EPSON®

Create Immersive Learning Experiences
Using Projection Technology

Webinar Recap

Projection technology continues to expand in functionality across society. Whether in the form of a visual floor show at a basketball game, an immersive art exhibit, or safety sign displays throughout warehouses, projection is used to create exciting and engaging experiences.

These innovative uses have made their way into educational institutions as well. Immersive learning, rooted in these cutting-edge technologies, can revolutionize education by engaging students in dynamic activities such as multi-sensory learning and interactive experiences. These techniques can enhance knowledge retention and foster a deeper understanding of complex concepts for students at every grade level.

Recently, eSchool News hosted an online conversation on this topic. This interactive ebook summarizes the content from this webinar and includes video highlights. It outlines the benefits of immersive learning in more detail, describes several use cases for doing so within K-12 education, and examines how schools can explore the potential of this emerging technique.

Read and hear how these experts in projection mapping, digital signage, and experiential learning spaces work with K-12 STEM, theater, computer science, and CTE teachers to bring this exciting movement to classrooms and buildings. Take a look at what's possible for the future of education—and how districts can get there.

Click through to hear more about the panelists' work.

Meg Athavale
Founder & CEO,
Lumo Interactive Inc.
Speaker Bio>

Ethan Castro, PhD
CTO of EDGE Sound
Research
Speaker Bio>

AJ Freysteinson
Creative Director and
CEO, RabCup
Speaker Bio>

The benefits of immersive learning

Immersive learning, facilitated by innovative technologies and platforms, is revolutionizing education by providing engaging and multisensory experiences. These technologies aim to transform traditional classrooms, offering interactive and dynamic environments that cater to diverse learning styles and needs. Immersive benefits include:

Enhanced learning experiences: Immersive learning platforms can offer a diverse range of scenarios and enable student performance—from improving motor skills to teaching STEM concepts. Immersive learning can even go beyond traditional auditory and visual stimuli to employ tactile and haptic technologies. All together, these multisensory approaches reinforce learning, making it more memorable and impactful.

Improved Inclusivity and Equity: Immersive learning technologies have the potential to create a more inclusive educational environment by catering to different learning styles and abilities. Visual, auditory, and kinesthetic learners can all benefit from interactive and multisensory experiences, ensuring that each student can engage with the content in a way that suits their individual needs. Immersive environments can provide alternative ways for students with physical disabilities to explore places or concepts they might not have access to otherwise. Virtual environments and simulations also enable all students to enjoy content and activities together.

Collaborative Learning Opportunities: Immersive learning often involves collaborative activities, enabling students to work together on projects regardless of their physical location. This collaborative approach encourages interaction between students with different abilities and backgrounds, promoting a sense of community and shared learning. By leveraging these technologies thoughtfully, educators can create environments that celebrate diversity, promote equity, and prepare students for a globalized and interconnected world.

"If you want to try to share an idea, share an experience, share an environment, hitting more senses is always going to be more effective."
—AJ Freysteinson

How to get started with immersive learning

To embark on immersive learning successfully, educators should first identify specific goals and needs. Once these are assessed, they can pinpoint areas where immersive technology can enhance learning experiences. It is also helpful to engage with existing communities, such as Facebook groups and Discord channels that touch on the subject, to connect with those already implementing immersive technology in classrooms.

Start with small-scale experiments using accessible tools and software to help understand feasibility and impact. Explore user-friendly platforms and consider cost-effective off-the-shelf solutions. Research funding sources and assess physical space requirements. Align immersive learning initiatives with curriculum goals and track progress through quantitative and qualitative measures. Lastly, encourage creativity and student involvement. This empowers learners, making immersive learning an inclusive educational approach. By embracing these strategies, schools can create engaging environments that harness the benefits of this advancing technology for both educators and students.

Athavale on how districts can get started

Castro on how to get started

**Freysteinson and Athavale on how to get started**

The future of immersive learning

Technological advancements, particularly in projector technology, are making immersive experiences more feasible and cost-effective. Laser projectors from companies like Epson are becoming more reliable and durable, overcoming past challenges of high costs and short lamp lifespans. The integration of generative media and AI is also accelerating content creation, allowing for quicker development of interactive programs and experiences.

The panel envisions a future where learners can request immersive scenarios effortlessly, such as being inside a heart or atop a tree, with visuals generated in real time. The trend extends beyond display advancements, including improvements in software development and content creation. There is also a growing awareness and acceptance of immersive technologies in other sectors—from corporate to museums, and beyond. The hope is for a convergence of these advancements to bring immersive learning into mainstream education within the next three to five years. The dream of a "holodeck in every classroom" reflects this aspiration for widespread adoption of interactive projection and immersive technologies, making learning more engaging and accessible for students.

