



EXECUTIVE BRIEF

# 5 Ways Your Network Can Improve the Educational Experience in Your School



# How high-performing network solutions can ensure the connectivity and security of educational institutions across Europe.

Research has shown that a fast, reliable, and secure network is essential for remote learning success. Educational institutions need connectivity and security to thrive in today's digital world. Cisco Meraki can help.



PART 1

# Connectivity



## Why schools should focus on connectivity.

Technology, without dispute, plays meaningful roles in all aspects of society today—with education standing at the centre of all the action.

The need for reliable wireless networks in educational institutions is more significant than ever because students use tablets and smartphones more often, increasing the demand for bandwidth.

The onset of the COVID-19 pandemic has also heightened the need for robust connectivity and security measures.

At the peak of the crisis, almost 1.6 billion students in 195 countries worldwide could not use their classrooms.

In addition, as schools grow increasingly reliant on online learning platforms, they require a high-quality network infrastructure that can support these new technologies.

Schools throughout Europe often rely on digitalised modes of learning, such as videoconferencing and streaming.

The increased application of immersive virtual and augmented reality in teaching and learning also contributes immeasurably to educating students in practical fields in an effective but risk-free environment.

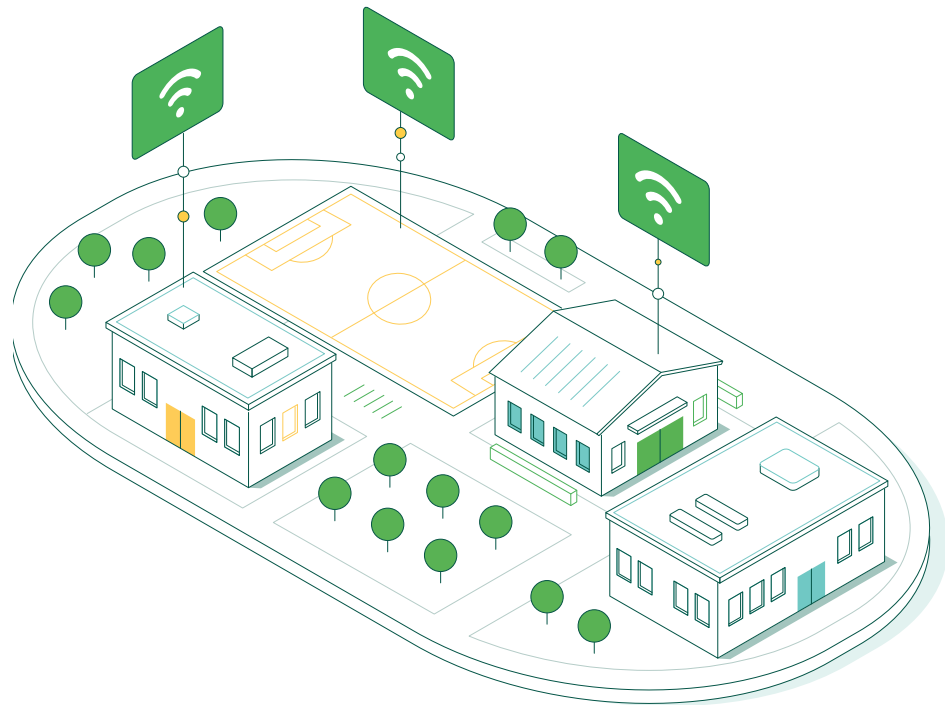
Considering the high population density of educational institutions, users need access to a high-speed internet connection to make the most of what digital learning offers.

The European Commission foresees that by 2025, all schools should have access to gigabit internet connectivity because it would be necessary to access up-to-date resources or heavy-bandwidth online learning platforms.

According to a report by Deloitte and Ipsos MORI on behalf of the European Union titled, 2nd Survey of Schools: ICT in Education, it became evident that less than one out of five students in Europe attend schools that have access to high-speed internet that clocks over 100 Mbps.

Nordic countries helped boost the number of students who had access to good internet due to the prevalence of high-speed internet connectivity in the region.

In basic terms, outside of Norway, Finland, Sweden, and Denmark, most students have to access the internet with connection speeds of 100 Mbps. The actual average internet connection speed in these countries is lower.




## How can Meraki help to fulfill these needs?

Meraki is a provider of reliable, high-performing networking solutions that use the latest technologies.

Meraki cloud-based architecture allows for instant scalability and central management from any location, enabling educational institutions to access an enterprise-grade network without overspending.






This architecture helps educational institutions adapt quickly without investing heavily into infrastructure or technology.

At the forefront of these solutions is cutting-edge Wi-Fi 6 that delivers unrivalled high-efficiency wireless connectivity, including broader coverage, quicker connections, and a better user experience.

