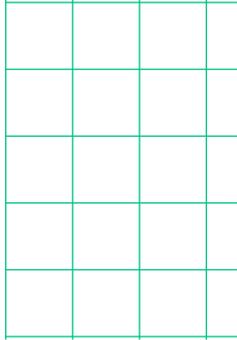
The Difference Between Remote vs. Online Instruction



Remote instruction—sometimes called emergency remote teaching—refers to developing and facilitating online course curriculum on the fly. In many ways, emergency remote teaching has become a discipline unto itself in order to equip institutions with processes to ensure some level of learning continuity in the face of disruption.



Online learning on the other hand, refers to courses that are intentionally developed with online delivery in mind. Learning experiences are designed in a sequential way, over weeks and months, to meet curriculum objectives and maintain academic rigor. These courses include a variety of instructional strategies and technologies that allow students to meaningfully interact with course content, the instructor and their peers.

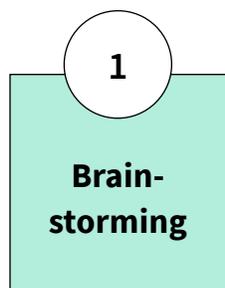


The Importance of Active Learning in Online Environments

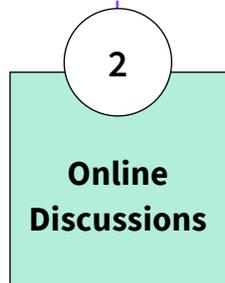
Arguably one of the most important touchstones for developing an effective online course is active learning—a pedagogy first introduced in 1991 by Charles C. Bonwell and James A. Eison. According to their pioneering work, active learning focuses on involving students “in doing things and thinking about what they are doing.” Put simply, it’s about **engaging students in activities**—not just allowing them to passively listen to a subject matter expert. Infusing dialog, debate, writing and problem-solving exercises throughout your curriculum has been shown to yield many benefits, including student satisfaction, knowledge retention and improved exam performance.

In a face-to-face classroom environment, active learning involves spending less time lecturing and more time on minute papers, think-pair-share activities, case studies and problem-solving exercises. Professors who’d been forced to move quickly to teaching remotely might have been more concerned with simply keeping up. While understandable given the crisis, with a little time and the right approach, maintaining—and even improving—engagement is possible in an online lecture.

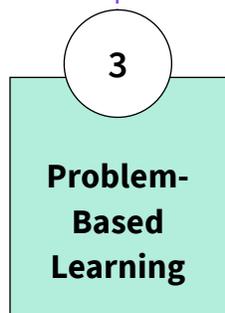
This guide is packed with tips and tools to help you put active learning into practice in an online learning environment. Here are three easy, low-risk ways to get started:



Brainstorming involves generating alternative possibilities to answer a question or approach a problem. With students working together in groups, it encourages risk-taking and creative thinking in order to generate new ideas and solutions. Debating the merits of different ideas also offers important opportunities for developing a deeper understanding of the topic in question while increasing student engagement.



Online discussions reveal the complexity of issues and help learners understand that there are a number of ways to approach learning material. Anonymously or not, students can ask clarifying questions to further their own understanding of course content, or spark a discussion with their peers. This allows instructors to take the pulse on how students are comprehending course content, and where they might need further direction.



Using this active learning method, problem-based examples in course materials present cases that are relevant to learners and encourage them to apply what they are learning to real-world situations. Problem-based learning motivates students to develop their critical thinking skills by offering opportunities to analyze, synthesize and evaluate information in order to make their case. Depending on your class size, this can be done as a collective or by breaking students into smaller groups.



Giving students a more active role in the learning process not only increases participation, it imparts a greater sense of ownership for their own learning. **With the right planning, online active learning techniques can also foster a deeper sense of community even while students are learning remotely.**

PART
TWO

How to Plan and Design Any Online Course

Switching from a live classroom to an online one requires adjustment for instructors and students alike. If the medium is the message, then you can't replicate the exact same lecture you had planned for a physical classroom in the online world—at least not without making a few adjustments. Moving into the digital realm requires a different approach to teaching and learning, particularly if you want to embrace active learning and inclusive teaching practices. →

Curriculum Design Methods

Curriculum design refers to the way you organize the curriculum: the objective of the course and the knowledge or skills a student must master before moving on to the next level. In the online world, it's also a step-by-

step process to improve the courses offered by a college or university, incorporating the latest online teaching strategies and innovative teaching techniques to improve the student experience.

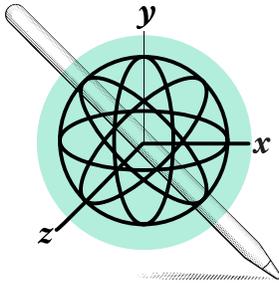
There are three basic types of curriculum design:

Subject-centred curriculum design revolves around a particular subject matter or discipline, such as mathematics, literature or biology. It's less concerned with individual learning styles.

Learner-centred curriculum design revolves around student needs, interests and goals. Differentiated instructional plans provide an opportunity to select assignments and learning activities.

Problem-centred curriculum design teaches students how to look at a problem and formulate a solution, helping them develop skills that are transferable to the real world

Review Rubrics



Regardless of your approach to curriculum design, you can use review rubrics to assess the quality of your course as you move it into the online world. A rubric can provide guidelines and best practices—rather than policy—for course design (and redesign), as well as processes and tools for assessing the impact of your curriculum design on learning outcomes.

Quality Matters has eight general standards in its rubric for assessing the quality of an online course. This includes course overviews, learning objectives/competencies, assessments and measurements, instructional materials, learning activities and interaction, course technology, learner support and accessibility and usability.

The **Online Course Design Rubric** from New Mexico State University uses 40 quality assurance standards for self-review or peer review of online courses.

The Quality Online Course Initiative Rubric from the Illinois Online Network at the University of Illinois assists in the design, redesign and evaluation of online courses.



Adapting vs. Replicating Content

While you can't replicate the same experience, you can adapt or repurpose existing course material and teaching methods. Giving a lecture or having a classroom discussion can be done online, but it may be harder to keep students' attention—so you may have to consider using your class time differently, such as coaching or mentoring instead of lecturing.

Some of this can be handled by your institute's learning management system (LMS), which typically includes communication, content delivery and assessment tools. But you may need to complement the LMS with other relevant

digital tools and technologies in order to create a rich and engaging learning experience for students. With the right tools, you can create a course, load assignments, set due dates, attach files (such as readings) and write a description for each assignment.

You'll also have to adapt some of that content for the online world. Salman Khan, founder of Khan Academy, says in [*Time*](#) that student attention span maxes out after about 10 to 15 minutes of passive listening. That means it's even important to make classes more interactive and engaging, especially online where students can be easily distracted.

PRACTICE AND FEEDBACK

Consider how you'll give students an opportunity for practice and feedback with both low- and high-stakes assignments.

For example, students could analyze and annotate an assigned reading with their classmates using an online teaching platform or other digital collaboration tools.

COLLABORATION

Breakout rooms can encourage collaboration typically seen in traditional classrooms. Using online collaboration tools such as Google Docs, students can also co-create papers or projects, and then submit them online.

Some ways to incorporate active learning into an online classroom environment include:

VIDEO ASSIGNMENTS

Rather than handing in a paper, students can complete video assignments or make video presentations using digital tools such as [Flipgrid](#) or [EdPuzzle](#). [Loom](#) is another good option. It allows you to easily record screen content and video stream, all in one go. It's also free.

POLLS AND QUIZZES

If you normally ask students questions during your lectures, you can ask similar questions in online discussion forums, polls or quizzes, and even offer feedback on their responses. This can boost engagement while identifying gaps in learning.

GROUP WORK

Several video conferencing tools include breakout rooms, so you can divide the class into smaller groups for discussions and group exercises. Look for a tool that allows you to move from 'room' to 'room' to interact with each group of students.



Equity and Accessibility

The focus of equity and accessibility tends to fall into two buckets: access to technology and access to support for students with learning disabilities. In both cases, it may take some extra work to redesign your course material and assignments to meet everyone’s needs, but will ultimately help students be more successful.

Students’ access to technology could vary widely. Some may not have high-speed Internet access at home, while others rely on physical university infrastructure, such as computers at the library. That means you’ll need multiple methods for engaging with students. Asynchronous options are

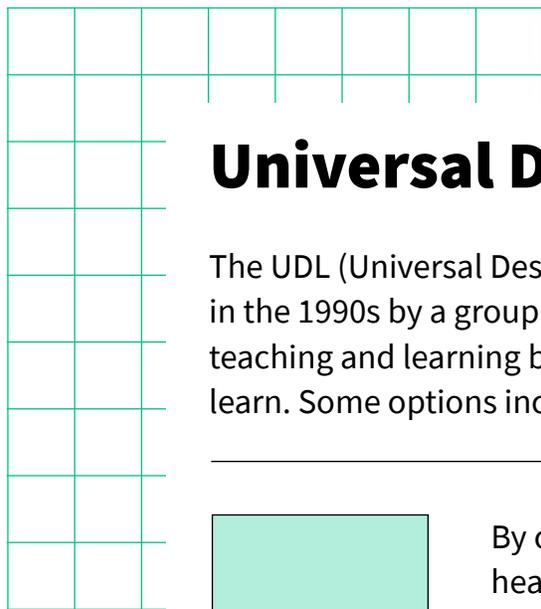
an important consideration since they give students the flexibility they may need to access a computer or study spaces that allow them to focus without interruption.

