

# Elevate Learning Environments with S3's Customized Facility AV Solutions

Exploring the Power of Audiovisual Technology in Transforming Education



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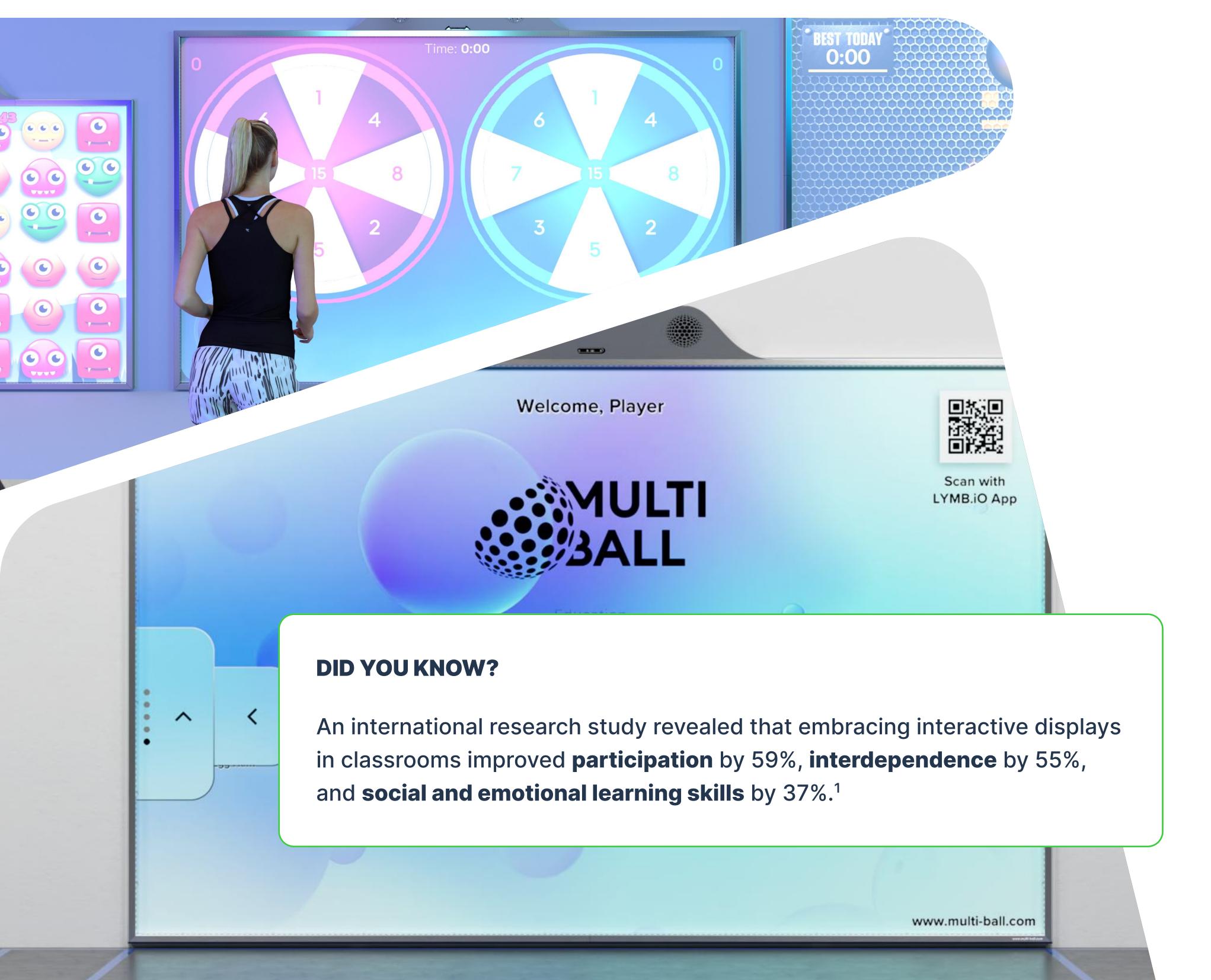
# Enhancing Classrooms with AV Technology

Good teaching goes beyond traditional textbooks—it's about harnessing the power of technology. Audiovisual tools like interactive screens and speakers bring lessons to life, amplifying every word and making lessons more vivid and engaging. These tools captivate students, drawing them deeper into their learning journey.

