THE FUTURE OF CLASSROOM TECHNOLOGY

What capabilities does a modern classroom require?

Before we describe the future of classroom technology, we should explore what users of the technology actually require in addition to managing content during the class. To this we can add two capabilities that are essential in organizations today: Managing multiple locations and optimizing resources.

Activity	Description	Examples
Manage Multiple Locations	Interact with people regardless of their location	• Video Conference • Audio Conference • Webinar
Manage Content	Easily access and share content	• Access files • Access web-based content • Play videos • Play music • Stream live audio and video
Optimize Resources	Optimize the use of classrooms	• Schedule classrooms • Determine room availability • Power down when not in use • Automatically power up prior to class

The role of the control / automation system

Managing such a diverse set of capabilities requires an integrated system that can handle the different source and output devices, enable students to participate remotely, and optimize the use of classroom facilities. Such a system generally consists of a touch panel or keypad to select devices and control the room ambiance, a controller or switcher to manage the behind-the-scenes switching between devices, and table top AV box for connecting devices to the system. These are the essential components to which many institutions add a room PC to manage connectivity.

Touch panel, switcher / controller and table top AV box:
Modern tools of the trade

Replacing or Supplementing the PC: AMX's Enzo™

The trio of the touch panel, switcher / controller and connectivity box will remain the backbone of any successful classroom technology solution for the foreseeable future. But if IT organizations and users seek a replacement or supplement for the room PC, what is it? What type of device can perform similar functions to a PC while avoiding its shortcomings?

This new wave of technology is here today, in the form of devices whose primary purpose is to access content from various sources and show it on the display, without requiring a PC. One such device is AMX's Enzo, which is a new solution purposely designed for the collaboration space to easily access content and documents stored on USB, on the web, or in the cloud.

AMX's Enzo: Specifically designed for accessing content in a classroom

What makes devices like Enzo different?

New devices like Enzo are specifically designed to avoid the pitfalls of a room PC for students as well as the IT organizations who support them. In order to be successful, devices like Enzo must include several key capabilities that optimize the class experience as well as the sharing of content, including:

- **"Instant-On" File and Web Browsing** – Attendees must be able to access web content or USB thumb drive files within seconds of entering the room. There should be no waiting for the product to boot up, and no lengthy process for users to log in.
- **IT Friendly** – These devices must be designed to avoid OS updates, viruses and other PC-related maintenance hassles and costs, and must be enterprise manageable over the IT network.
- **End of session data purge** – To be successful, such devices must eliminate disclosure of confidential information by purging all files and links to internal and external content when the class ends.
- **PoE, Pass-Through Ethernet and Small Form Factor** – In order to ensure widespread adoption, such devices should be easy to install practically anywhere, with a small footprint that's easy to mount within a room without being obtrusive.

Replacing or Supplementing the PC: Pros & Cons

The decision to replace a classroom PC or supplement one with a dedicated content management device depends on many factors, which are discussed below.

Action	Pros	Cons	When to Consider
Supplement PC	• More options for displaying complex content • Access to more programs & applications	• Retain IT support and user headaches • More expensive	• Large rooms with complex technology • Need to display highly specialized graphics & images • Need to run many programs / applications during class
Replace PC	• Reduces cost • Reduces IT support headaches • Frees PCs for other uses • Reduces delays in starting classrooms • Simplifies user experience with the room • **Ability to present wirelessly**	• Limited number of applications & programs • Cannot display some complex forms of content	• Rooms without complex technology • Organizations with stretched IT resources • Need an option to present wirelessly and share information with many

From the AMX White Paper "The Evolution of Learning Space Technology" (www.amx.com/education)

TAKE ACTION

To learn how AMX's award-winning products can help your organization manage the new world of BYOD, BYOC and rich content, we invite you to explore the information on our website.

The **LEARN** page (http://amx.com/education/learn.aspx) includes a broad range of general resources on the AV industry, as well as Product Guides covering most major AMX products. In particular, you might be interested in AMX's classroom solutions as discussed above:

- Enzo. Describes the amazing "always on" content management device discussed in this White Paper.
- Enova® DVX Family. Describes our ultra-reliable line of All-in-One-Presentation Switchers.
- Resource Management Suite (RMS) Overview. Describes our software package for real-time remote monitoring of AV assets.
- AMX Modero® S Family and AMX Modero X® Family. Describe the industry's most awesome lineup of touch panels.
- HydraPort®. Describes our configurable architectural connectivity products.

The **PLAN** page (http://amx.com/education/plan.aspx) includes an interactive tool that allows you to visualize the typical classroom configurations that AMX offers, and to explore which room configuration is best suited to your needs.

You can always **CONTACT A SOLUTIONS ADVISOR**, who will be glad to guide you through the process of identifying, specifying and purchasing your ideal classroom or classroom AV solution. The "Contact an Advisor" link is at the top of every page of the AMX website. Options to connect include chat, phone and email.