You might also have students with learning disabilities or those who require special accommodations to function online—from dyslexia to reading processing disability to attention deficit disorders. That means making use of technology that can optimize their learning experience. A student with a learning disability, for example, might be able to use assistive software that reads text aloud or could ‘listen’ to a textbook on an e-reader.

One way to accommodate different learning styles is to provide multimodal ways of learning, such as reading text (such as eBooks or interactive timelines), listening to audio (podcasts or audio clips), watching videos (live action or animation) or looking at images (infographics or photos). Online active learning platforms like Top Hat offer many options to ensure every student is engaged and can complete their

course no matter where they are, including the automatic transcription of lecture recordings.

Now may also be the time to consider introducing digital textbooks into your curriculum. Not only are they less expensive than traditional print textbooks, they typically incorporate multimedia and interactive elements to engage students with different learning needs.



Universal Design for Learning

The UDL (Universal Design for Learning) framework was developed in the 1990s by a group of neuroscientists to improve and optimize teaching and learning based on scientific insights into how humans learn. Some options include:

Captioning

By captioning videos, you can help students with hearing impairments—or even those in noisy environments (if they don't have a quiet, dedicated workspace). Look for a video creation and sharing platform that offers captioning out of the box.

Transcripts

Most video creation and sharing platforms with captioning capabilities allow you to download captions into a transcript. This helps students who may have a slow Internet connection or poor stream quality to follow along.



Organizing Principles

COVID-19 has forced instructors to quickly adapt to the online world—and that’s not an easy feat, particularly for those who aren’t comfortable with technology. That being said, there are ways to organize your online course, just as you would a traditional course, by week and semester.

Organize your course content into units with submodules, including key concept reviews and unit tests. Each week, create a document that summarizes everything you’ll need for the week including any assignments due, live sessions and

recorded lectures (with links). Also consider where online assessments fit in, including options such as remote open-book exams and secure online proctored exams. Communicate this to students and hold virtual office hours for those who have questions or accessibility issues they wish to discuss in private. Having a central hub where students can access everything they need, from assigned readings to deadlines, is important. Stick with dedicated (and accessible) educational tools rather than relying on social media, such as Twitter, to communicate with students.

Tools for Planning and Designing Your Course

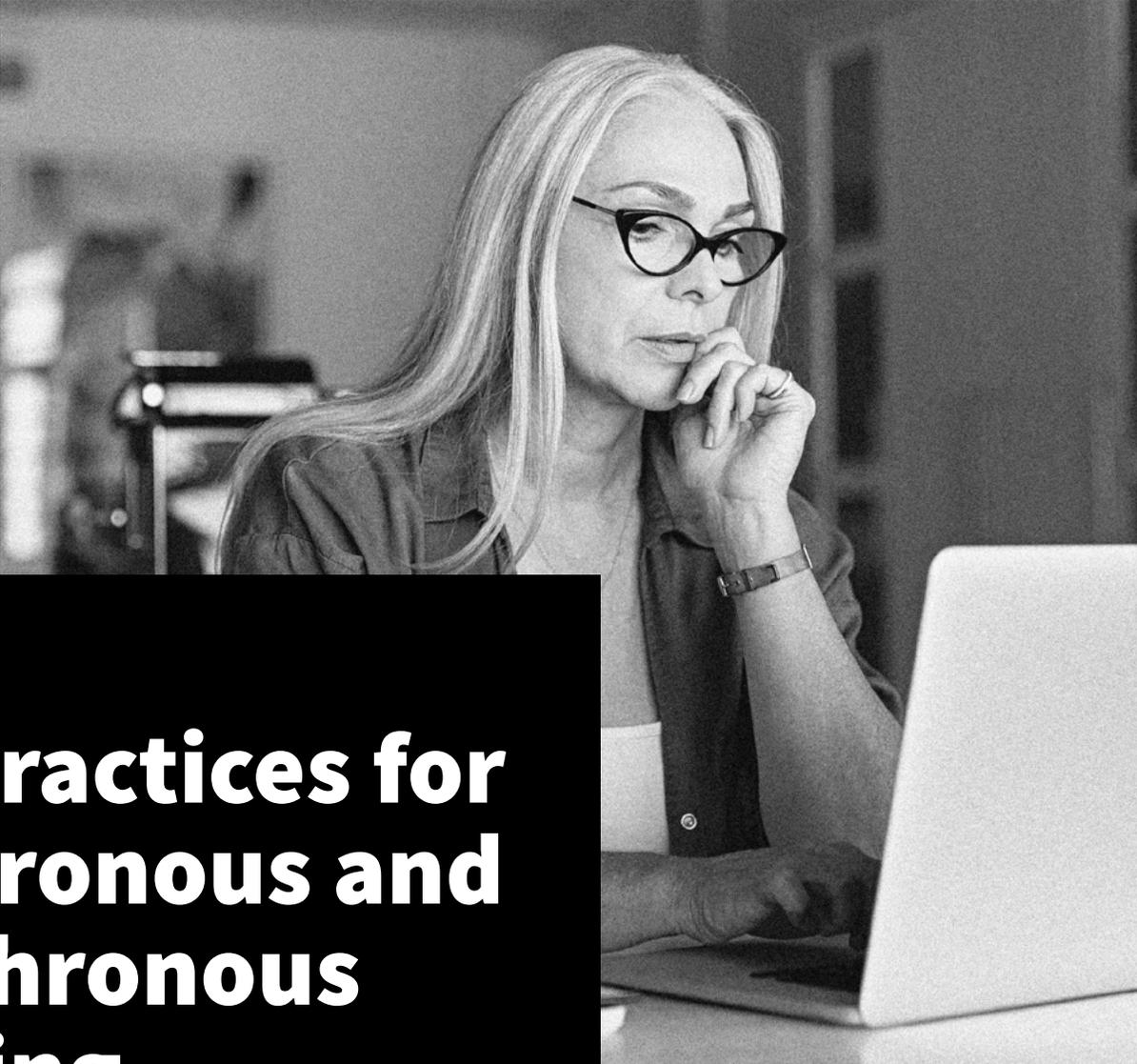
You don't want to end up with dozens of different tools—that becomes a management nightmare. But there are some effective and easy-to-use tools available that can help you in designing your course:

- Mind mapping tools such as [MindMeister](#) can help you structure information the way your brain works (radiant, rather than linear) and deal with information overload.
- Collaboration tools such as [Trello](#) can help you create outlines and visualize the structure and flow of course material with drag-and-drop functionality.

As well as providing an active learning platform that helps professors teach effectively in any online learning environment, Top Hat offers free, downloadable online teaching resources.

- This [Lecture Plan](#) is designed to help instructors organize their course more effectively
- An [Actionable Learning Outcomes](#) worksheet will help you develop strategies that bridge the gap from students' prior knowledge to what you hope they can achieve by the end of your class.
- A customizable [PowerPoint Template](#) will help you plan your lectures, with tips on how to incorporate active learning during your lectures

You can also find course-specific resources across a variety of academic disciplines such as digital textbooks, lecture notes, quiz packs, videos and presentations in the [Classroom Resources](#) marketplace.



PART
THREE

Best Practices for Synchronous and Asynchronous Teaching

In an online learning environment, one of the most important steps educators can take—and one that can alleviate some anxiety and frustration—is determining what content should be delivered to students synchronously (live or in real time) and what learning can be supported asynchronously (recorded or self-paced). And while the reality is that effective online teaching requires a combination of both methods, ultimately, the key is to play to the strengths of each approach. ➔

Making Synchronous Lectures Engaging

In the online world, teaching synchronously most closely mirrors the physical classroom experience. Delivering course content and presentations ‘live’ creates a sense of immediacy and intimacy that is particularly effective for student engagement.

Participating in discussions and working through course concepts together in real time are two essential elements of synchronous learning, giving students opportunities to apply learning and collaborate with peers. Synchronous presentations are especially useful when course material is complex and may require feedback or clarification in the moment to keep students on track.

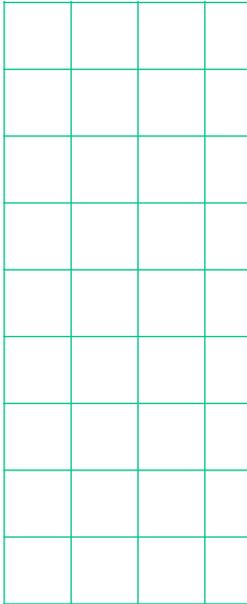


**DANIEL
MAXWELL**

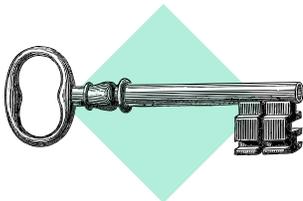
*Lecturer of
Criminal Justice
at the University
of New Haven*

As a general rule, lecturing for 50 or 75 minutes is not the ideal way to engage students at the best of times, less so in a virtual environment. For this reason, it’s important to consider how to use your precious class time most effectively. In the spirit of active learning, ‘flipping’ your classroom may make sense. This worked for **Daniel Maxwell**, a criminal justice lecturer at the University of New Haven. Instead of using slides or presenting new content during online class meetings, he assigns interactive textbook readings prior to class with pertinent details highlighted in red to give his students focus. He then facilitates a discussion in class based on student responses to pre-class textbook assignments.

By having students consume lectures and course materials ahead of time, synchronous engagements can be used to apply knowledge through problem solving and case studies or by discussing course concepts in depth. This can help make the learning process more engaging for students. There are important social benefits as well. The opportunity to connect with peers and collaborate on problem solving exercises can go a long way in alleviating the sense of isolation that can exist in online environments.