The network allows schools to use several distinct types of wireless access points to serve students and teachers in various settings, including school offices and classrooms.



One tremendous boost Meraki offers schools is a connection system that is easy to deploy, maintain, and scale. Fully configuring Meraki cloud-managed access points (APs) is a breeze thanks to a single easy-to-use dashboard that requires no extensive technical knowledge or training.

Finally, Meraki delivers a solution to one other problem IT teams have battled for years: task fatigue.

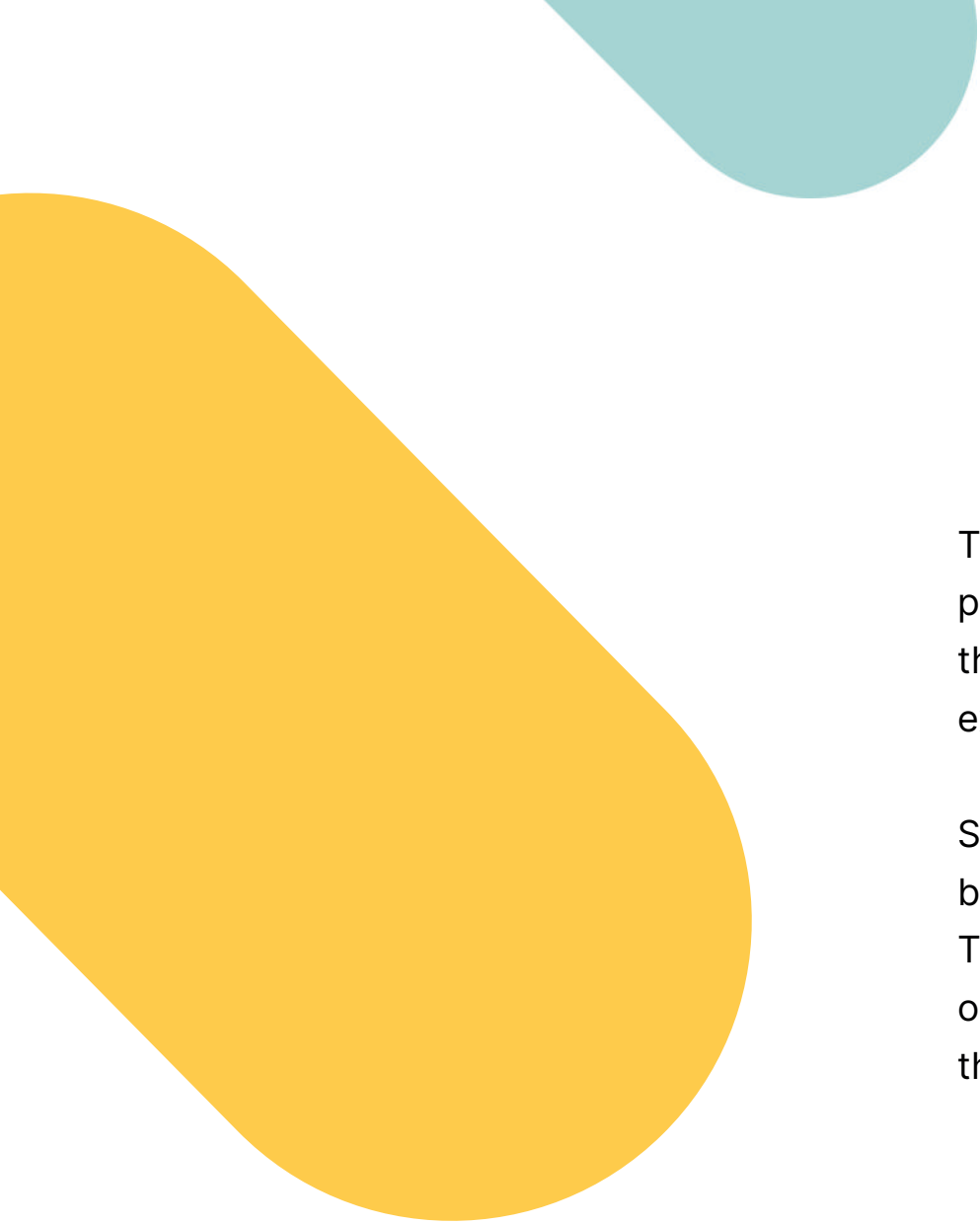
By automating robotic and monotonous tasks, such as monitoring network performance and endpoints and troubleshooting network infrastructure, Meraki helps school IT teams reduce the amount of time they spend manually performing tedious tasks.

# What's in it for schools and students?

Meraki connectivity products deliver a comfortable and connected learning environment for students and keep your network infrastructure up-to-date and compatible with existing smart technology.

