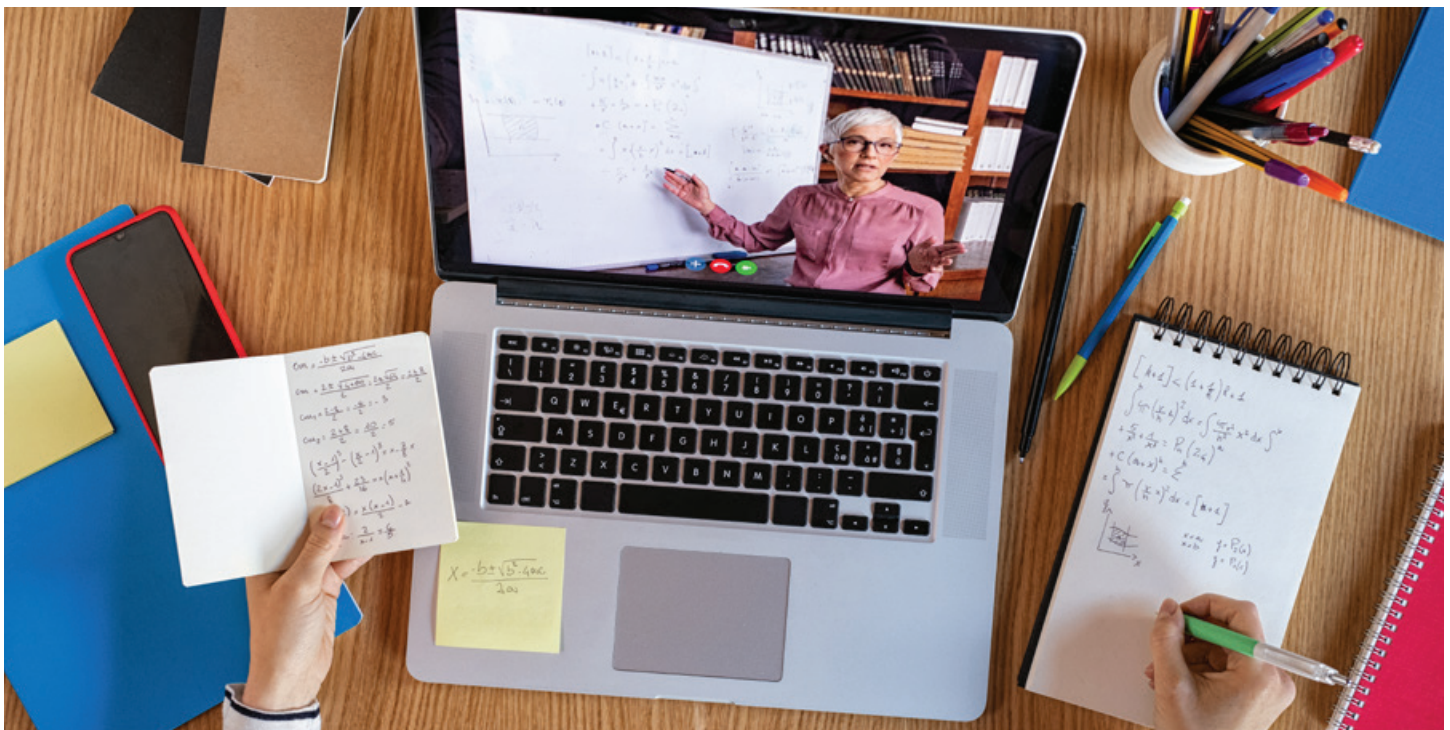


# Getting Ready for a Flexible Fall

Now that schools are reopening with a mix of in-class and at-home learners, the hyflex model of instruction is a necessity. Current conditions don't require you to give up on student collaboration. Here's how to make it work.



If you're wondering what teaching will look like in the fall, the best advice we've heard is to be prepared for whatever. Flexibility is the main ingredient. While you can expect some students to return to class, the reality is that not everybody will be able to. That means teachers need to ready themselves to teach in the classroom while also connecting with students who will be tuning in for their lessons from home.

In this kind of set-up, the concept of the "blended" or "hybrid" class takes on a new meaning. Traditionally, a blended class is an approach in which the teacher uses a mix of at-home activities and in-person activities. The student goes online for some types of learning (such as watching a video of the teacher explaining the basic concepts) and then meets up in class to participate in discussions and undertake team projects. Now, the concept encompasses another dimension: the idea that some students will be in-room and some not—a "hyflex" model. But the same enrichment activities can still work.

The hardest part will be to come up with creative lessons that can be done with safe physical distancing in class while also meeting the needs of remote students. Fortunately, education technology will provide the bridge to bring everybody together.

This article offers guidance for helping educators engage students no matter where they're learning from.