How Synchronous Teaching Supports Active Learning



10-15 MINUTES

Keep presentation blocks to this length, then introduce active learning components

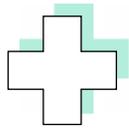
To ensure students are actively engaged, it's important to balance content delivery with interactivity and time for reflection. Similar to a face-to-face classroom environment, it's recommended that the time to present information is kept to 10 to 15 minute blocks followed by more interactive components. Discussions, class polls, 'click on target' questions using an ed tech platform and giving students time to reflect on their learning through 'minute papers' are simple ways to drive engagement and reinforce important concepts. Regular use of these activities can also help you pinpoint where students are struggling and which concepts need revisiting.

How to Drive Student Engagement Synchronously



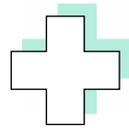
Frequent feedback helps students succeed by giving them the support and direction to re-focus their studies.

Regular low-stakes assessments or quizzes are an important part of the process. They help create a consistent rhythm for students while providing instructors with a steady stream of insights into student progress. This data can then be leveraged to check in and ensure feedback is tailored to individual needs or struggles.



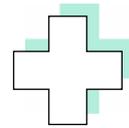
Peer connections are crucial in creating a sense of belonging and motivating students to participate in the course.

Using icebreakers, polling questions and other fun activities are great ways to foster connections between peers. By strengthening community in class, students are more likely to feel comfortable sharing and collaborating with one another.



Using multimedia content like photos, videos, memes and real-world examples can help reinforce course concepts while adding variety to presentations.

Instructors should make a habit of breaking up large blocks of text with multimedia elements to keep students engaged. Variety is the spice of life. It can help increase knowledge retention and equip students to apply what they've learned to upcoming assessments.



Presence is integral to student engagement.

It's important to let learners know when you're available to meet and provide them with the necessary resources to support them academically. Hosting regular virtual office hours and participating in online discussion threads are easy ways to reinforce a sense of caring and commitment. They can also strengthen your connection with students.



Making Asynchronous Lectures Engaging

Asynchronous learning is an integral part of active learning and is particularly useful if students are unable to maintain a specific schedule. **Accessing materials, readings, assignments, quizzes and lecture recordings in a single place—which is possible on an active learning platform like Top Hat—allows students to explore topics in-depth and at their own pace.** Supported by discussion forums and one-to-one communications through email are simple ways to create engagement even if much of the learning is self-directed.

Asynchronous learning also provides an opportunity for instructors to promote peer collaboration. Specific assignments that require students to work with each other or review each other's work are powerful ways to keep engagement high outside the confines of a class schedule

How Asynchronous Teaching Supports Active Learning

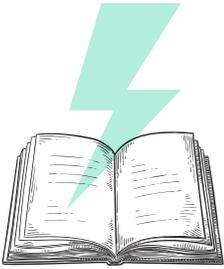
In thinking through how best to incorporate asynchronous methods into your curriculum, take time to review your course syllabus and learning objectives for the semester. Do you have the ability to teach using both synchronous and asynchronous methods? If so, are there components that can be recorded for students to view on their own schedule? What is essential for synchronous delivery? How will students access readings and assignments? Thinking through these elements can help shape an effective plan and identify pedagogical as well as technical gaps you may need to address.



FRANK SPORS

Associate Professor of Optometry at Western University of Health Sciences

Frank Spors, an Associate Professor of Optometry at Western University of Health Sciences, expertly employs short, asynchronous assignments in Top Hat that students are required to complete before his live remote classes. These well-structured assessments start with an outline of the intended learning objectives, complemented by embedded YouTube videos of Spors reviewing course material. Assessment and discussion questions follow, which focus on identifying the content areas that require more clarification. He uses the feedback from these assignments to understand how well his students are comprehending the material they've learned to date, as well as the content they've been asked to tackle asynchronously. From here, he adjusts his lecture and takes time to respond directly to student questions using Top Hat or 'in class' over video. "I look at students' responses literally minutes before the lecture to gauge their level of understanding," Spors says. "Depending on how well concepts are understood, I either slow down, continue as planned, or accelerate my lecture materials."

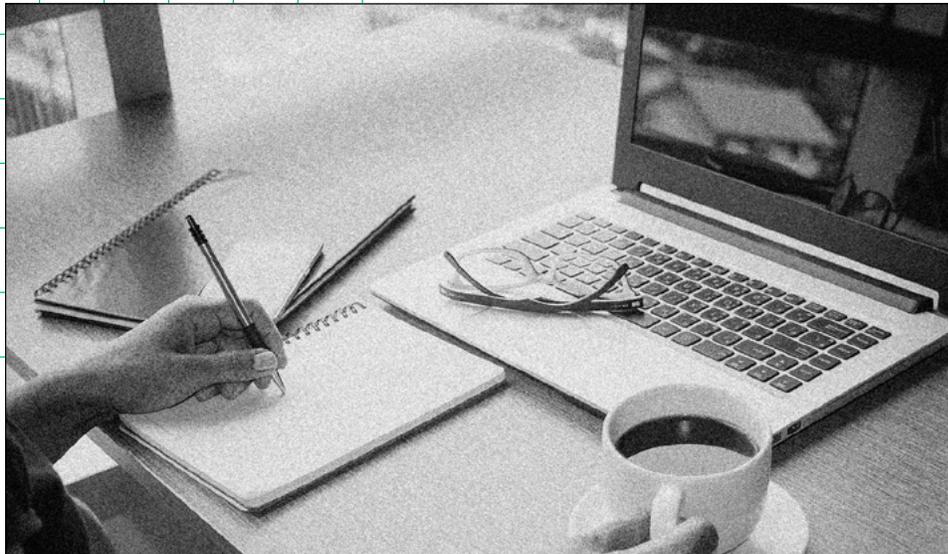
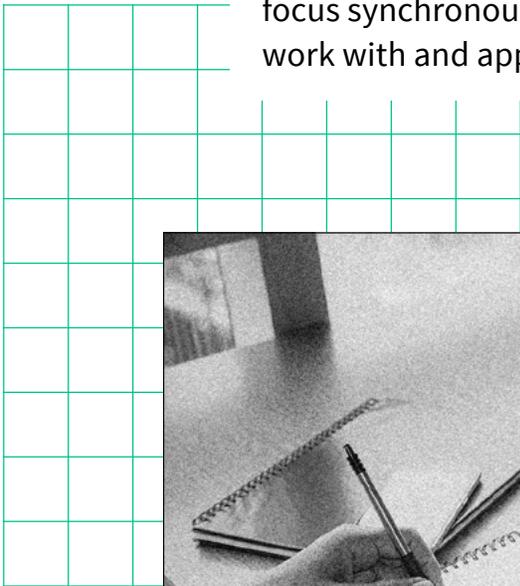


INTERACTIVE TEXTBOOKS

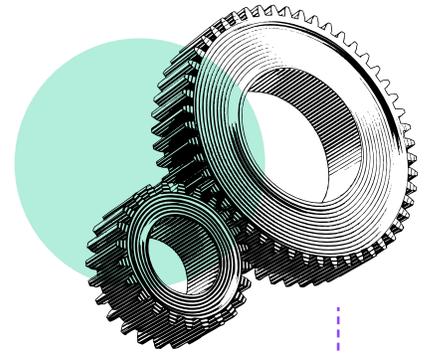
include audio, photo and video components, as well as quizzes and questions embedded directly into readings and assignments

If you don't have the benefit of live interaction, it's especially important to communicate—or over-communicate, as the case may be. This starts with orienting students to important tools, as well as providing information on how to find and navigate through learning materials. Taking time to set expectations, provide clear instructions for assignments and respond to student emails and discussion threads are critical to mitigating student apathy and feelings of isolation.

Another way instructors are bringing active learning to their online teaching practice is by using interactive digital content. Unlike traditional print materials, digital textbooks typically include multimedia elements such as audio, photo and video components, as well as quizzes and questions embedded directly into readings and assignments. Making full use of these options will ensure students are prepared, giving you the flexibility to focus synchronous elements of your course on helping learners work with and apply the latest concepts.



How to Drive Student Engagement Asynchronously



Active learning is not an isolated activity. In fact, you can incorporate active learning practices across every part of your curriculum and if you are employing both synchronous and asynchronous methods, this can be done before, during and after class. Here are some examples of activities that can be used at different stages of the learning journey:

BEFORE CLASS

Short Quiz

Have students complete a short quiz on concepts discussed during the previous lecture. Regular, low-stakes assessments improve knowledge retention while giving instructors a mechanism to gauge how well students are grasping key concepts. If necessary, review the results before diving into the next topic, or spend more time on concepts that posed the greatest challenge for students.

DURING CLASS

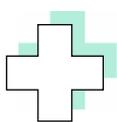
Discussion Threads

Have students exchange drafts of their work and then come up with questions and comments for each other. Be clear about what the goals of the exercise are. For example, do you want to test a student's understanding of a topic? Or perhaps how well they are able to apply something they learned to a real-life situation? You can also use discussion threads to explore more sensitive or polarizing topics by having students respond anonymously—a great way to engage, whatever the material.

