Why Do You Need Multimedia in the Classroom?

White Paper

Lightware Visual Engineering

Our new digital age has transformed people's perception, especially of young people, who are primarily subjects of education, as everyone has become more ready to perceive visual information, instead of written content. If you want to implant information into people's brains, it is essential today to use dominantly visual tools paired with good quality audio. Factors contributing to establishing AV upgrades to education facilities:

Cost

Budget is probably a highly decisive property in the decision making, but to have a smoothly working system does not usually mean a costly investment, configurations are available which most schools and training institutions can afford. Lightware offers the best solutions for any institution's budget. For a huddle room, a small switcher with multiport inputs is perfect , like the UMX-HDMI-140. Users can connect to the presentation system with their own laptop, sending video over its VGA, HDMI, DVI or even DisplayPort connection – this switcher can accommodate all of these. There is even an option to separate the audio from the signal and connect it directly to an active speaker, so that everyone would hear well, even in the back of the room.

Time

Endusers often worry that preparing the technical environment for a presentation may be time-consuming. Lightware offers built-in technologies, which most other makers would ask an additional price for. One of such technologies is Event Manager, which provides all the necessary room control in a smaller, simpler collaboration room. With Event Manager the possibilities are almost limitless, saving time and energy. It is possible to use a motion sensor or a simple button panel in the system, and by entering the room or by pushing a simple button the whole room prepares itself for use: dims the lights, pulls the shades, rolls the motor screen down or turns the monitor on, and adjusts the volume. When the tutor enters the room with the students, by the time everyone is seated the system already prepares itself and the presentation can start.

Technical Skills

Teachers and trainers are often afraid that they may not be skilled enough to prepare and operate sophisticated equipment. Lightware pays special attention to make every product plug and play, with user friendly interface and operation, working basically out of the box. By simply plugging your computer into the switcher, the system detects the active signal and automatically switches the room into presentation mode. The everyday user basically needs no special skills to operate the room, and with Lightware, there is no IT person required to prepare it every time to use it.

Operation Costs

Long run operation may include changes which may require further intervention from tech people, which may be costly, but this is definitely not the case with Lightware gear. As mentioned, most Lightware products are designed to work out of the box, plug and play. Lightware has probably one of the best support services in the AV industry, we never leave a possible problem unresolved, we also have our engineers helping the installation on scene if a project requires. Also, Lightware products are really reliable, so after installation there is virtually no problem with the equipment. Third party control systems usually need a skilled programmer for high hourly rates to change anything in the AV system, but with Lightware It is also very easy to integrate our devices with other maker's products, thanks to the open software environment. When it comes to a time when the system has to be changed somehow, it is really easy to add or remove elements from the application, without complex re-programming, especially if Event Manager is used for control. As mentioned before, no IT person required to prepare it every time to use it. All this results in minimal long time operation costs.

Unclear Advantages

Beyond actually increasing the weight of visual representation in the presentation material, the other benefits of multimedia upgrades are not clearly seen by the future users. It is probably best to present some examples of how Lightware AV technology can help training and education reach the required goals.

Watch the video, but add your own narration

The MMX8×4-HT420M matrix switcher is specifically designed for group collaboration. It has an active microphone input and a built-in mixer with a DSP chip. It features voice talkover, so while watching a video, it can automatically lower the volume of the sound coming from the video, and focus on your voice automatically, as soon as you start speaking into the microphone. This matrix switcher was designed to provide everything for a collaboration environment, including the built-in Event Manager room control with lots of control ports, bi-directional analog audio ports and many more.

People interested in the presentation only fit in two or more rooms

Existing or purposely installed network cables, CATx or optical alike, can be used to forward the video feed from one room to one or more other rooms using HDBaseT or fiber optical transmission. If you have a TPS (HDBaseT™) enabled matrix switcher, like the MMX6x2-HT220, it can take and send the video feed including audio and control signals into other rooms via even an already existing LAN network, so a presentation in one room can be viewed in other connected rooms, or even all over in every collaboration room on a university campus.

Display any workstation screen in the room on the big screen

Imagine a lab, where everyone is working behind a computer at their desks, while the tutor is holding the lecture in front. With a not too complex AV installation, the presenter can select and display the computer screen of any of the students on the main screen, and discuss it with everybody seeing it.

Summary

This document was just a quick summary to do away with possible misbeliefs, and to provide a few good ideas to start including more AV related methods in education. AV technology can give a lot to help the efficiency and depth of conveying the ideas of science to an audience. Visual information escorted with good quality audio helps keeping the attention of the viewers up, and also generating visual memories, which are easier to recall and which are also closer to the expectation of the students of our age.