The Right Technology Can Make or Break Hybrid and Distanced Learning Models

If the COVID-19 pandemic had happened just a few years ago, its social and economic impacts would have been manifestly more devastating on every conceivable level. The truth is, it was not because companies like Sharp/NEC and their technology stepped up and came to the rescue.

The corporate world asked: "How do we maintain business continuity?" The answer for many was fairly straightforward. Those who could work from home did. They connected to high-speed Internet, logged into video conferencing apps for meetings and got to work. Businesses quickly noticed an unexpectedly high level of productivity among their remote workforces, causing them to reconsider, possibly permanently, their corporate organizations, office spaces and workflows. A Gartner survey found that 82 percent of company leaders plan to offer remote work at least some of the time after the pandemic–and workers are generally happy with this evolution. More than half of employees reported that, if they had a choice, they would prefer to keep working from home, according to a survey by the Pew Research Center.

In the world of education, the answer wasn't quite a simple, but thankfully, technology made it possible. During the shutdown, students were sent home and schools had to bridge the gap between historically successful pedagogical approaches and the "new normal" of distance and hybrid learning. Not knowing any better, schools jumped into online classes with the hope that with everything online, everything would be fine. They quickly found that online and eventually hybrid environments with students either remote or in the classroom left out some critical elements such as the human aspect or the art of teaching.

Schools asked, "How can we maintain the continuity of the teacher's teaching style … while also maintaining the quality of instruction … while also meeting the education requirements of the students with different learning styles … and not break the bank?" Sharp/NEC provided answers to the challenges not only during the pandemic, for many years to come as well. Audio/visual display technology was the keystone to solving these issues. Sharp/NEC developed solutions to meet the four scenarios that encompass most in-person, hybrid and distanced learning situations.

Scenario 1: Smaller rooms, larger screens, fewer students

This scenario allows for social distancing within smaller spaces. Screens such as the E558, 55" 4K UHD Display are used. It's important to have 4K technology so students far away can see the screen and those in close can also clearly see the content without any pixilation issues.

Scenario 2: Larger rooms, larger screens, socially distanced students.

This scenario calls for half the number of students to be in the classroom for social distancing. Larger screens and projectors such as those in the ME and MC Series with greater brightness and the longest lamp life on the market (20,000 hours) are needed so students in the back of the room can see the content clearly.
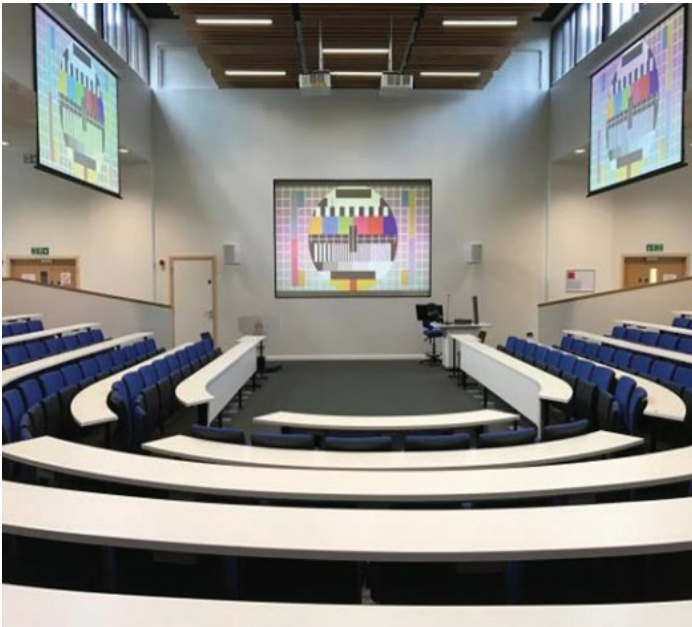
Scenario 3: Personal spaces, personal screens, remote students.

This is a pure virtual learning situation where students and the instructor are all completely remote. The display technology that is needed to optimize the experience includes cameras, desktop monitors, large LCD monitors, and projection systems of various sizes. Again, bigger is better. The reason is small laptop screens add to a growing concern called computer vision syndrome for both students and teachers. According to the American Optometric Association, computer vision syndrome, or digital eye strain, which describes a group of eye- and vision-related problems, can result from prolonged computer, tablet, e-reader and cell phone use. If students have a larger screen, their eyes do not have to work so hard to see, read and comprehend the information.

Scenario 4: Mid-size room, multiple screens, present and remote students

This is a hybrid situation that is most similar to traditional environments. Screens are mounted or projected to the back of the room. The instructor can stand at the front of the room and still see the faces of all the students in the class. Of all the scenarios, this allows the teachers and professors to maintain their teaching style, enable continuity and quality of instruction with the greatest amount of natural, personal interaction.

Sometimes the answer is even outside these four main scenarios and a flexible, mobile solution is called for. Many schools and universities have implemented an a la arte, "on a cart" approach by purchasing several 65-inch, 4k monitors. The monitors are installed on a wheeled cart with a camera and stand-alone PC to use among several rooms. When video conferencing is needed, the cart can be rolled into the classroom and education can commence.

As these scenarios prove out, technology can deliver better results, but it must be flexible and meet the demands of the situation, and that can often change from teacher to teacher. This includes the needs of the class, but also how technologically the teacher is. If they are comfortable with technology, there are few hurdles for teaching and learning. If they are not as familiar with technology, it can be a big barrier. As such, regardless of the scenario that is needed for the classroom, the technology must be high-quality, yet extremely easy to use.

Sharp/NEC has engineered its solutions to be powerful, energy efficient, long lasting, and easy enough for anyone to use. Because of this technology, schools and universities can overcome the obstacles brought on by the global pandemic and remote learning so teachers, instructors and professors can fulfill their purpose and provide better student outcomes.