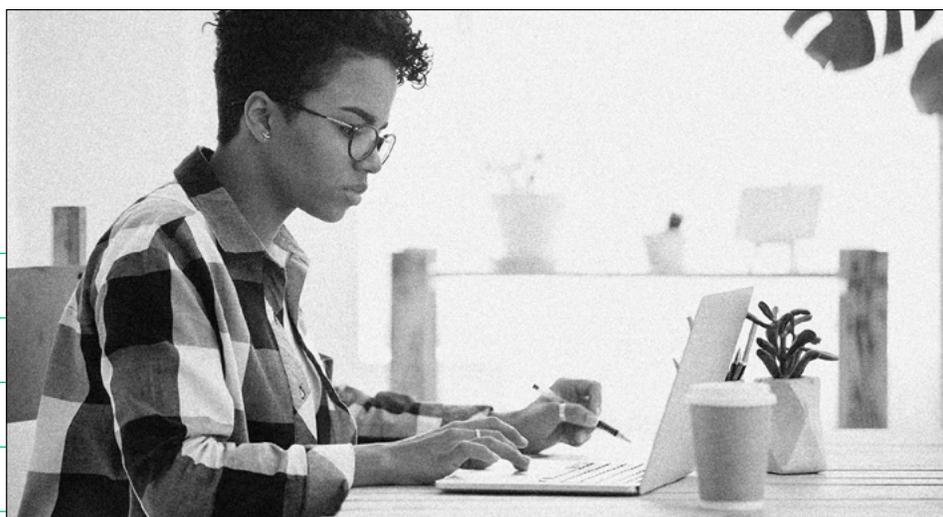
AFTER CLASS

Interactive Readings

With digital textbooks and course materials, you can incorporate active learning principles into simple reading assignments. This includes breaking up text with video and other multimedia elements and embedding questions to test for comprehension before students move onto subsequent sections. Online active learning platforms like Top Hat can automatically tabulate these results allowing you to shape your next lecture to address student needs.



If your class does not have a synchronous component to it, the likes of quizzes, discussion threads and interactive readings are still essential in order to keep students engaged in—and add valuable structure to—a self-paced learning environment.



Keeping Students Motivated Outside of the Virtual Classroom

Organize Your Course: Strategic course design, including how you choose to display your content, is the first step in achieving your course's objectives. Housing course materials in a well-organized central repository will avoid unnecessary frustration and help you and your students easily locate, review and submit items. Splitting up your content by format—lecture slides, assignment briefs and weekly readings—ensures students can find the information they need while keeping them accountable for completing homework and assignments.

Flexible Assessments: There are a number of options instructors can use to test student mastery in an asynchronous online learning environment. Open-book exams, group projects and culminating summative assignments offer great flexibility for instructors and students (more on that, starting on [page 46](#)). The ability to include digital interactive materials like audio, photo and video materials also allows more freedom and creativity than ever before. Student choice is another important element. Providing options, whether in terms of topics or format, can motivate students while giving them more room to exercise creative problem solving skills.

Tools for Teaching in Real-Time and Self-Paced Learning Environments

Synchronous Checklist

- Strong internet connection
- Decent microphone to ensure students can hear you clearly
- Attendance software, to check which students are showing up to class
- A timer to ensure you're keeping track of time
- Class agenda, or a sense of how you're going to divide today's lecture block
- 5 main points to be covered and analogies, videos or case studies to support your course content
- List of homework questions that students had struggled with to address in class
- One discussion question for every 10-minute block lecturing

Asynchronous Checklist

- Double-check that your screen recording and video software is working properly
- 10-minute refresh of course content from previous lecture block
- Time-stamped agenda of lecture video
- Open each module with a short weekly quiz to get a pulse on how well students are comprehending the module's content
- Create discussion prompts in pre-recorded lecture for students to post in a discussion forum
- If providing a recorded lecture, ensure the video is constructed in an organized manner and that it aligns to one or more specific course objectives
- Keep video lecture recordings as concise as possible—one hour should be sufficient!

PART
FOUR

How to Keep Students Connected, Motivated and Engaged

The cancellation of in-person classes forced instructors to pivot their course delivery, with little notice or time to prepare. While the initial goal was simply to move courses online as quickly as possible to avoid disruptions, it soon became clear that there's more to digital classrooms than digital technology. ➔

Creating an Online Learning Community



ERIC DAVIS

*Associate
Professor of
Sociology at
Bellevue College*

Empathetic teaching is important—but it’s critical in a digital setting. Professors’ care and concern for their students doesn’t go unnoticed either. Today’s students appreciate when instructors take the time to tailor their approach accordingly to help students manage their anxiety or uncertainty. “Being mindful of the fact that other people right now are struggling to figure out how they’re going to eat really keeps me grounded,” says Eric Davis, an Associate Professor of Sociology at Bellevue College. “I try to set the table so that my students can share their feelings and stories without feeling ashamed. I don’t say ‘we’re going to get through it.’ I say ‘we’re going to thrive through it.’”

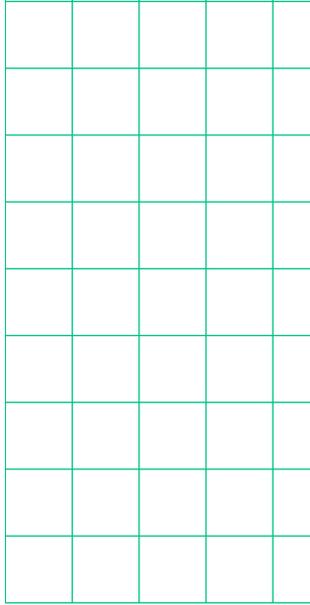


Creating an online learning community, however, requires a different approach than in a traditional classroom. For example, we’re already seeing the inevitable signs of ‘Zoom fatigue.’ Video lectures aren’t enough to keep students interested and engaged.

To create a sense of community, get to know your students’ needs by conducting regular online surveys or polls

Forging a community of online learners means making the digital classroom an inviting place for students. It means using technology to help students who were previously reluctant to raise their hands participate in class and fostering peer-to-peer (and peer-to-instructor) connections to make the course material meaningful.

To create a sense of community, get to know your students’ needs by conducting regular online surveys or polls and adjusting the curriculum to make it more collaborative. Also, create a central hub for students. Having information housed across too many platforms can undermine the sense of community you’re trying to build, making it hard for students to align with one another on assignments and discussions.



Shifting from ‘Instructor’ to ‘Community Manager’

Being the ‘sage on stage’ doesn’t work in a digital classroom. Even the most riveting of lectures won’t translate well in an online environment, since it’s hard for students to passively stare at a computer screen for 50 to 75 minutes. Instead, shift toward becoming a ‘guide on the side.’

By giving shorter lectures and breaking up class time with interactive learning activities and group work, your role becomes more of a community manager. This means you facilitate activities and group work while keeping students active, motivated and engaged.

You can become more of a community manager by:

- incorporating short audio clips or videos from online textbooks or YouTube

- polling or quizzing students about course material and soliciting student feedback

- providing the option of open assessments, where students choose from a range of possible assignments to complete

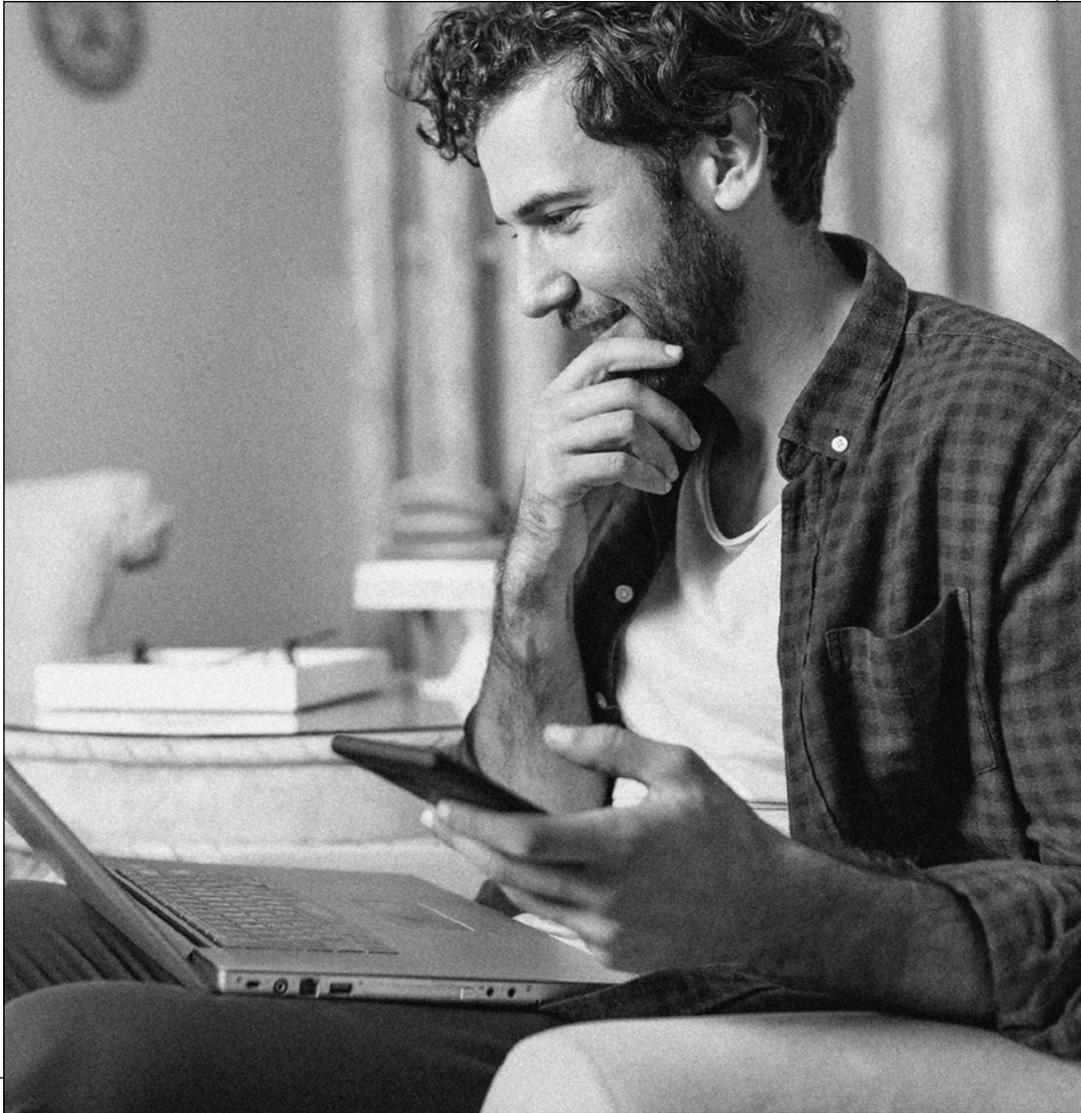
- getting students to create TikTok videos for assignments or presentations

- assigning group work in breakout rooms and visiting those groups to monitor how collaboration is progressing

- creating online games related to material in the course (or having students create their own games)

Without physical classrooms and campuses, students are missing out on the critical social aspects of higher education, which help to create a sense of community and engagement. Consider adding a virtual ‘water cooler’ to your course and foster spaces outside of class, such as a discussion board or social media page where students can talk about common interests.

