Designed for Education #Classroom 3.0

Democratizing Interactive & Immersive Learning



manciadali mirta

Designed for Education #Classroom 3.0

Contents:

- 1. Introduction to Classroom 3.0
- 2. AR VR for Education
- 3. Current Problems in adoption for Educational Institutes
- 4. Our Solution [Perceiv.io]
- 5. Benefits for Educators and Trainers
- 6. Benefits for Students
- 7. Why Institutes should adopt Classroom 3.0 by Perceived
- 8. Conclusion and Takeaway
- 9. About Perceived Design Pvt Ltd



Introduction To Classroom 3.0

Classroom 3.0 is an emerging model of teaching and learning that integrates advanced technologies to enhance the learning experience. In Classroom 3.0, both human teachers and computer agents can interact with the learning environment, blurring the boundaries between the physical and digital worlds. This creates exciting possibilities for personalized and immersive learning experiences that were not possible before.

The use of immersive technologies such as augmented reality, virtual reality are a key aspect of Classroom 3.0. These technologies provide highly interactive and engaging learning experiences that simulate real-world situations, allowing students to practice and develop practical skills and knowledge in a safe and controlled environment.

Classroom 3.0 represents a shift towards more student-centered and experiential learning, where learners take an active role in the learning process. By creating more engaging and immersive learning experiences, Classroom 3.0 aims to promote deeper understanding and retention of knowledge, as well as develop practical skills and competencies that are essential for success in the 21st century.





3D, AR & VR Role in Teaching and Learning



3D Interactive, AR (augmented reality) and VR (virtual reality) are immersive technologies that can significantly enhance the learning experience in Classroom 3.0. AR overlays digital information onto the real world, while VR immerses the user in a completely virtual environment.

The use of AR in Classroom 3.0 can provide students with interactive and engaging learning experiences. For example, students can explore historical landmarks or practice scientific experiments in a virtual lab. AR can also be used to provide students with real-time feedback and enhance their understanding of complex concepts.

VR, on the other hand, can provide students with opportunities to develop practical skills and knowledge in a safe and controlled environment. For example, students can explore different ecosystems or practice surgical procedures in a virtual environment. VR can also simulate real-world scenarios and provide students with experiences that would otherwise be difficult or impossible to recreate in a traditional classroom setting.



Go Beyond Traditional Classroom, Empower Your Educators

In Classroom 3.0, the use of AR, VR, (XR technologies) can enhance the learning experience by providing students with personalized and interactive learning experiences. These technologies can simulate real-world scenarios, provide students with opportunities to develop practical skills, and enable them to explore complex concepts in a more engaging and interactive way.

Overall, AR, VR, can play a significant role in the Classroom 3.0 model of teaching and learning by providing highly engaging and immersive learning experiences that promote deeper understanding, retention of knowledge, and development of practical skills.



What is Stopping us?

Current problem an Institute faces in Adoption The integration of AR and VR technologies in education has the potential to revolutionize the way students learn, but there are several challenges that need to be addressed in order to make these technologies more accessible and effective in the classroom. There are several challenges that have limited the accessibility of AR and VR technologies in education:

- 1. **Cost:** AR and VR technologies and multiple hardware procurement can be expensive, making them difficult for many schools and educational institutions to afford.
- 2. **Technical expertise:** Implementing and using AR and VR technologies in the classroom requires technical expertise that many teachers and educators may not possess.
- 3. **Infrastructure:** AR and VR technologies require a significant amount of computing power and storage, which can be a challenge for schools with limited IT resources.
- 4. **Content creation:** There is a lack of high-quality educational content that has been specifically designed for AR and VR technologies, which can limit their effectiveness in the classroom.
- 5. **Health and safety:** The prolonged use of VR headsets can cause discomfort or motion sickness, which can be a concern for some students.
- 6. **Integration:** There may be resistance from teachers or educators who are not familiar with AR and VR technologies or who prefer traditional teaching methods.



Addressing these challenges will be crucial for making AR and VR technologies more accessible and effective in the classroom. This will require collaboration between educators, content creators, and technology companies to develop affordable, high-quality educational content that is specifically designed for AR and VR technologies. It will also require investment in IT infrastructure and professional development to ensure that teachers and educators have the technical expertise to effectively use these technologies in the classroom.

What is the Solution?

Powerful Tool makes Powerful Teachers

A Platform that brings AR VR like Interactive Capabilities to existing Smartboards and Projectors.

A Platform that is as easy to use as creating PPTs

A Platform that allows to upload and create AR VR in few clicks

A Platform that allows creating 3D videos as simple as using Google Meets/Zoom.

A Platform that can render AR VR and 3D in just one click.

