

Network audio supports the digital classroom of the future.

Goetheschule Großen-Buseck improves acoustics and communication on the school grounds with IP audio solutions.

**Organization:**

Goetheschule Großen-Buseck

Location:

Großen-Buseck, Hessen, Germany

Industry segment:

Education

Application:

Audio

Axis partner:

ESS Telecom

Mission

Goetheschule in Großen-Buseck (located in the German state of Hesse) is an elementary school with 250 students and 25 members of the teaching and administrative staff. The school's previous audio system consisted of a single, outdated bell in the schoolyard, which could only be used for the recess bell and was barely audible across the school grounds. The school was therefore looking for a comprehensive and easy-to-use solution that could adjust the volume and target areas and people in the school.

Solution

In collaboration with telecommunications company ESS Telecom and electrical contractor Rühl, in the fall of 2020 Goetheschule began installing seven AXIS C1310-E Network Horn Speakers on the sports field, schoolyard and playground plus 49 AXIS C1410 Network Mini Speakers in all classrooms, restrooms, basement rooms and the hallways.

From a microphone in the secretary's office, the zones can be managed and announcements broadcast. The school chose the Axis audio solution because it is easy to install, easy to use, flexible when making announcements, and a space and power saver.

Result

Goetheschule Großen-Buseck uses the Axis audio solution to ensure that the right messages reach the people they are intended for at the right volume. The administrative staff and teachers can communicate independently with schoolchildren with the easy-to-use system. The schoolchildren are happy with the good sound quality – especially on the occasions when music is played from the speakers.



Goetheschule in Großen-Buseck (located in the German state of Hesse) is a school with about 250 students in grades 1 to 4. A total of 25 employees make up the administrative and teaching staff. The school grounds, located in the middle of the town, consist of two buildings housing the classrooms, the secretary's office, the faculty room, the childcare rooms, the auditorium and the cafeteria. The buildings are separated by both a schoolyard, where recess takes place, and a road that runs through the school grounds. A sports field and a playground are also part of the school grounds.

Outdated technology required new solution for better acoustics and communication

One of the two school buildings is a landmarked structure dating back to 1922, and the bell that was installed in the playground until last fall was also old and had been the school's only audio tool. The outdated bell had several disadvantages: the ringing was the only sound through which children and teachers could be addressed, the volume was not variable, and the ringing could not be heard in the classrooms. The old bell could no longer be relied on: "As a result, teachers had to keep track of the time themselves. For the school, there was no other way to communicate with the students beyond the bell. Teachers were also unable to reach each other, for example if a recess conference was to be held spontaneously," explains Katrin Seipp, Principal of Goetheschule Großen-Buseck. "A single bell for a schoolyard of this size – it was simply no longer sufficient."

Safety aspects also increased the desire for an improved audio solution at the school: "It was a big concern for us to be able to warn and inform both children and teaching staff at short notice in the event of a sudden emergency situation, like a fire or accident."

School invests in future-proof audio solution

When the IT and electronics in Goetheschule were replaced and expanded as part of the "DigitalPakt Schule" program, the school administration also pushed for the acquisition of a modern audio system that meets all of the school's needs in the future. After an initial selection process in cooperation with district officials and the school's technology partner, ESS Telecom, a test run with three Axis speakers and an intercom system took place on site at the school. This convinced the school and the administration – so the final decision was made in favor of the solution from Axis Communications.

"Axis products score highly in many respects. Starting with the low installation effort and the direct connection to the school network," says Matthias Wirth, owner of the telecommunications company ESS Telecom. "The space required is also much smaller than for a conventional PA system with a network cabinet. They consume less power and give the school the flexibility it needs when making announcements to people and rooms. All in all, Axis proved to be the supplier with the most sustainable and future-proof solution for us."

In the fall of 2020, with the support of ESS Telecom and the electrical contractor Rühl, Goetheschule began installing a total of 57 speakers in the school building and in the outdoor area. After electricians laid the necessary cables in all rooms and the outdoor area during the summer, the local electrical contractor Rühl took over installation of the speakers and microphone system.

Excellent sound quality throughout the school grounds

Seven AXIS C1310-E Network Horn Speakers were installed on the sports field, schoolyard and playground, as their robust design makes them ideal for outdoor use. They have an integrated amplifier and preconfigured digital signal processing, ensuring clear, intelligible announcements even during noisy recesses and gym classes.





“Since the speakers and microphone console have been in operation, day-to-day school life has been smoother and more pleasant for both the children and the teachers. We can no longer imagine having just a single bell to use. The change was urgently needed.”

**Katrin Seipp, Principal of
Goetheschule Großen-Buseck.**

All classrooms, restrooms, basement rooms and hallways were equipped with AXIS C1410 Network Mini Speakers. The compact speakers blend discreetly into their surroundings in the school building.

The 2N SIP Mic network microphone console completes Goetheschule's new IP audio system. The microphone can be used to assign zones and zone combinations. It is now possible to make targeted announcements that only go to, for example, rooms where second graders are currently being taught or to people in the cafeteria. These settings can be changed at any time. Using the microphone, teachers or administrative staff can reach schoolchildren with live spoken messages.

After the successful installation of all devices in spring 2021, ESS Telecom installed the switches to network the speakers, assigned the IP addresses, and conducted a final test run, which went smoothly. The school staff then received a short briefing on the audio system and how to operate the microphone.

The entire solution is intuitive to use, but ESS Telecom's support during the start-up phase was very valuable for Goetheschule.

“The system is used by many different people and we wanted to make sure that everyone had the same level of knowledge,” explains Katrin Seipp. “We were told, for example, how we can speak directly to people on the sports field by simply pressing a button, how to combine rooms for an announcement, and how to connect a cell phone to the system to play music – a feature particularly popular with our students, especially leading up to Christmas or school breaks.”

IP audio solution takes day-to-day school life to a new level

All of the challenges that Goetheschule faced at the beginning of the project were solved with the Axis IP audio solution. The signal and voice messages reach the intended recipients. The volume can be easily adjusted to suit the surroundings. Each speaker can be set up and maintained individually.

“Since the speakers and microphone console have been in operation, day-to-day school life has been smoother and more pleasant for both the children and the teachers. We can no longer imagine having just a single bell to use. The change was urgently needed,” explains Katrin Seipp.

Feedback on the new audio system from the schoolchildren, teachers and administrative staff has been overwhelmingly positive. “We would make the same decision again in a heartbeat. The advantages of the solution have really won us over.”

About Axis Communications

Axis enables a smarter and safer world by creating network solutions that provide insights for improving security and new ways of doing business. As the industry leader in network video, Axis offers products and services for video surveillance and analytics, access control, intercom and audio systems. Axis has more than 3,800 dedicated employees in over 50 countries and collaborates with partners worldwide to deliver customer solutions. Axis was founded in 1984 and has its headquarters in Lund, Sweden.

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