Also, as a community manager, remind students that they’re part of a larger campus culture—and that they’re not alone. Alert them to non-academic activities and resources, and share links to webinars and virtual events that may be of interest.



Fostering Social Connections Among—and With—Your Students

In a traditional classroom setting, students get to know each other through informal networking during and after class. Just because the class has moved online doesn't mean students should miss out on this

aspect of the learning experience. With physical distancing measures in place, it's perhaps even more important for instructors to make the effort to create social connections among students.

Get the process rolling by breaking the ice. This could be as simple as setting up a discussion thread called “introduce yourself” or using icebreakers (which are applicable in either a synchronous or

asynchronous learning environment). While it’s ideal to do this at the start of an online course, icebreakers can also be used as a precursor to group work.

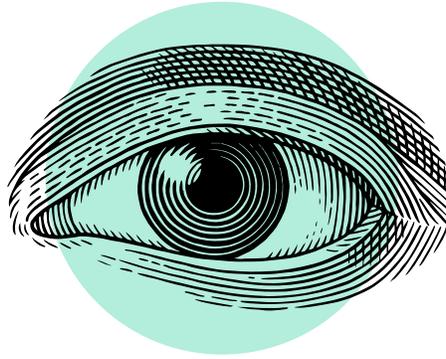


Online Icebreaker Exercises:

1. Classmate Quiz: Have students post introductions on a discussion thread. Give them a few days to read them all in preparation for a matching or multiple-choice quiz about their classmates—you can even entice them with bonus points for the winner.

2. Two Truths + One False: Students post three statements about themselves: two true, one false. Their classmates review and guess which statement is false (explaining the reason behind their guess). Students then reveal the false statement and list the names of students who guessed correctly.

3. Three Ps: Divide students into small breakout rooms where they share three facts with their classmates: something personal, something professional and something peculiar (such as a hobby or habit—nothing too personal).



Bringing Your Authentic Self to the Virtual Classroom



**JAMIE
POMERANZ**

*Associate
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University of
Florida*

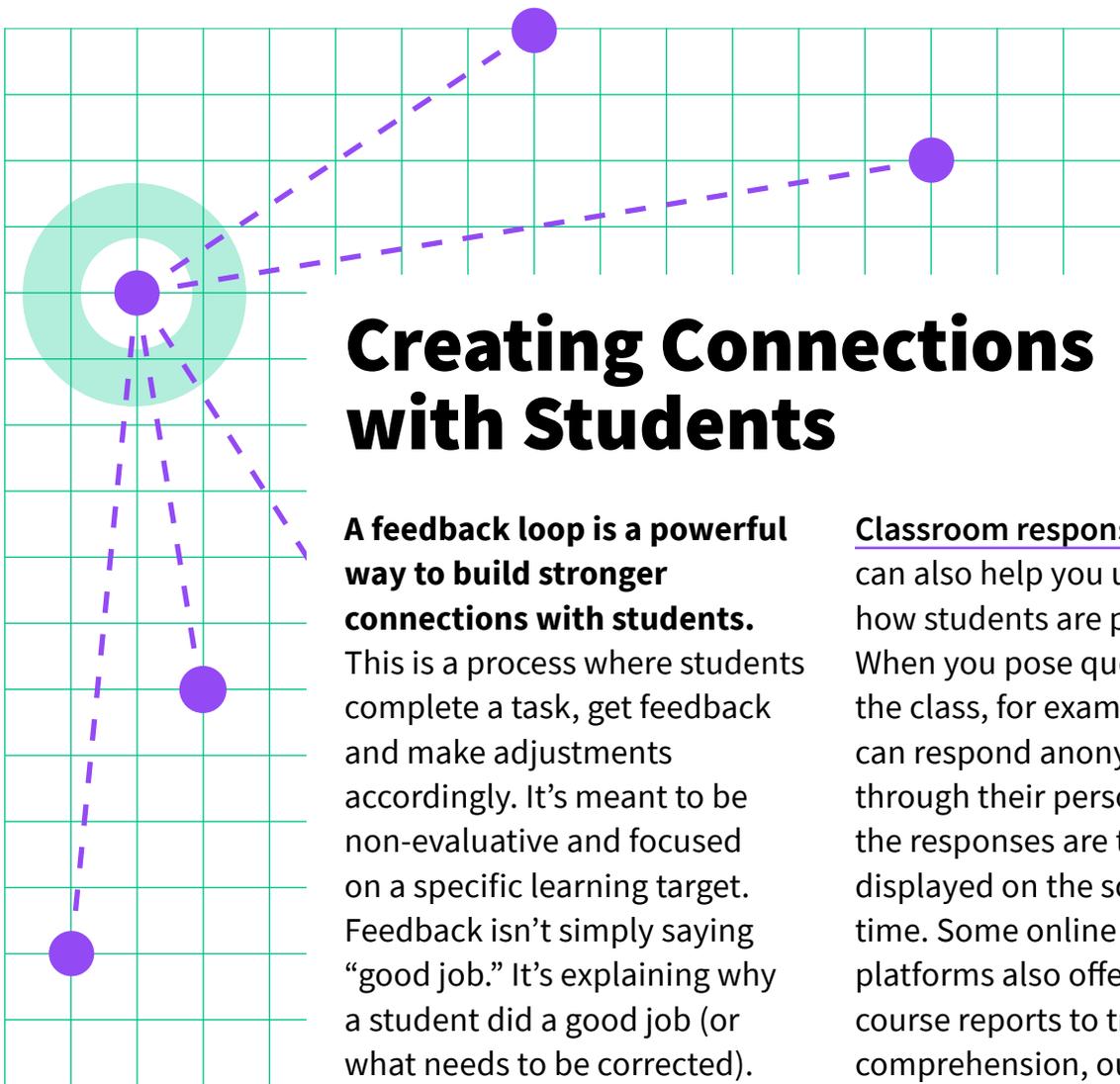


People often lose their ‘persona’ when they shift to the online world. But crafting an authentic and empowering presence as an instructor, or community manager, is more important than ever when students are feeling anxious, disconnected and isolated.

Establish your presence by providing some information that humanizes the person on the screen, such as your research interests or how you got into your field. While you want to build empathy, you don’t want to unload your stress or struggles onto students. “It’s one thing to empathize. Once you’ve reached that level of empathy, then you’ve got trust,” says Jamie Pomeranz, an Associate Professor of Occupational Therapy at the University of Florida. “From here, that’s an opportunity for us to really empower students.”

Empathy in the classroom can help students manage their anxiety during uncertain times—and keep them engaged

Empathy in the classroom can help students manage their anxiety during uncertain times—and keep them engaged. Take time to acknowledge the challenges they’re facing right now. Make sure they know you’re there for them with virtual office hours. This can help to build rapport with students, even if you can’t be together in the same room.