## An Idea Borrowed from Higher Ed

The "hybrid-flexible" or hyflex model was pioneered by Brian Beatty, an associate professor of instructional technologies at San Francisco State University, more than a decade ago. The initial impetus was to serve both in-person and online students at the same time when resources—time, space and teachers—were limited. Many institutions have turned to hyflex as a way of boosting enrollment.

Now, 10 years later, hyflex is an idea whose time has come in a big way, not just for colleges and universities but also for K-12, with a twist. Rather than using hyflex to combine online and in-person students in sufficient numbers to justify offering a specific course, it's going to become standard operating procedure for many schools for the foreseeable future as a way of reaching all of their students.

## Setting Up Hyflex in the Classroom

What would hyflex look like in a classroom? "First, the in-person students are going to be spread out," said Ryan Pitterle, product manager and education evangelist for Sharp NEC Display Solutions of America. "Schools are going to do their best to remove any unnecessary furniture so students can tuck themselves into every corner of the room."

Rather than groups of students coming up to a main collaboration board to work on problems simultaneously, they'll be doing that from their devices in their hands, which will be displayed onto the wall or screen with a projector, Pitterle added. That will include those who are in the classroom and those working from home. Everybody's work will be seen. Teachers will use those collaboration boards to deliver instruction, which can be watched by learners in person, of course, but also seen by the remote students via camera or webcam pointed at the teacher.

"You definitely want the kids to be able to see their teacher," Pitterle noted. "That goes a long way in remote learning just to give a student from home a sense that they're there in the room."



A big point of the set-up, he said, is that hyflex uses the same gear in the classroom that teachers are already familiar with: a shortthrow projector, an interactive collaboration board and software, such as Google Classroom, for sharing multiple displays.

## Why Ultra Short-Throw is Better for Hyflex

For collaboration work the ultra short throw projector has two big advantages over the traditional projector strung up in the middle of the classroom. First, because ultra short throw projectors are mounted close to the wall and above the screen or whiteboard upon which they're projecting, the effect of shadowing that blocks visibility of what's being displayed is drastically reduced. That makes a big difference for the viewers at home. Second, the teacher isn't blinded by the light of the projector.

NEC's UM383WL ultra short throw projector has an additional benefit: It runs on LEDs and is lampless. No more worrying about whether the lamp will burn out just as the teacher gets to the climactic moment in his or her lesson. This model projects up to a 130-inch diagonal view of video and images, making it viewable from every corner of the room even if students are spaced apart.

Another consideration: Make sure your projector is as bright as possible (measured by lumens) because that'll improve viewing for students in the classroom no matter how far back they need to sit.

## Choosing the Right Interactive Display

One thing a teacher doesn't want to have to do is juggle a computer while standing at the display. Choosing the right kind of interactive, large-format display enables the teacher to walk up to the screen and flip through the pages of the presentation without having to touch the laptop or use a clicker. He or she can interact with the display as if it were a giant mouse. (For safety these days, that means using a simple stylus to take the place of a fingertip.)

As an example, the NEC Collaboration Board ("CB") series of displays can accommodate up to 10 interaction points and the built-in system-on-a-chip or SoC includes software for wireless presentation, web browsing and annotation.

But choosing the right display, said Pitterle, comes down to more than technical specifications. "You have to consider what technology is right for your space and what your specific goals are for instruction. You also need to consider what type of longevity you need from your display products, what the maintenance requirements are and what level of support is expected for your organization. What the decision really comes down to is how well the vendor can cater to the environment and the experience that's unique to education."

One aspect is the software that connects all of the various displays in the room. It has to work simply and not get in the way of instruction. The best option will work with a mix of equipment—the projector, computers, displays—including those from multiple companies. If something like Google Classroom isn't in use, NEC offers Mosaic Connect, a wireless presentation program that streams content from devices to the main display.

Plus, management has to be easy. On the IT side, Sharp NEC produces NaViSet Administrator, a network-based asset management application that allows for remote operation of equipment, such as turning displays and projectors on or off, tuning the settings and automating the process of detecting technical problems and notifying tech support.

Then there's the warranty, to help districts extend the value of their IT investment. NEC displays, for example, come with standard warranties of three years, but schools that participate in the free Star Student education program bump that up with an additional year. The Star Student program extends NEC projector warranties to 5 years.

"Everything we're doing is built around flexibility," Pitterle said. "Going into a job, we ask ourselves, what can we leverage to make your life easier?"

## Yes, Collaboration Still Matters

For the time being teachers won't be designating small groups of learners to work in physical "huddles" or "pods." But that doesn't mean collaboration goes away; it simply takes a new form.