Transform your learning approach with S3 Tech's customized <u>facility AV solutions</u>. Our commitment to providing high-quality AV systems for schools can make classrooms more interactive and powerful, propelling your students' learning experience to new heights.

This e-book covers different types of AV solutions and how they can enhance learning environments, from interactive displays to crystal-clear videoconferencing.





# A Closer Look at Classroom Audiovisual Solutions

#### **Interactive Displays**

Interactive displays in education may look like a large TV, but they're designed for much more than passive viewing. These LED or LCD touchscreens allow users to directly manipulate digital content, making them ideal for boosting engagement in educational and business settings.

Interactive sports walls, such as <u>MultiBall</u>, are one example of interactive displays. Combining physical activity with digital learning, they balance free play and structured lessons, allowing students and teachers to take active breaks while playing enjoyable activities on one dynamic platform.

<sup>&</sup>lt;sup>1</sup> K-12 Dive, "Research reveals large interactive displays are vital to the classroom ecosystem," June 7, 2017, <a href="https://www.k12dive.com/press-release/20170607-research-reveals-large-interactive-displays-are-vital-to-the-classroom-ecos/">https://www.k12dive.com/press-release/20170607-research-reveals-large-interactive-displays-are-vital-to-the-classroom-ecos/</a>

Meanwhile, interactive displays like the Clear Touch 6000A+ benefit both teachers and students by promoting active learning. Instead of passively receiving information, students can engage directly with the content. For teachers, they offer a versatile platform to access digital resources, present dynamic lessons, and adapt content to student needs—freeing up more time to engage with students individually.

Let's explore some crucial features of interactive displays that boost ease of use and educational effectiveness.

- **Responsive Touch Technology**: Interactive displays respond intuitively to touch, letting students navigate, write, and interact directly on the screen with either their fingers or a stylus. This enhances engagement and allows students to explore content at their own pace.
- Collaborative Multiuser Access: With multi-user functionality, multiple students can interact on the display simultaneously, fostering group work and collaborative problem-solving. Cloud integration also allows students and teachers to access materials remotely, promoting a flexible and inclusive learning environment.
- Seamless Digital Integration: Interactive displays easily connect with other digital tools, from presentation software to online resources. This ease of integration means teachers can bring lessons to life without dealing with complex setups, making the displays practical and time-efficient.



- **High-Definition 4K Resolution**: Stunning 4K resolution showcases content with sharpness and vibrant color, making visuals more engaging and easier to understand. This feature is especially beneficial for subjects that rely on detailed images, like science, art, and geography.
- Robust Data Security and Device Management: Built-in security features protect user data and device functionality, allowing school IT teams to monitor and control settings, updates, and access. This ensures a safe and reliable experience for students and staff.



#### **DID YOU KNOW?**

Teachers typically spend an average of **7–12 hours in manual content preparation** per week. By incorporating interactive displays, they can speed up the process without compromising quality.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> EdReports, "Centering Quality Materials in Teacher Preparation Programs," February 27, 2023, <a href="https://edreports.org/resources/article/centering-quality-materials-in-teacher-preparation-programs">https://edreports.org/resources/article/centering-quality-materials-in-teacher-preparation-programs</a>"



**DID YOU KNOW?** 

An experimental study found that adding sound elements (e.g., voiceovers, background music, sound effects) to e-learning materials and applications positively influences student comprehension and engagement.<sup>3</sup>

#### Sound Systems

Quality sound systems play a crucial role in creating immersive learning environments. They optimize audio to ensure every student, no matter where they sit, can hear the teacher clearly.