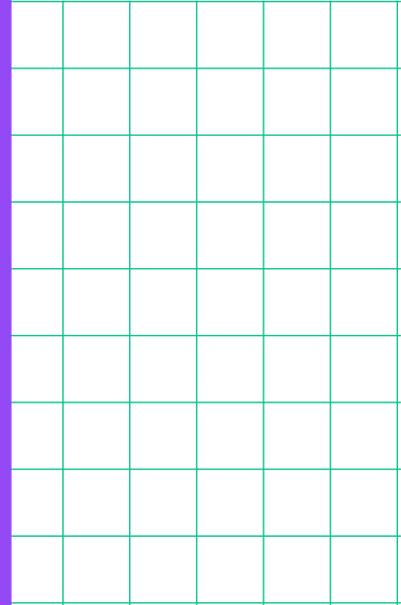
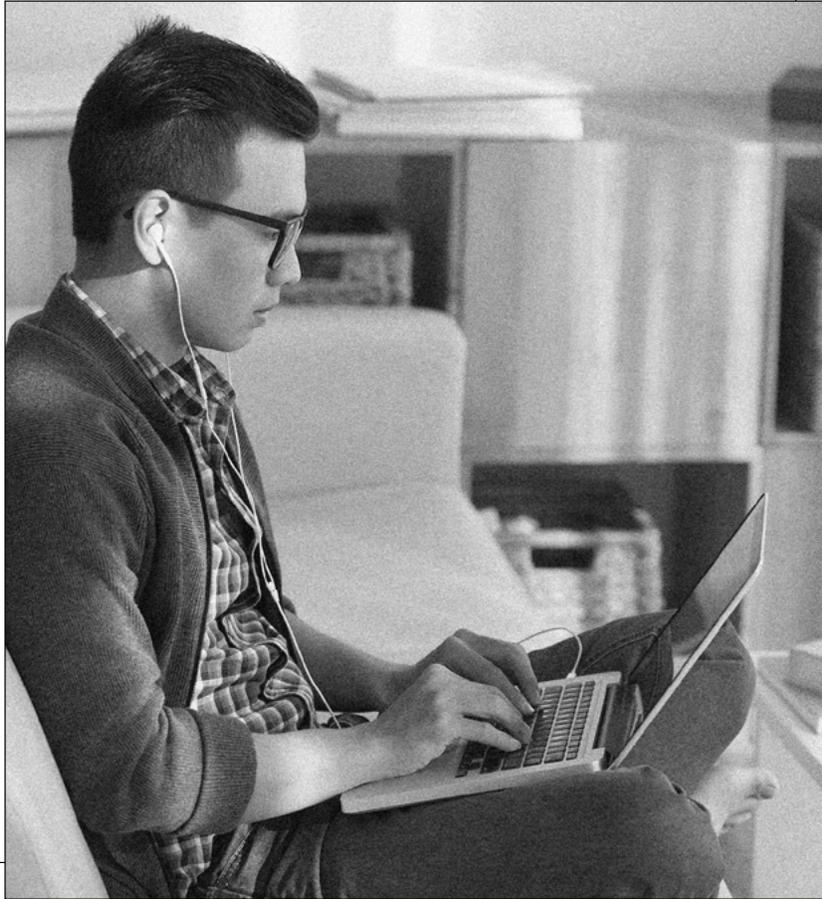
Creating Connections with Students

A feedback loop is a powerful way to build stronger connections with students.

This is a process where students complete a task, get feedback and make adjustments accordingly. It's meant to be non-evaluative and focused on a specific learning target. Feedback isn't simply saying "good job." It's explaining why a student did a good job (or what needs to be corrected). And it typically requires students to reflect on that feedback, thus creating a loop. Since this is an ongoing process, digital formative assessments can facilitate a continuous feedback loop. Using tools such as online assessments or apps like Top Hat, you can provide specific, immediate feedback to students, helping them to reset their trajectories—and helping you to evaluate student performance.

Classroom response systems

can also help you understand how students are performing. When you pose questions to the class, for example, students can respond anonymously through their personal devices—the responses are then displayed on the screen in real time. Some online learning platforms also offer weekly course reports to track student comprehension, outlining where they performed well and where they need more work (more on this below). This can make it easier to identify struggling students and reach out with helpful, actionable feedback.



Leveraging Insights

The Top Hat gradebook tracks student participation and results for every type of assessment. Educators can easily monitor progress at the course level and check in on individual students. Accompanying the gradebook, Top Hat's Weekly Course Report recaps students' performance in the form of weekly emails sent directly to your inbox, identifying those in need of intervention and providing actionable direction to keep students on track.

It could also be useful to find a mentor who is thriving in the online teaching environment, saving you time and unnecessary missteps. You can connect with experts on social media (with hashtags such as [#remoteteaching](#) and [#instructionalcontinuity](#)) to learn the tricks of the trade and make the mind shift from instructor to learning community manager.



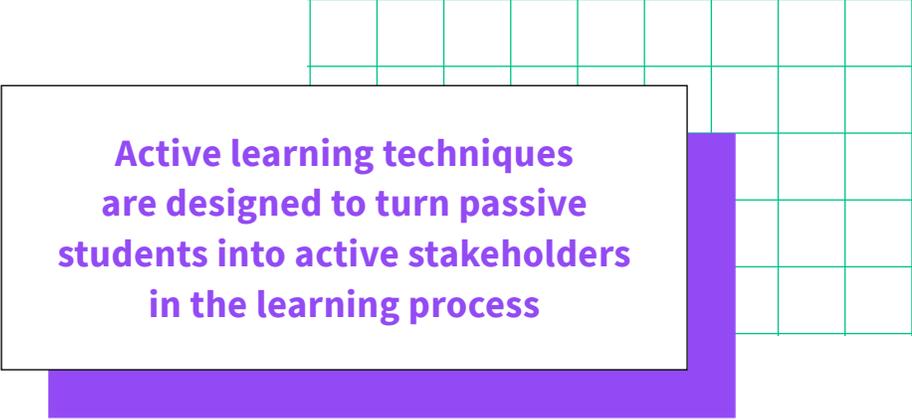
Tools for Engaging Your Students

When it comes to engaging students with interactive activities, the possibilities are endless. To get you started, download our Innovative Activities Template. It's a great starting place in aligning learning outcomes to questions and activities to stimulate your students.

PART
FIVE

10 Strategies to Make Online Learning Stick

The key to successful online learning—or any learning for that matter—is recognizing that durable, long-lasting knowledge is acquired when there is increased mental effort. In the world of the virtual classroom, that's often easier said than done. Beyond contending with many distractions that come with participating remotely, perhaps the most daunting challenge of all is human nature itself: Given the chance, most students will happily choose the path of least resistance. →



**Active learning techniques
are designed to turn passive
students into active stakeholders
in the learning process**



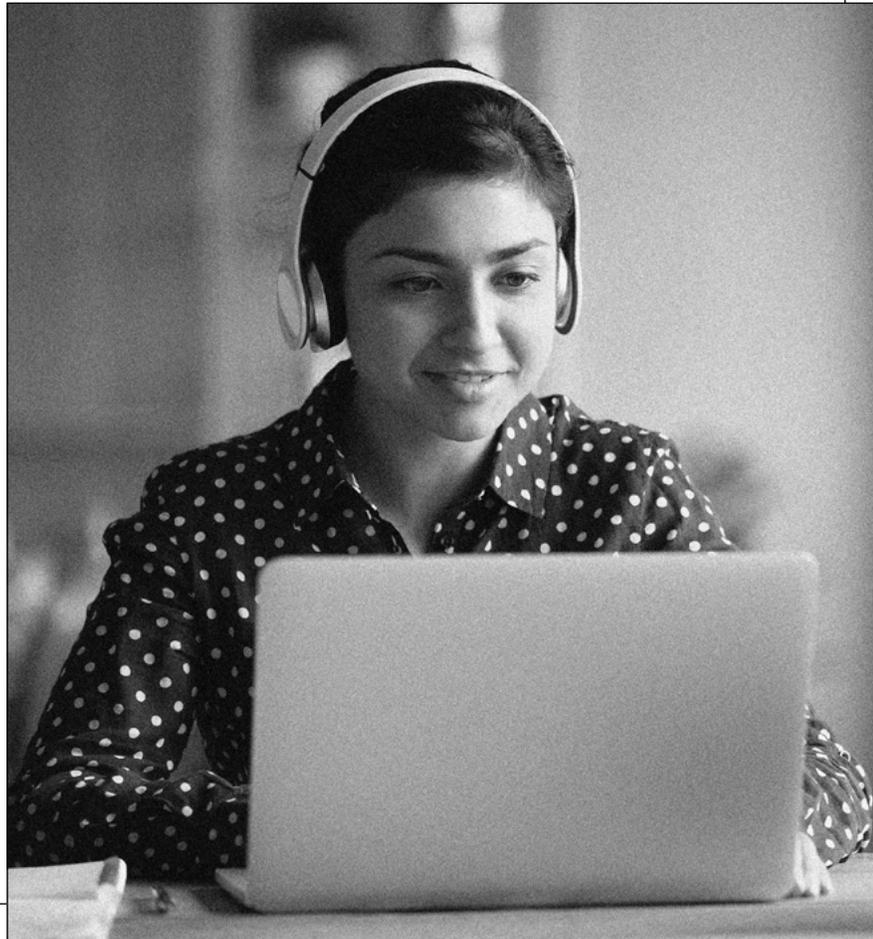
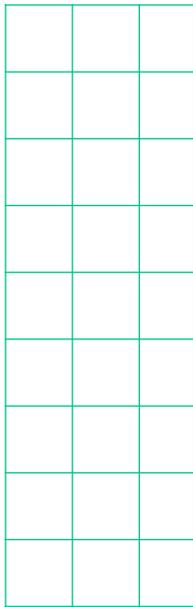
**ANDREA
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*Associate
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This is an issue that Andrea Hendricks, an Associate Professor of Mathematics at Georgia State University, Perimeter College, knows all too well. Looking back at over 19 years spent teaching online courses, Hendricks has come to recognize that if students see resources as unnecessary, they will simply bypass them. “They’ll skip readings or skim them in order to complete the homework questions,” Hendricks observes. “And while this might be enough to achieve a passable grade on an assignment, I found that a good portion of these same students would end up failing a high-stakes assessment.”

This is just one of the reasons why active learning has become the gold standard in higher education. Active learning techniques are designed to turn passive students into active stakeholders in the learning process. In practice, this includes employing a broad array of activities, from short, simple exercises like ‘minute papers,’ to much more ambitious interventions such as implementing a ‘flipped classroom’ to challenge and engage students.

Granted, flipping your classroom may not be part of your immediate plans, but just as drops of water fill a pail, even small changes can make a big difference to student learning. Here are some simple yet effective practices steeped in learning science that not only help engagement, but support student mastery as well.