A Platform that enables sharing content simply by sharing URLs

A Platform that can be interacted to any LMS





Perceiv.io is a 3D interactive AR and VR hosting and rendering platform designed by Perceived Design Pvt Ltd that specializes in Human-Computer Interaction. It delivers VR-like capabilities to interact with 3D models on any device, such as mobile phones, laptops, smartboards, and more.

The platform is primarily designed for educators to deliver real-time demonstrative live classes and lectures in a traditional classroom setting or a hybrid online classroom environment. With a specially designed 3D interactive interface, any educator can manipulate 3D objects like never before. They can move, recolor, dissect, and delete 3D objects, as well as use a pen tool on 3D objects to annotate in a live class.

Perceiv.io provides a wide range of features, including hosting your own 3D-based interactive curriculum, such as 3D notes, 3D lessons, 3D videos, 3D live classes, and sharing the curriculum with your students in just a few clicks. This content can be accessed by your students in all 3 modes, including 3D interactive, AR, and VR. Additionally, the platform allows educators to access user activity and manage and control resources and users on the go.

Overall, Perceiv.io is a cloud-based cutting-edge technology solution that makes classroom learning more interactive, immersive, and accessible without depending on high-end devices.



Our Platform Overview:

Create and Host

Build and Deliver Your Own Curriculum in 3D+AR+VR





- Upload 3D Model,
- Configure the 3D scene,
- Launch and Share



Customize, Update & Share Content on the go. Educator can customize the content as per their classroom plan.

- Control Project Access
- Add Personal Notes
- Personalize 3D Controls



Maintain Content Library of 3D Classes, Notes and Study Material and integrate to your LMS.

- Easy to Maintain
- Easy to Share
- Easy to Update
- Easy to Integrate





Combination of Content Types

Facilitate Pedagogy for Teaching and Learning

- Add PDF Documents to 3D models. (Apt for live classes)
- Add 3D Interactive Models to Your PDFs (Apt for curating study materials and revision modules)
- Video Mapped 3D Interactive Models for Self Learning.
- Add 3D Labeled Text with Auto Read Feature for Self Learning.
- Create 3D based step-by-step processes flow for Self Learning.



Ability To Interact in 3D

Educator can interact with 3D content on any device





Drag Object Tool

Move 3D Layer in the scene to explain concepts and demonstrate live in a classroom.



Rotate the object to right orientation



Click the layer you want to move



Drag the cursor and move



Dissect Object Tool

Delete/Remove 3D Layer in the scene to demonstrate deeper layers live in a classroom.







Rotate the object to right orientation

Hover the layer you want to delete

Click/touch the layer to delete it



Isolate Object Tool

Isolate the 3D Layer in the scene you wish to focus on a get rid of the distraction in a live class.



Rotate the object to right orientation



Hover the layer you want to isolate



Click/touch the layer to isolate it



Highlight Object Tool

Color multiple layers and assign different colors to indicate and highlight layer in a live class.



Rotate the object to right orientation

Click on the layer to drop color



Select different color and resign



Pen Tool to Annotate

Standard pen tool for 3D interface. Write in real time to annotate and provide notes on the go in a live class.



Rotate and manipulate the object as required



Write above the model on the go.





Camera & Microphone based Screen Recording

Enable Camera and Microphone of the device to record or share live class online or locally record.

One Content Multiple Render Option

Toddle between 3D AR VR based on your mode of teaching and demonstration in a live classroom









Supports: Laptop/Desktop Smartboard Mobile/Tablet



Supports: (6DoF) Mobile/Tablets MR Headsets



Supports: Mobile (3DoF) VR Headsets (6DoF)



Advantage For Educators & Trainers

Having a platform with VR-like interactive capabilities on any device in a classroom setting can provide numerous benefits for both students and educators. Here are some potential benefits:

- 1. Enhanced Learning Experiences: Perceiv.io provides an immersive and interactive learning environment that allows educators and trainers to deliver engaging and effective learning experiences.
- 2. **Easy to Use:** Perceiv.io is user-friendly and easy to use, with a simple and intuitive interface that requires no technical expertise.
- 3. **Customizable Curriculum:** Perceiv.io allows educators and trainers to create their own customized 3D-based interactive curriculum, including 3D notes, 3D lessons, 3D videos, and 3D live classes, which can be accessed by students in 3D interactive, AR, and VR modes.
- 4. **Real-time Feedback:** Perceiv.io provides real-time feedback to students, allowing them to track their progress and identify areas where they need additional support.
- 5. **Remote Teaching:** Perceiv.io enables educators and trainers to conduct remote classes, making it easier to reach students who are unable to attend traditional classroom settings.