Consider the following when looking for sound solutions to enhance teaching and multimedia delivery.

- Microphone: To capture clear audio for lectures, discussions, and recordings
- Speakers and Headphones: To reproduce amplified sound accurately and distribute it evenly across the learning space
- Amplifiers: To adjust the volume and clarity of audio signals from various sources
- **Controls**: To optimize listening quality by adjusting the tone, volume, equalization, effects, and other audio settings
- **Mixer**: To combine and balance audio from multiple sources like microphones, devices, and instruments
- Cables: To connect various system components and transmit audio signals between them
- Acoustic Treatment and Soundproofing: To control sound behavior and prevent unwanted noise from disrupting the learning space
- Audio Software and Device: To manage recordings, multimedia, and lectures for improved clarity and ease.

<sup>&</sup>lt;sup>3</sup> Jehad Imlawi, "Students' engagement in E-learning applications: The impact of sound's elements," Education and Information Technologies 26, no. 5 (2021): 6227–6239, <a href="https://doi.org/10.1007/s10639-021-10605-0">https://doi.org/10.1007/s10639-021-10605-0</a>.

#### Videoconferencing

Remote learning has become integral to today's educational system, especially following the COVID-19 pandemic. Some students need alternative learning styles and environments, and remote setups provide that flexibility. One of the most popular classroom technology upgrades is videoconferencing.

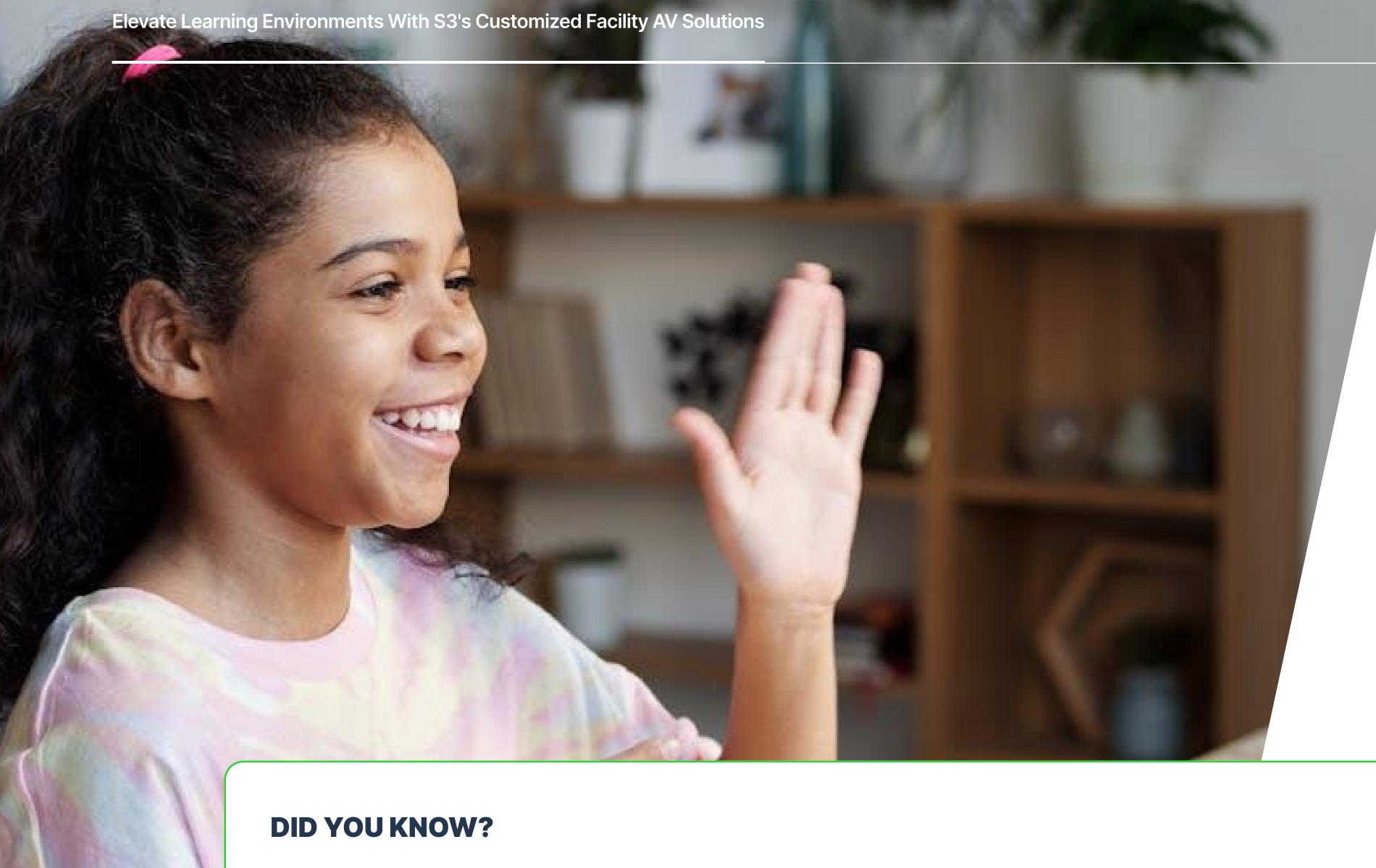
Videoconferencing is a setup where video cameras connect via the Internet or a specific network, allowing people in different locations to see and communicate with each other effectively without having to travel. In remote learning environments, it enables real-time interactions between instructors and students, fostering collaboration regardless of distance. This is especially crucial for guest lectures, connecting experts and audiences who couldn't attend in person, thus overcoming geographical barriers.