The Big Five Learning Science Tactics

1. Generation Have you considered starting each learning module with a real-world problem for students to solve, even if they don't yet have the tools to do so? There's good evidence to suggest that the process of generation—or struggling with a concept before being formally introduced to it—helps prime students

for learning. Pushing students to use prior knowledge to solve new or different types of problems can help strengthen knowledge pathways. It also carries the added benefit of creating a “curiosity gap” by giving students a preview of what they don't know, instilling the motivation to learn more in order to fill in the gaps.



**JAMES
M. LANG**

Author of
*Small Teaching:
Everyday Lessons
from the Science
of Learning*

2. Elaboration As James M. Lang, author of *Small Teaching: Everyday Lessons from the Science of Learning*, explains, making connections between what you study and the world outside the classroom is what separates experts in a field from novice learners. “If we want students to develop expertise in our fields, then, we have to help them thicken up those connections,” says Lang. “The more connections they can create, the more they can begin to formulate their own ideas and gain a wider view of our fields.”

Elaboration is one way to do exactly this. The process is simple. It focuses on having students summarize concepts in their own words or connect new material to past experience and knowledge. Typically this involves using ‘how’ and ‘why’ questions that challenge learners to explain what they have learned and create linkages between ideas by illustrating how they might work together. Having students take five to 10 minutes to write down their responses is a great way to wrap up each section of your syllabus. The responses can also be shared on a discussion board to stimulate further discussion.

3. Retrieval Asking students to recall facts from memory forces them to step back and examine what they already know. Retrieval is an effortful process. It requires struggle, which helps strengthen memory while surfacing potential gaps in understanding. A common approach is using frequent low-stakes quizzes or asking students to write down everything they remember about a given topic. You can also intersperse retrieval-based questions throughout homework and reading assignments to shift students away from passively consuming information to actively thinking about what they do and do not know.

4. Spaced Practice There is good evidence to suggest that the more opportunities students get to learn something, the greater the chances they’ll have of mastering the topic. As the authors of *Make It Stick: The Science of Successful Learning*, explain, “embedding new learning in long-term memory requires a process of consolidation.” The most important ingredients in this process are time and repetition.

Spaced practice can be as simple as revisiting the most important or challenging topics of a course across multiple classes. To make the process more demanding, Andrea Hendricks makes a point of adding questions on homework assignments students may have missed from prior tests or returning periodically to topics that are essential to the course. Spreading learning opportunities over time is one of the reasons why many educators ensure that at least a portion of any high stakes exam is cumulative.

5. Interleaving Working on the same problems using the same approaches over and over can create the illusion of mastery, missing opportunities to help students create deeper, more sustainable learning. Research suggests that students learn more effectively when they regularly switch between different but related topics. The process of interleaving challenges learners to practice solving different types of problems by forcing them to retrieve different approaches and types of information.

Admittedly, interleaving can be challenging for students, leading to mistakes and some degree of frustration, at least initially. Nevertheless, over the long run, the effort required on the part of students has been shown to result in significantly better knowledge retention. For this reason, it's important to remind students that the struggle itself is an indication that they are on the road to mastery, even if it doesn't feel that way in the moment.



Putting Learning Science into Practice

Space Out Deadlines and Tests

Leverage the power of spaced learning by creating more frequent, moderately sized tests and assignments. As James M. Lang suggests, “multiple short papers will beat that one long one, and will better prepare your students for that one long one. Weekly quizzes, writing exercises, or problem-solving sessions will help even more.”

Spaced Syllabus

Integrate your syllabus into the ongoing learning process. Consider giving students low-stakes or no-stakes quizzes to practice retrieving knowledge and concepts from prior modules. Or have them practice elaboration by comparing what they learned that day to concepts from earlier in the course.

The Minute Thesis

What was the most important thing you learned today? What is the muddiest point? Allotting a few minutes at the end of class to respond to these questions helps solidify concepts and clarify areas of weakness in students’ minds. Using a discussion board to capture responses will also help you zero-in on concepts that may require revisiting.

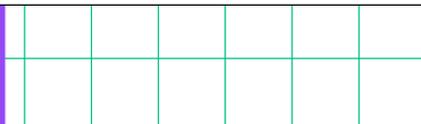
**Connection
10**

James M. Lang suggests that to grow those neural networks, have students dedicate 10 minutes at the end of class to reflect and write about what they've learned. Why does the concept matter in the world outside the classroom? How does it manifest in the day-to-day lives of students? How does it connect to what they learned the previous week?

**Student-
Generated
Exam
Questions**

Having students submit ideas for exam questions is a creative and effective review activity that also helps solidify connections between different concepts. It also has the added benefit of giving students a say in the testing process, which can be a powerful motivator. The key is to include at least a portion of these questions on the actual assessment.

The ultimate goal of these tactics is to lead students to deeper, longer-term learning while overcoming the illusion of mastery that comes with more passive approaches to learning. The good news is that wholesale changes to course content aren't essential. Introducing small changes and being consistent can lead to significant gains—not only in comprehension but student engagement as well.

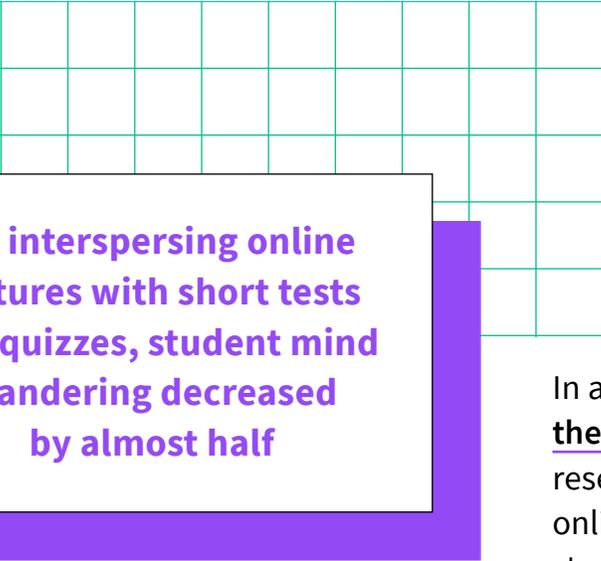




PART
SIX

How to Assess Your Students Remotely

One of the chief concerns about online learning is the sheer number of distractions students face simply sitting at their computers. Email, social media, YouTube—the opportunities to focus on anything but the task at hand are both tempting and endless. So how do you ensure students sit up and pay attention? One solution may be testing students early and often. ➔



By interspersing online lectures with short tests and quizzes, student mind wandering decreased by almost half

In a paper published in the Proceedings of the National Academy of Sciences, Harvard researchers found that by interspersing online lectures with short tests and quizzes, student mind wandering decreased by almost half while note-taking and retention of course

material increased substantially. Turns out that giving incentives to pay attention yields many benefits, with the added bonus of reducing the feelings of anxiety many students associate with test-taking itself.

When it comes to the virtual classroom, there are many options to help students and instructors monitor progress against learning objectives. But before jumping in, it's good to consider the different reasons for assessing students in the first place.

Assessment of Learning: Gathering evidence on student achievement relative to learning outcomes is what we typically think of when it comes to assessments. Although the primary motivation is to evaluate and grade students, even high-stakes summative assessments offer important opportunities to provide feedback and encouragement to fuel the ongoing learning process.

Assessments for Learning: This involves gathering insights to clarify student knowledge and comprehension with the goal of *improving* the quality and impact of instruction. Sometimes referred to as 'formative assessments,' these evaluations for learning take place throughout a course with the aim of identifying misconceptions and areas of struggle. Quizzes, writing assignments, homework questions as well as self-assessments can all be used to identify learning gaps and shape feedback to motivate students.

Assessments as Learning: The focus here is having students monitor and reflect on their own learning. What do I know? What can I do now that I couldn't before? What's confusing to me? Having students complete a 'minute paper' on what they've just learned is one easy and efficient way for individuals to assess their understanding of key concepts and clarify areas requiring further focus.

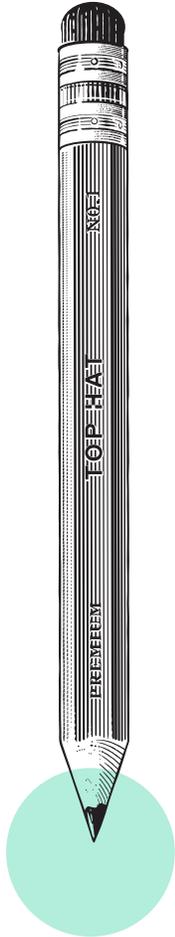
Examples of Formative and Summative Assessments

Formative

- Weekly quizzes
- In-class polls and discussions
- Minute papers
- Homework assignments
- Student surveys
- Projects with peer review
- Case studies

Summative

- Midterms or final exams
- Essays
- Reports
- Projects
- Portfolio reviews
- Presentations
- Poster sessions



Going Beyond Multiple Choice

Technology doesn't have to limit your options for assessing students. With a little planning and a little ingenuity, you can gather useful insights to support student progress and create meaningful experiences to mark the end of the semester. An ed tech platform like Top Hat can be invaluable in instituting any variety of [these formative and summative assessments](#).

Open Book Exams

In an open book exam, students are allowed to access notes, texts and other resources, the goal being to test their ability to find and apply information. For this reason, most instructors design open book exams to be slightly more difficult than an exam with no aids. Focusing questions on applying, analyzing, synthesizing, comparing or evaluating information will help minimize any advantages searching the internet, as will ensuring questions focus on lecture content and discussions.