With the deployment of Wi-Fi 6, more and more smart devices and gadgets are made to work with the new standard.





Thus, by using Meraki high-performance Wi-Fi products, schools across Europe can prepare for the future without compromising support for existing devices.

School IT teams are also better equipped to have bird's-eye visibility into network activity. This enables them to identify which APs students or workers are having difficulty connecting to and then diagnose the issue.

As for students, the improvement in the learning experience cannot be overemphasised. With better network connection comes increased capabilities and learning opportunities.

Support for high broadband activities such as virtual or augmented reality translates into students having a truly immersive learning experience.

Outside the classroom, students can play games, stream music, videos, or perform research from the comfort of their dormitories as long as those locations have Meraki APs installed.

PART 2

# Security

# Why should schools take security even more seriously than they currently do?

Security threats exist in various forms in schools today. Students are exposed to physical and digital risks by different actors, ranging from unscrupulous intruders to those eager to experiment with things that may pose a threat to themselves and others.





## How can Meraki products improve security in schools?

At a strategic point of Meraki connectivity products lies a stable and secure network and one which can be used to improve security.

School security can realise a significant boost with sensors that can be used to monitor a wide range of events, such as high or low temperature, entry into an area, water leaks, and more.

Meraki sensors can be used in different locations to alert school authorities when an area has been accessed by an unauthorised individual or if a water leak occurs.

When used in conjunction with Meraki smart cameras, it results in a top-notch surveillance system.

Meraki smart cameras not only help identify and eliminate security blind spots, they also detect and investigate threats through motion capture and video recording.

When used with other solutions in the Meraki network, they can be taken a step further toward granting or denying access to school parking lots through license plate recognition.

School authorities can easily combine visibility into access control audits and instances of forced entry by deploying Meraki smart cameras with Kisi access control. These can all be configured and operated from a single dashboard.

What's more, when Meraki smart cameras join forces with Meraki Everyangle, the result is a security system that helps identify suspicious persons and notify security staff of possible threats. Meraki Everyangle supports integration with other IoT devices and can be used with Meraki smart cameras and Kisi door access control to detect, identify, and mitigate security threats in real time.

In addition to providing ultra-fast internet connections, Meraki access points (APs) can also provide a safe and secure environment in which students can learn and thrive.

Contact tracing is easy and convenient with the Meraki cloud-based platform. When deployed and connected with Bluetooth® Low Energy beacon devices issued to students, staff, and visitors, the APs effectively identify who has come in contact with whom.

## What's in it for schools and students?

The online and offline security benefits that Meraki solutions provide to school authorities and students are almost endless.

School authorities gain a consolidated view of threats to student safety and well-being by using Meraki APs, smart cameras, sensors, and other related products in the Meraki ecosystem. They can then form an intelligent plan for detecting, mitigating, or stopping threats in their tracks before they are activated.



School administrators are also able to monitor network activity in real time with the Meraki cloud-based dashboard, as they can see each device that connects to the Wi-Fi. This way, if suspicious behavior or viruses are detected with any of the connected devices, IT teams will be better equipped to act fast and eradicate the threat before it is able to spread.

Preventing unauthorised network access is also easy for school authorities, as their IT teams are able to remotely authenticate endpoints via the Meraki cloud-based dashboard. This helps schools ensure that only authorised students and users can access their network connection and internet resources.

Schools can stay ahead of the latest security threats while ensuring that all devices connected to the school networks are protected. This is because school IT teams are able to quickly and easily deploy security updates and patches across their entire network infrastructure through the Meraki cloud-based architecture. In the physical world, school authorities can protect students from possible physical threats with Meraki smart cameras monitoring, and have the ability to detect and be notified of suspicious behavior. This includes dangerous materials that may not yet have been detected by traditional security cameras and sensors.

Lastly, Meraki products help schools track down students who break school rules through their Bluetooth Low Energy beacon technology which emits a signal that can be detected by Meraki APs.



## A secure and connected school is a better learning space

Educational institutions in Europe are able to remain connected as well as maintain security for their students and staff with Meraki products at the forefront of their network.

This creates a school where students and teachers are able to collaborate effectively, engage in meaningful lectures, and enjoy insightful experiences where teachers teach better and students learn more.



Students can spend their leisure time listening to music, playing online games, watching videos, or engaging in seamless video calls with loved ones without worrying about poor internet connection.

With Meraki technologies, schools across Europe can provide a safe and secure learning environment where students can thrive. A safe learning space is a productive one because it helps students to focus on academics and worry less about their safety.

These are only a few of the many ways that Meraki technologies aid in connectivity and security for educational institutions across Europe.



Learn more about  
**Meraki solutions for education.**