Overall, integrating interactive 3D content in a classroom 3.0 setting has the potential to transform the learning experience, making it more engaging, effective, and personalized for students.





Advantage For Student/Learners

- 1. Interactive Learning: Perceiv.io provides a unique opportunity for students to interact with 3D objects, which can help them better understand complex concepts and ideas. They can manipulate objects in real-time, view them from different angles, and even dissect them to understand the internal structure.
- 2. Accessible Learning: Perceiv.io is accessible on a wide range of devices, making it easy for students to access the content from anywhere, at any time. This can help students who may not have access to high-end devices or internet connectivity.
- 3. **Collaborative Learning:** Perceiv.io allows for collaborative learning experiences, as students can work together to manipulate objects and solve problems. This can help build teamwork and communication skills, which are valuable in many different contexts.
- 4. **Personalized Learning:** Perceiv.io allows educators to create customized 3D-based interactive curriculum, which can be tailored to meet the needs of individual students. This can help students who learn best through visual or hands-on experiences.

Overall, Perceiv.io offers a more engaging, accessible, personalized, and collaborative learning experience than traditional classroom teaching, which can lead to improved retention of information and better learning outcomes for students.



Perceiv.io Advantage For Educational Institutes

Perceiv.io provides several advantages for institutes over traditional unity-based AR/VR platforms, including:

- Easy and Cost-Effective Content Creation: Perceiv.io makes it easy for educators to create interactive 3D-based curriculum, such as 3D notes, 3D lessons, 3D videos, and 3D live classes. This is done using a specially designed 3D interactive interface that allows educators to manipulate 3D objects in real-time, and create content without requiring extensive programming skills or high-end hardware. Additionally, Perceiv.io provides a low-cost solution for deploying classroom 3.0, with less dependency on high-end hardware, making it an affordable solution for educational institutions.
- 2. **Content Capture:** All the content generated on Perceiv.io can be captured and used later, which can help educators to analyze and improve their teaching practices. This feature also provides educators with a tool for assessing student learning and progress.
- 3. Improved Quality of Teaching and Learning: The interactive and immersive nature of Perceiv.io can help improve the quality of teaching and learning by enhancing engagement, retention, and overall performance. With Perceiv.io, students can interact with 3D models in real-time, which can help them better understand complex concepts and ideas. Additionally, the interactive nature of Perceiv.io can help keep students engaged and interested, which can lead to improved learning outcomes.



Perceiv.io Advantage For Educational Institutes

- 4. **Faster Curriculum and Content Updates:** Perceiv.io makes it easy for educators to update curriculum and content frequently, targeting better personalized content for the masses. This is done using a cloud-based platform, which means educators can update content from anywhere, at any time, and students can access the updated content on any device. This feature can help educational institutions keep up with the latest trends and advancements in their respective fields.
- 5. Versatility: Perceiv.io provides a wide range of features, including hosting your own 3D-based interactive curriculum, such as 3D notes, 3D lessons, 3D videos, 3D live classes, and sharing the curriculum with your students in just a few clicks. This content can be accessed by your students in all 3 modes, including 3D interactive, AR, and VR. Additionally, the platform allows educators to access user activity and manage and control resources and users on the go.

Overall, Perceiv.io provides educational institutions with an easy-to-use, versatile, and cost-effective solution for deploying classroom 3.0, creating interactive 3D-based curriculum, and improving the quality of teaching and learning.



About Us



Perceived Design Pvt Ltd

Perceived (Registered as Perceived Design Pvt Ltd) is a leading research and development company based in India that specializes in human-computer interaction capabilities for education. Founded in 2019 by experienced engineers who have worked in prominent EdTech companies like Byju's, Unacademy, and Edu-com, Perceived has quickly established itself as a rising star in the field of education technology.

Backed by leading EdTech incubators like AWS edstart and government institutes like IAMAI (K-tech) and IIIT-Bangalore, Perceived is dedicated to providing real-time experience and engaging, interactive learning experiences to students through the use of proprietary XR technologies and design vision.

As an award-winning company, Perceived has helped its clients successfully adopt the concept of real-time experience in classrooms that are not only engaging but also drives curiosity and motivation. With a strong focus on innovation, collaboration, and excellence, Perceived is poised to continue making valuable contributions to the field of education technology.

Contact us



Perceived Design Pvt Ltd (CIN: U72900KA2019OPC128703)

Website: www.perceived.design

Email: connect@perceived.design

Linkedin

Our Founder Details:

Mr. Uttam Kumar Pandey

Email: uttam.kumar@perceived.design

Contact: +91 7795019496, +91 9910372949

Linkedin