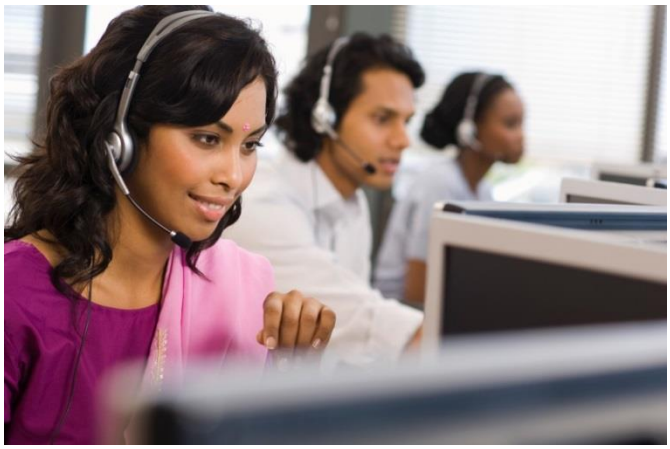
FROM REACTIVE TO PROACTIVE:
THE IT LEADER'S GUIDE TO CLASSROOM AUDIO / VISUAL SYSTEMS

AN AMX SOLUTION GUIDE

Quick jumps to key topics:

Is your Classroom Technology Support staff struggling to maintain your busiest classrooms?

Technology in a classroom is one of the fundamental ways a Campus IT Leader can contribute to the educational priorities of an institution. Despite its importance, a typical college or university is often plagued with mismatched and non-standard equipment in the classrooms and other collaboration spaces. Each room might have a different brand or model of LCD display, projector, DVD player, document camera, video conference system and so on.



Even before considering the challenges this creates for the variety of users who operate classroom technology, the needs of an often limited and overworked support staff is reason enough to consider how developing a standardized approach to classroom technology can greatly improve the instructional environment by providing a consistent, predictable technology foundation in each room. If even a small percentage of instructors experience a technology problem on a given day, it is likely to occur simultaneously as the classrooms begin their first class session, making it difficult for limited support staff to address the problems quickly if they need to visit each room. If there is an equipment failure requiring troubleshooting or repair, there may be only a 15-30 minute window on a typical day when a classroom is not in use.

To be "support-friendly", classroom technology should be standardized by room type so that the support staff knows what should be in place in any given room. Compact all-in-one systems which consolidate the functionality of traditional rack systems are quicker to program and install initially, and also quicker to troubleshoot when a problem does arise. Some campuses may opt to keep a spare system on hand with their standardized programming and configuration for each room type so that it can be swapped out quickly to keep their heavy-use classrooms up and running in the event of a problem.

AMX has been in the business of automating classrooms and other meeting spaces for over 30 years, and we leverage that experience to deliver a vastly superior solution for the IT support team. Our philosophy is simple but effective: ***AMX's classroom technology solutions help Campus IT Leaders to "automate genius" by simplifying the control, monitoring, and management of classroom technologies regardless of which equipment is used in the rooms.***

Technology planning for the ideal classroom starts with what you don't see, or at least should not see. The core systems supporting the technology-rich classrooms of yesteryear are typically large racks with a hodgepodge of Audio and Video equipment including Media switcher, Controller, Amplifier, Audio Processor, Scaler, and more. The rack systems are accommodated by either allocating valuable real estate to closet space or placing them in a corner of the classroom. Inside the classroom, they are not only unsightly, but can also contribute to disruptive ambient noise, uncomfortable temperature fluctuations, and risk of tampering or theft. More progressive designs combine all the needed A/V functionality for the typical classroom, and are compact enough to be housed in a vented, locked lectern or credenza.

Traditional A/V

Progressive A/V

Aside from the physical benefits, the modern all-in-one designs address a number of technical challenges associated with traditional AV gear. These improvements include the ability to transport HD video signals over greater distances using standard category cable instead of more costly specialized cabling, as well as simplifying the distribution of HDCP protected content to multiple outputs. Scaling is another challenge that can be addressed with a system such as the AMX Enova DVX which comes with a unique built-in feature called SmartScale™. This feature ensures that content presented to multiple output devices with varying native resolutions will appear at the optimal resolution of each display, projector, etc. rather than dumbing it down to the best common resolution of the output devices.