> The panel envisions a future where learners can request immersive scenarios effortlessly, such as being inside a heart or atop a tree, with visuals generated in real time.
>
> **Panelist Predictions**
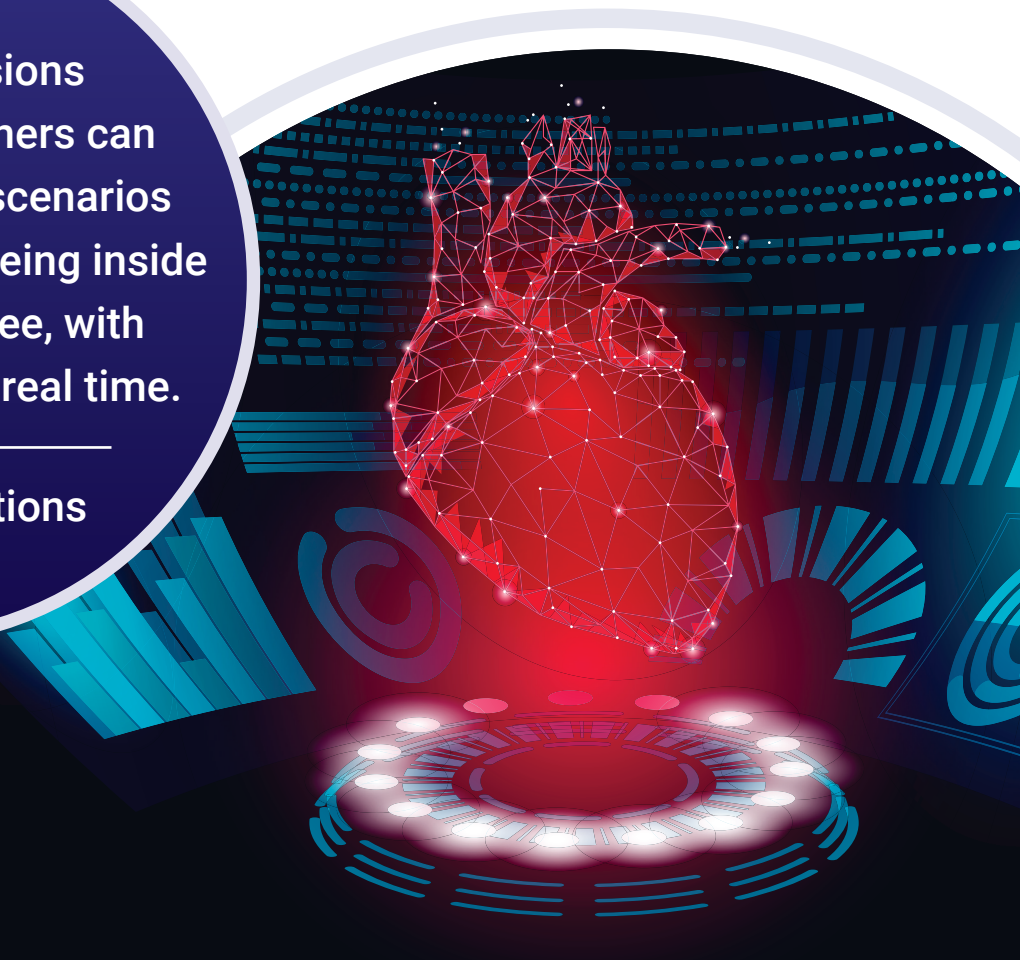
Summary

Immersive learning has the potential to redefine traditional teaching methods and open up new dimensions of engagement and understanding. From tactile interaction, where learners engage physically with educational content to projection mapping in classrooms, the immersive approach is versatile and adaptable. The key lies in identifying specific needs, consulting with the wider community, and experimenting with accessible tools. The speakers encouraged educators not to be intimidated by the technology. Platforms with user-friendly tutorials can make it easier for teachers to incorporate immersive learning into their classrooms. The consensus was that by embracing these tools, educators can create learning environments that cater to diverse learning styles and needs, fostering a new era of education.

Resources

Immersive experiences with Epson Laser Projectors | InfoComm
https://www.youtube.com/watch?v=PpM-f73XxsE

LUMOplay is software that makes any digital display interactive. It's used by parents, teachers, businesses, agencies, and brands all over the world.
https://www.lumoplay.com/

Edge Sound Research brings realism to sound experiences by introducing a new patent-pending audio technology that allows a user to hear and feel sound with a reliable combination of mastering-grade audible, tactile, and haptic audio in a single device.
https://www.edgesoundresearch.com/

RabCup leads the industry in deployment of 3D projection mapping, augmented reality experiences, holograms, and engineering uncommon video solutions.
https://rabcup.com/about-us/

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