Give careful consideration to allotting a realistic period of time for students to complete the work. You might also specify the length of responses to the questions to avoid students providing answers that are longer than necessary. Make sure to inform students about what to expect and, if time permits, give them an opportunity to practice. Ensuring you are accessible throughout the exam period, via email, for example, is also important since students will invariably have questions and potential technical issues to navigate.

Asynchronous Assignments

Asynchronous assignments involve having students tackle something new that allows them to apply knowledge gained throughout the semester. You might provide a problem to solve

or have them write a paper or report that lets them utilize learning from the course by analyzing and evaluating content. The room for creativity is endless. Beyond reports and essays, you might have students create an annotated portfolio of their learning—something that can be reviewed but that also serves as a keepsake from the course.

Culminating Summative Projects

The idea behind a culminating summative project is to have everything in your course build up to the same, singular assignment. To prime students for what's to come, you could have the class attempt a major research project or final paper at the beginning of your course. Then use the rest of the semester to improve and refine their final submissions.

Executed with the benefits of a digital learning platform, you can provide ongoing feedback on different iterations of the same project digitally. By treating your entire course in this manner, you create opportunities to provide mentorship and reward improvement as students progress. The constant revisiting and revising of material can also have lasting effects on knowledge retention. So you can be confident that students have not only achieved but sustained mastery of the material.



**ANTHONY
CRIDER**

*Professor of
Astrophysics at
Elon University*

Epic Finales

If you're looking for creative inspiration, Anthony Crider, a Professor of Astrophysics at Elon University, has an interesting take. Crider has championed the idea of the 'epic finale' in place of a final exam. This involves having students tackle something new that allows them to apply knowledge gleaned throughout the semester in a creative way. Or giving students the opportunity to create something of their own that they can take away as an artifact of their learning. Depending on the curriculum, this may be a more meaningful (and practical) way to end the semester.

Group Projects

Whether assigning group-based or individual submissions, consider having students tackle a group project using the 4-S style of problem solving. This is where students are challenged to state the problem, structure the problem around possible solutions, solve the problem and, last, sell the solution. Depending on timing, drafts of smaller portions of the major project can be submitted earlier in the course, so it feels like a culmination rather than a singular event.

Video conferencing solutions make it easy for students to collaborate on assignments. Using recording software like Loom, students can also record the content on their screen and video feed, all in one go. These recordings can be submitted, giving instructors the flexibility to review student work at their convenience.

Remote Proctored Tests

For many educators, anything beyond a timed proctored exam is simply not an option. This is often the case for those overseeing courses that are required for accreditation. The good news is remote proctoring solutions have come a long way. Advanced solutions offer the ability to validate student identities, monitor for irregular behavior and use timesaving features like autograding to assess results quickly and accurately.

Before taking the remote proctoring plunge, make sure to inform students about the procedure ahead of time. What is and is not permitted during the test taking? What are the system-specific requirements students will need? Beyond effective communications, if time permits, walking them through the test-taking experience and providing practice questions can help set students up for success. Last, be sure to have a contingency plan should students encounter any technical difficulties. If a student's computer crashes, what alternatives might you provide?



Tools for Choosing the Right Remote Assessments

Bloom's taxonomy is one of the most useful tools available to educators. Why? It's the answer key to how students learn and helps equip educators with the knowledge they need to design valid assessment techniques. This handy [guide](#) and [worksheet](#) are designed to help you identify the most appropriate assessment based on the level of student learning you seek to assess.

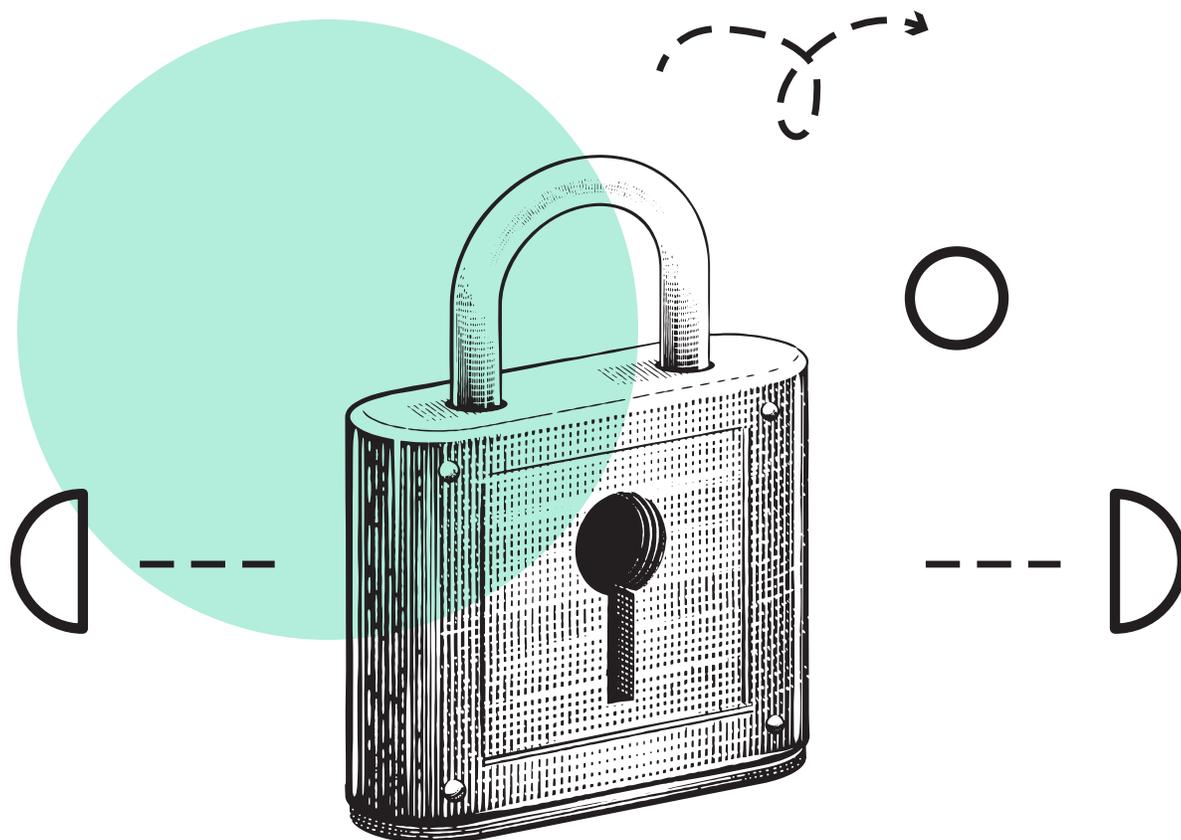


The Importance of Creating New Learning Experiences

Students were okay with “good enough” online learning at the height of the pandemic, according to Top Hat’s [recent survey results](#). But they will be less likely to put up with mediocre learning for another term. While the grand experiment has so far been met with mixed results, the good news is that many students see value in the flexibility of online learning. In fact, more than one in three would prefer a blended approach, with both in-person and online components. ➔

The key to success is improving the online experience and ensuring students see the return on their academic investment. Getting this right is now critical to the immediate and longer-term future of higher ed. Even when institutions reopen their physical doors and life returns to 'normal,' the ability to teach online,

in-person or some combination of the two will yield important benefits in terms of flexibility and dimensionalizing the learning experience. As educators and students grow more comfortable and more confident with the virtual classroom, so do the opportunities to infuse learning with new experiences and new possibilities.



The Best Way to Teach Online

Top Hat's active learning app helps professors deliver engaging experiences that motivate students in online, blended and face-to-face courses. [Top Hat Pro](#) offers a robust set of virtual classroom capabilities perfect for any real-time or self-paced learning environment. [Top Hat Basic](#) is a free platform designed to increase engagement and motivate students in synchronous classrooms.

Turbocharge Your LMS

Unlike your LMS, Top Hat is designed for engagement first. It includes many useful features for course management and content delivery and syncs seamlessly with any LMS. Plus, with our best-in-class support and instructional design team, we will get your course up and running fast.

Enable the Virtual Classroom

With video streaming, live chat and moderation tools available inside the Top Hat platform, you have everything you need to deliver a live lecture or host an interactive class meeting.

Make Content Available

Asynchronously

Seamlessly capture presentations and class participation with recordings of live lectures, so students can review later without missing out on the “in-class” experience.

Maximize Accessibility

Reach every student with the option to dial-in for class meetings. Automatic transcription is also available for lecture recordings. Mobile improvements mean students can complete readings and assignments from anywhere.

Top Hat at a glance

	Pro	Basic
Voice & video conferencing	✓	✓
Slide presentations & editing	✓	✓
Screen share	✓	✓
Moderation controls	✓	✓
Whiteboard	✓	✓
Hand raise	✓	✓
Dial-in option	✓	✓
Record session	✓	✓
Automatic attendance	✓	✓
Interactive polls & quizzes	✓	✓
Live chat	✓	✓
Discussion threads	✓	✓

	Pro	Basic
LMS gradebook integration	✓	✗
Student performance insights	✓	✗
Auto-assign grades for attendance & participation	✓	✗
Auto-grade polls & quizzes	✓	✗
Assign homework	✓	✗
Schedule and run tests	✓	✗
Student browser lockdown	✓	✗
Remote proctoring	ADD-ON	✗
Interactive digital textbooks	ADD-ON	✗
Authoring, editing & customization tools	✓	✗
1:1 instructional design	✓	✗
Professor tech support	CHAT, PHONE, EMAIL	EMAIL
Student tech support	CHAT, PHONE, EMAIL	EMAIL

Want to learn more about how Top Hat can help you drive student success in your online or blended courses? [Visit tophat.com/demo](https://tophat.com/demo)