Below are must-have features of videoconferencing for effective learning setups.

- **Screen Sharing**: Allows users to display their computer screens or specific files and applications to others for presentations and collaborative work
- **Chat**: Provides a communication channel for participants to share messages (including emojis and links) without interrupting the lesson
- **Recording**: Allows high-quality recording for future reference and playback for those who couldn't participate in real time

**DID YOU KNOW?** The saying that 90% of communication is nonverbal is a myth. Many studies have debunked this, but one thing remains true: nonverbal communication —eye contact, smiling, gestures—greatly affects how people understand and react to information.<sup>4</sup> This poses a challenge for distance learners, but remote solutions such as videoconferencing can effectively address it.

<sup>&</sup>lt;sup>4</sup> The University of Texas Permian Basin, "How Much of Communication Is Nonverbal?," November 3, 2020, <a href="https://online.utpb.edu/about-us/articles/communication/how-much-of-communication-is-nonverbal/">https://online.utpb.edu/about-us/articles/communication/how-much-of-communication-is-nonverbal/</a>



- Virtual Background: Enables participants to change their video backgrounds or use preset settings to eliminate distractions and maintain privacy and professionalism
- Dynamic Webcam: Supports the use of multiple webcams simultaneously, allowing users to focus on who's talking from different angles and see all participants present in the meeting.
- User-Friendly Interface: Designed with simple navigation and intuitive controls so students can quickly learn how to utilize the platform and avoid technical challenges
- Seamless Integration: Easily connects with existing classroom technologies, such as smart boards and projectors, to enhance the teaching experience and ensure smooth operation in hybrid or fully remote settings
- Security Features: Keep all teachers' and students' personal data safe within the learning environment. Features include password protection, authentication settings, and waiting rooms to help prevent incidents like Zoom bombing<sup>5</sup>

A study found that video conferencing applications in synchronous learning gave students new and creative ways to present themselves and were particularly helpful for their studying throughout the pandemic.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> Projects at Harvard, "What is Zoom Bombing?," October 29, 2022, <a href="https://projects.iq.harvard.edu/user-services/faq/what-zoom-bombing">https://projects.iq.harvard.edu/user-services/faq/what-zoom-bombing</a>.

