

BRING VIRTUAL REALITY TO LIFE IN SCHOOL CLASSROOMS



SOLUTION BRIEF



Studying the history of Hong Kong? Why use a textbook, when you can see the city all around you in vivid detail on guided virtual tour? Learning about silverback gorillas? No need for a field trip to the zoo. Take a virtual safari through Odzala National Park, guided by the world's top primate experts.

To have experiences like these, students no longer have to be world travelers, schools no longer need big budgets or fund raisers, and students won't miss classes. Schools are bringing fully immersive learning (in any weather!) right to the classroom through the power of virtual reality (VR).

Now, Ruckus Networks is partnering with Lenovo to make it easy to bring VR learning to any primary or secondary school through the Lenovo Virtual Reality Classroom Kit. These self-contained bundles come with everything educators need to get VR quickly up and running: VR headsets, touchscreen tablets, and thousands of hours of digital curriculum, all linked through Ruckus Wi-Fi.

A COMPLETE VR LEARNING SOLUTION

Lenovo designed the Lenovo VR Classroom Kit as a complete, self-contained bundle that works out of the box. Each kit is pre-provisioned and includes:

- **Lenovo Mirage Solo™ VR headsets:** The first standalone, fully immersive VR headset built for the Google Daydream™ VR platform, bringing students an incredible 110-degree field of view, with no wires or PC required.
- **Lenovo Tab 4 PLUS 10" tablet:** Teachers can control the entire VR experience with an easy-to-use wireless touchscreen that walks them through the curriculum, and provides talking points and discussion topics customized for each lesson.
- **Ruckus R510 wireless access point (AP):** Get reliable wireless connectivity with pre-configured connectivity between student headsets and teacher's tablet. No setup needed by the teacher!
- **Thousands of hours of VR curriculum:** Each kit includes fully tested lesson plans from Scholastic, along with more than 700 available Google Expeditions VR field trips and exclusive Wild Immersion with the support of Jane Goodall Institute. Teachers can also access hundreds of VR lesson plans and tools from Google's Daydream app store.

IMMERSIVE LEARNING AS EASY AS 1, 2, 3

For teachers and school administrators, VR learning is immensely exciting—but can also be intimidating. How will I get all of this cutting-edge technology to work together? How much time will I have to spend troubleshooting technology problems versus teaching students? How can I use VR as a practical learning tool, instead of just a shiny toy?

Teachers have enough on their plates—they don't want to take on the job of IT helpdesk too. That's why Lenovo designed the Lenovo VR Classroom to be simple, scalable, and durable. Each kit functions as a complete turnkey solution, with VR hardware, software, curriculum, and Ruckus Wi-Fi all pre-configured and ready to go. No complex setup, no fiddling with settings to get and stay connected. Just turn on the VR headsets, bring up today's lesson plan on the tablet, and dive in.

All hardware is designed with primary schools in mind: rugged casings that will withstand heavy use throughout the year, and no external antennas to snap off or reorient. And, because the kits come with their own Ruckus Wi-Fi access point, they don't need to run on the school's existing wireless network. No dropped connections, no choppy video when the school Wi-Fi gets congested. And no need for constant calls to IT to figure out why you're getting a bad connection.

THE RUCKUS DIFFERENCE

Immersive VR learning delivers incredible, lifelike experiences. But VR applications are also incredibly demanding, requiring rock-solid, nonstop, high-performance wireless connectivity. Why invest the time and resources to bring VR to the classroom, only to run it on an overtaxed school network with spotty connections and choppy video?

The Ruckus R510 that comes with each Lenovo VR Classroom bundle delivers enterprise-quality 802.11ac Wi-Fi connectivity. Designed for dense, demanding environments, it delivers the capacity and higher performance than most schools need. But that's no accident. It means that, as you scale your VR deployment and add more headsets—even expanding to 1:1 VR headsets per classroom—you'll get the same reliable, high-performance connectivity.

Ruckus R510 APs deliver:

- **Dedicated “Ruckus Unleashed” Wi-Fi connectivity:** These APs are designed to run entirely on their own—no wireless controller required, and no IT support. Just power up and start learning.
- **802.11ac Wave 2 Wi-Fi:** Deliver data rates up to 1200 Mbps and protect your investment with the latest Wi-Fi technology that will support both current devices and new ones released in the coming years.
- **Ruckus patented BeamFlex+ antenna technology:** Ruckus BeamFlex+ dynamically reorients antenna patterns in real time to mitigate interference. The result: longer range and superior connections to every device, every time.
- **Ruckus SmartCast technology:** Ruckus SmartCast automatically optimizes demanding HD video and voice traffic over the network to deliver consistently smooth, vibrant VR content experiences.
- **PD-MRC antenna technology:** Ruckus BeamFlex+ uses PD-MRC antenna technology to preserve a clear, high-performance connection even when devices change their orientation and polarity—which happens constantly when wearing a VR headset.
- **Compact, rugged form factor:** Ruckus R510 APs have internal antennas and protected uplink and power ports to prevent tampering in busy classrooms.

Right now, hundreds of schools across the United States are using the Ruckus R510 to support digital learning and 1:1 computing initiatives in the classroom. Built for dense public environments with dozens of simultaneous users and high-bandwidth multimedia content, they're the perfect solution for demanding VR learning.

START YOUR VR ADVENTURE TODAY

More teachers and school administrators view VR as a great equalizer. No matter where students live, across all socio-economic backgrounds, they can experience the whole wide world in living color, right in the classroom. With immersive, hands-on VR experiences for practically every subject, students learn and remember material more effectively. And the best part: they can't wait to get to school.

Ready to try out the Lenovo VR Classroom at your school? Visit promo video: <https://youtu.be/DJUsLdbnZSk>.



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