Do users struggle with classroom technology due to its complexity and lack of a standard interface from room to room?

A successful deployment of classroom technology starts with creating an environment where users operate the system with confidence. By standardizing on a single User Interface (UI) and control system, AMX ramps up user adoption and understanding of the room's capabilities, ensuring that users can easily manage the meeting without having to rely on IT.

All AMX classroom automation and control systems are designed around a simple and intuitive UI that encourages users to control the room's technology with confidence. For small, simple classrooms, AMX offers easy to use keypads that control the room's display, audio video sources and lighting at the push of a button. For larger and more complex lecture halls or auditoriums, AMX offers its award-winning Modero X-Series family of touch panels. These touch panels feature a G5 graphics engine and a Quad Core processor for the fastest, smoothest animations and transitions available. They also provide the option of previewing up to 10 content source devices in an intuitive dashboard format. The tabletop models of the Modero X Series line of touch panels also feature a built-in 720p HD camera which can be used for video conferencing applications such as help desk connectivity.

In classrooms which do not require the full capabilities of the Modero X Series, AMX recently announced the Modero S Series line of Touch Panels as a more cost-effective solution for those environments. The capacitive touch glass overlay of the Modero S series line of touch panels also makes them well suited for learning spaces where users may need to access the touch panel via indirect touch, such as a gloved hand, stylus, or prosthetic. Both the Modero X Series and the Modero S Series line of touch panels are fully customizable with a sleek industrial design and available in a range of sizes in desktop, wall/lectern mount versions, and secure mounting options.

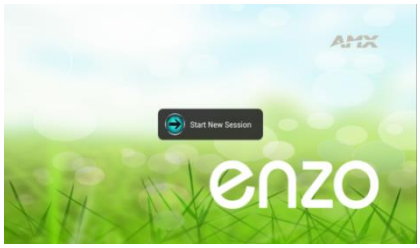
Does your technology plan call for moving collaboration from the traditional classroom to alternative learning spaces?

As instructional pedagogies evolve, the spaces and technologies supporting learning and collaboration must be adapted to accommodate alternative learning spaces. For example, where group study is part of the curriculum, it may occur outside of the classroom in a flexible / drop-in cluster type of environment that is not equipped with standard classroom technologies. Even in an instructor-led environment, there may be a desire to have various students equipped to share their work.

hydraport

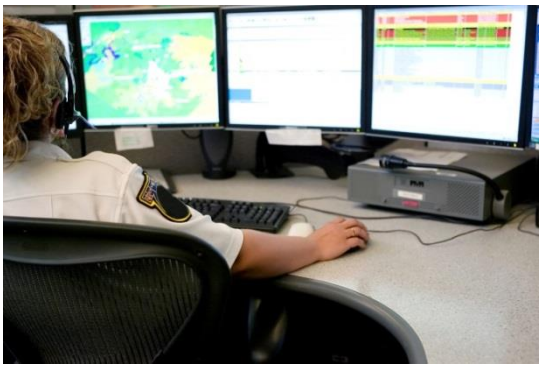
The B.Y.O.D. (Bring Your Own Device) concept requires consideration for incorporating AV inputs and control into various room furnishings, or what AMX refers to as architectural connectivity. Modular inputs that can be changed out as requirements change are a sensible approach to ensure that technologies placed into table or lectern cut-outs do not become obsolete during the furniture's expected life. For example, as more and more devices utilize USB charging, traditional power modules can be changed out for USB charging modules.

With the needed inputs throughout a learning space, the support staff will also need to be concerned about the availability of necessary cables for connectivity. Retractable cable units built into the AMX HydraPort unit help ensure that needed cables stay in the classroom rather than getting packed up with student devices.