<sup>&</sup>lt;sup>6</sup> Mark Anthony R. Aribon III, "The Use of Video Conferencing Applications Facilitating Behavioral Engagement during Synchronous Learning in the Time of Pandemic" (paper presented at the 29th International Conference on Computers in Education, 22–26 November 2021, virtual), https://icce2021.apsce.net/wp-content/uploads/2021/12/ICCE2021-Vol.I-PP.-626-631.pdf.

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# Transforming Classroom Learning with S3 Technologies

Backed with over a decade of experience, <u>S3 Technologies</u> designs and installs comprehensive educational AV solutions that transform classrooms into dynamic spaces for students and educators.

- Classroom AV: Voice amplification, interactive displays, projectors, TVs
- School-wide AV: PA systems, bell systems
- School Video Announcement: Video production and live streaming equipment
- Theater/Auditorium: Projectors, sound, live streaming
- Conference/Meeting Room AV: Videoconferencing, displays, speakers, microphones,
- Digital signage

S3 Technologies has helped schools establish a comprehensive AV framework that is easy to integrate and scale. Besides installation, we provide in-person training, user guides, and ongoing support to help our customers adopt our AV solutions effectively.



\* \* \* \* 3 months ago

S3 Technologies is truly an innovator when it comes to education. They helped set up our Clear Touch boards in both our academic and construction classrooms. It has taken our students' educational learning experience to the next level. Their staff is exceptional. They are extremely knowledgeable, efficient, professional and friendly. Whenever we need an issue fixed or additional training, they offer their expertise and assistance quickly. I highly recommend S3 Technologies for your educational needs.



### Integration and Scalability

Integration and scalability are vital in modern learning environments. They ensure a seamless and adaptable experience for both students and teachers. Integration allows various tools and technologies to work together smoothly, while scalability provides these systems with the flexibility to expand and accommodate growing resources and participants.

S3 Technologies offers facility AV solutions for everyday use and special events that can be seamlessly integrated to meet the needs of educational classrooms. From TVs and interactive whiteboards to PA and sound systems, we provide technologies to help upgrade your facility's audiovisual capabilities.

Moreover, we provide customization options, allowing you to tailor AV setups according to your unique requirements. Choose from various adjustable microphone systems for different classroom sizes, flexible display solutions like interactive whiteboards or LED screens, and custom control interfaces to streamline usability and meet specific technical needs.

#### **Support and Training**

To successfully implement and leverage the benefits of AV solutions, support and training are necessary. Training empowers the educational community to utilize devices effectively while continuous support troubleshoots any issues that may arise.

S3 Technology understands these needs and provides training programs and ongoing support for schools. These include the following:

- Specialized technology coaching for teachers
- Collaboration with your administration, teachers, and team to integrate technology in the classroom
- Preventive maintenance
- AV solution upgrades



Amazing company! Tricia's resources, ideas and leadership have changed the trajectory of my career and the learning of many students in the area. Their knowledge of Technology and school integration is second to none. Looking forward to working with you again in August!





\*\*\* \* 3 months ago

I moved our educational support to tech support to S3 four years ago after being dissatisfied with a different popular company. I have been thrilled with the level of service and expertise since switching. The team is efficient and knowledgeable, providing timely solutions that work the first time. They have fully supported the schools in which I work with care and a personal touch. Our entire staff knows and appreciates our S3 support contact as we see her as part of our team.





## Future-Proofing Classroom AV

Staying informed about emerging trends and advancements is essential as they continue to shape how learning environments operate. It also offers a competitive advantage, ensuring you're ahead of the most effective teaching methods available.

Here's a sneak peek of the latest trends in audiovisual technology for the education sector.

