HDBaseT for Education: Optimizing the Collaborative Classroom

The Collaborative Classroom
The traditional classroom as an environment where students sit facing the teacher and the board is fast being replaced by a set-up that encourages increased interaction and collaboration. Whether this set-up means clumping desks together, forming a circle of chairs, or using specially designed furniture, students benefit from the flexibility that a collaborative classroom brings. Although at a basic level the physical set-up of the class is important, even more critical is the underlying technological infrastructure that enables the collaborative classroom of the future.

Connectivity for the Collaborative Classroom
Connectivity is a central element in the collaborative classroom. Connecting different sources of information – whether the school’s servers, the teacher’s personal computer, or even the students’ tablets – to different displays, shared or not by all, defines the core of this classroom. The elements involved may include: displays, projectors, outlets, and information sources (computers, tablets, DVDs etc).

Common Challenges for the Collaborative Classroom
- **Distance limitations:** The collaborative classroom can be a small space, or a larger auditorium, or even a room that can be broken down into smaller spaces for group discussions. Distance between projectors and displays is an issue, as well as between sources of content and displays.
- **Cable infrastructure:** Many schools will rather take advantage of pre-installed cabling to simplify installations and reduce costs. This usually translates into category cables, which are also easier to install, and allow for field-termination.
- **Future-proof technology:** Most schools do not have the budget to constantly upgrade their entire connectivity infrastructure. By deploying a standardized, future-proof technology, schools can guarantee the most advanced systems going forward.
HDBaseT for Education

HDBaseT is the one-cable solution for the educational sector. HDBaseT technology allows for the convergent delivery of the 5Play feature set - uncompressed ultra-high-definition audio & video, Ethernet, controls, USB 2.0 and up to 100W of power over a single LAN (Cat6 or above) cable.

The HDBaseT Difference

- **Distance & Cabling:** HDBaseT is transmitted through a simple LAN cable, for up to 100m/328ft. These cables are easily handled, and can be field-terminated, which simplifies the installation.

- **Standard & Future-proof:** HDBaseT has been adopted by the IEEE as a standard for digital connectivity. It has been embedded in products in the market today, from simple extenders, to matrixes, displays, and projectors. Because of the ease of use and low cost of LAN cables, several extra drops of cable can be installed to future-proof the classroom for future device connectivity. In addition, HDBaseT extenders allow equipment that do not have embedded HDBaseT to connect to the overall network, providing a seamless experience to teachers and students.

- **Feature-rich:** The 5Play feature set brings audio & ultra-high-definition video, Ethernet, controls, USB and up to 100W of power over one single cable, simplifying the overall infrastructure necessary. With bi-directional USB functionality, USB signals can be transmitted up to 100m/328ft, enabling interactivity and further sharing of content, even if the student’s or the teacher’s device is far from the front of the class or auditorium. USB enables the usage of keyboard and mouse functionality, touch screen capability, video sharing and more.