"There's still the same technology in the room. The purpose is just slightly different right now," Pitterle observed. "And then we'll come out of this and that collaboration board can be shared and small groups can gather around it and touch it; and the students sitting in the back of the room will be able to move closer to whatever's being taught that day."

By using display and projector hardware and software that educators already have experience on, they can turn their classroom into a hyflex space that engages students and keeps their learning on track.



Here are five ideas that lend themselves well to collaboration in the hyflex model.

### 1 Webinar Collaboration

Stream experts from the sciences, the arts or tech to make short presentations and take questions from your students that will open up their horizons. Right now, many people are stuck working at home when they'd rather be traveling the world because that's their job. Why not bring your class to them through an online guest lecture? It gives you a break from teaching and students a break from looking at each other, supports any number of subjects that you're covering in your lessons and lets professionals in the field hear from the next generation.

For local experts, reach out to your area colleges or chamber of commerce for referrals. For national or international experts, contact universities, museums and science centers; the education liaisons at professional associations in the relevant field; or organizations such as Science Buddies, NASA or National Geographic, all of which will often provide guest speakers to support education.

### 2 Team Teach

Join up with another teacher to hand off control. There's a reason so many news shows have two anchors. It's just more interesting for the viewer or the listener. People pay more attention when the voice changes, along with the face. Seek out other teachers in your grade or subject and undertake lessons together. The important point is to show both of your faces to students in class and at home and switch back and forth as you work through your lesson.

Also, by tapping both of your teaching super-powers, you can more easily differentiate among groups of students based on their learning needs. One of you can act as the primary teacher, walking students through the lesson, while the other teacher works in the background, taking

attendance, providing technical support; analyzing the results of student polls, answering student questions in the background, popping relevant links into the presentation window and other essential aspects of a live session.

Work up the choreography of your live sessions beforehand in a dress rehearsal. Otherwise, you'll lose the attention of your audience of students. Also, make sure you record your lessons so that students who couldn't attend during the live session can watch it for credit at a different time. (Make sure they provide you with some form of evidence that they've tuned in.)

### 3 Publishing

Encourage students to work in small teams to journal and vlog daily about their learning experiences and other stuff happening in their lives during this unique period. WordPress, Google's Blogger or Square's Weebly all allow you to set up free blog sites.

As they're going through this truly historic event in their lives, encourage your students to work in virtual small teams keeping an online journal about their experiences, with text, video, audio and images. Just make sure that for whichever blog program you choose, you learn how to set the privacy settings, to keep their journals private to the class.

### 4 Field Trips

Visit museum collections online or other kinds of sites that have limited offerings for the public right now to share other worlds with your students. No, you don't need virtual reality headgear to make this work. A big screen and display plus high-speed internet will do just fine. Among the more intriguing organizations that have set up virtual tours are these:

Smithsonian National Museum of Natural History in Washington, D.C. and the American Museum of Natural History in New York City, which allow for virtual exploring at your own pace

NASA's Langley Research Center and Glenn Research Center, which provide walk-arounds as well as explanatory videos

San Diego Zoo, the Houston Zoo and Monterey Bay Aquarium, all of which offer numerous webcams for monitoring favorite animals The Google Arts & Culture website provides clickable access to art and historic events and Google Maps offers virtual explorations of significant locations (Venice, Mt. Fuji, an Everest Base Camp, Churchill, the pyramids of Giza, the Colorado River...)

For a more timely learning experience, the National Museum of African American History & Culture is participating in a community curation program, encouraging members of the African American community to document their experiences of the pandemic and the mass protest movement through "Voices of Resistance and Hope."

Before introducing these places to your classes, just make sure to learn the basics of operation and to practice using the tour services yourself.

### 5 Do the Brady Bunch

Come up with a read-aloud or performance project where each student contributes to the whole and then a team of students edits the final results. If the recording is done in a single sitting, video production can start by having them record a Zoom or Microsoft Teams session and editing the MP4 generated from that. Or you can use the split screen or collaboration functionality of these programs:

- **Adobe Spark**
- **Binumi**
- **Clips and iMovie from Apple**
- **Screencast-O-Matic**
- **TouchCast Studio**
- **WeVideo**



Christopher Bill, a trombonist who was creating ensemble music videos and posting them to YouTube long before schools closed campuses in the spring time has shared an excellent six page Google Doc on multitrack editing that includes plenty of details for pulling off similar efforts among your students.

For more information, please visit [www.sharpnecdisplays.us/solutions/education/11](http://www.sharpnecdisplays.us/solutions/education/11)

*For additional information about Sharp NEC Display Solutions of America products, call (866) NEC-MORE, or visit the website at [www.sharpnecdisplays.us](http://www.sharpnecdisplays.us). Follow us on our social media channels: Facebook, YouTube, Instagram, Twitter and LinkedIn.*