- Augmented Reality and Virtual Reality: These technologies offer a realistic and engaging way to present information. Think virtual field trips or simulations through programs such as Google Expeditions or interactive textbooks with 3D models and animations.
- **Sustainable AV**: Sustainability is at the forefront of most industries today, and AV is no exception. Various eco-friendly initiatives have emerged, from solar-powered displays to green video conferencing practices. These technologies consume lower energy and reduce carbon footprints, contributing to a more environmentally responsible learning community.

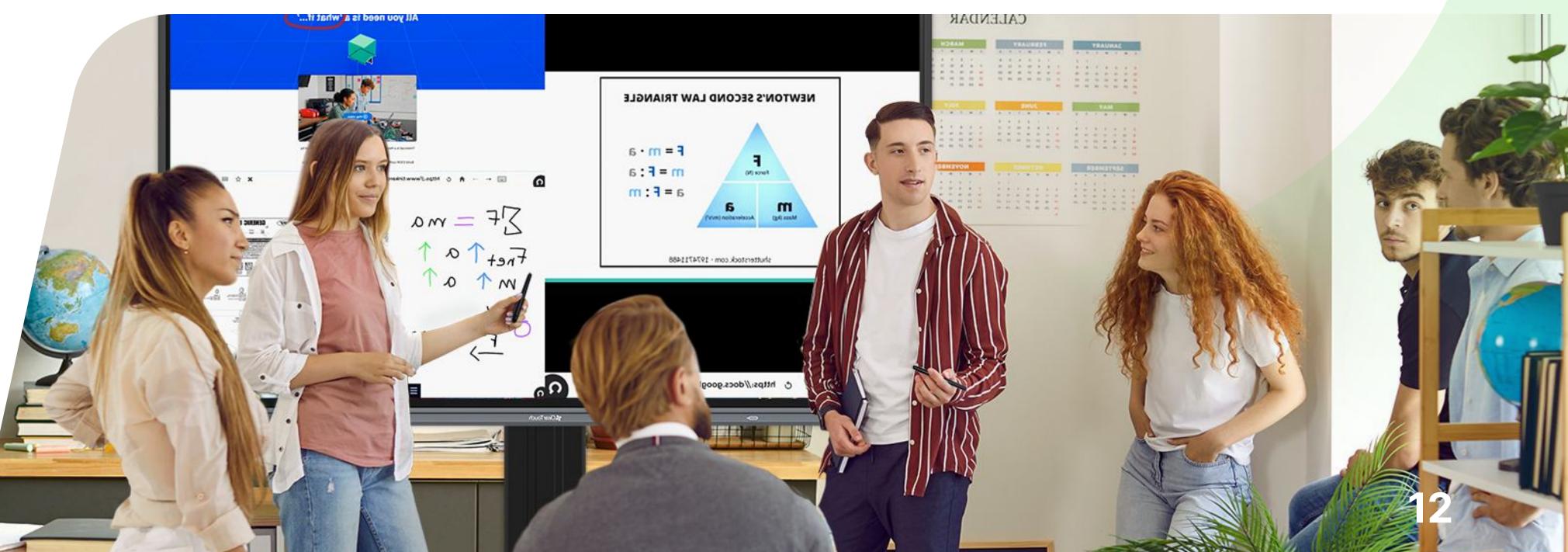


### Takeaway

Remember: AV solutions empower educators, not replace them. They offer quick access to various learning resources, flexible communication between teachers and students, and customized learning experiences to meet diverse needs. By captivating attention and sparking curiosity, AV solutions amplify the impact of lessons, making them memorable, immersive, and fun for all learners.

Collaborate with S3 Technologies to build robust and customized facility AV solutions in your school. Our cutting-edge, student-centric, and data-driven technologies and strategies can help you prepare for and overcome future challenges. We take charge of the design, installation, and guidance, from training to post-installation support.

Call (330) 648-5408 today to discover how we can help modernize your classrooms.



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