Newer technologies such as the AMX Enzo device allow for the easy sharing of content via USB, cloud storage or web access without the need for a complete AV Control system or PC connectivity. The Enzo device is perfect in areas where students or lecturers will access or share content via a simple login for a collaboration session. At the end of the session, the content accessed is automatically purged.

Does your Help Desk have full visibility into the real-time performance of your classroom AV?



Another huge benefit of AMX Classroom Technology solutions is the ability for IT to globally monitor the status of classroom technology devices and know ahead of time when issues may arise so they can proactively address them. AMX's Resource Management Suite (RMS) is an enterprise software platform that provides remote monitoring, scheduling, customizable dashboards and hotlists, all using a wizard-based GUI. RMS enables remote troubleshooting, which dramatically reduces the frequency of technician visits to classrooms.

Not only does the AMX solution provide seamless control of the unrelated equipment – it also allows IT to see and resolve issues before users are impacted. For example, RMS can notify IT if a projector's light bulb is on the verge of burning out, thereby allowing for proactive replacement. Moreover, AMX provides the Help Desk with a standard interface that they can use in the event there is a challenge with a projector, display or any supported peripheral.

Are you concerned about multiple standards for AV equipment?

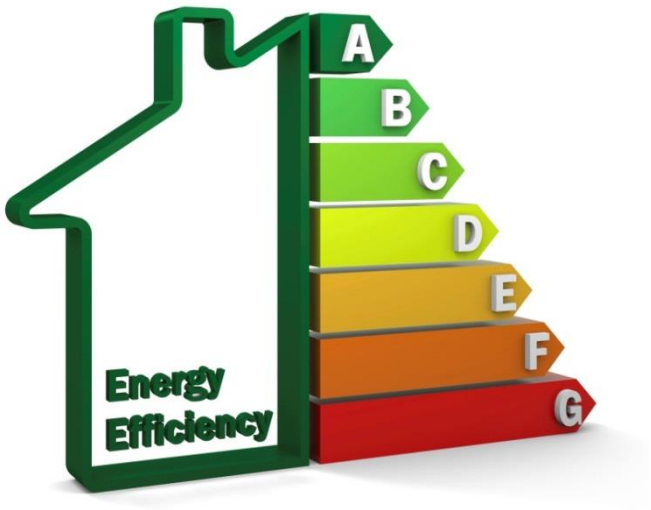
The buildings and rooms on a typical University or College campus are built over time, with curriculums and instructional technology requirements changing as new rooms come online or enrollment in available degree programs shift. Without a consistent approach to classroom technology as the campus evolves, you are left with various devices and thereby a differing user experience as faculty moves from room to room. This is frustrating for the user and also makes it very difficult for support staff to manage. Given the technology planning cycles of a large university, it is impossible to eliminate variations in brand or version of room devices across the board. AMX provides technology to help bridge the standards gap by providing a consistent user interface and programming/management tools to support the technologies campus-wide throughout their lifecycle.

Do you and your support techs struggle with system configurations and programming costs in your classrooms?

Many IT leaders are shocked when they learn how much of their AV budget is spent on programming. These costs can be so high as to deter organizations from installing effective control and automation equipment, especially in smaller, less utilized classrooms. Even more, programming costs don't end with the initial installation – they can also be sky high when making even a minor modification or addition to an existing classroom.

AMX provides a revolutionary solution that slashes the time required to configure a complete classroom or meeting space from several days to less than an hour. Rapid Project Maker, or RPM, is a cloud-based software tool that uses a step-by-step wizard to set up all the inputs and outputs, configure the controller, and set up the touch panel. This free tool from AMX is designed so that even non-technicians can configure a room or modify an existing configuration to change out or add new capabilities.

Does your classroom technology support your Green initiatives?



AMX Classroom Technology solutions are ideally designed to support your Green initiatives and provide significant energy savings. With AMX you can continue to use legacy equipment and remotely monitor its performance until such time that it is no longer viable. AMX gear can also be programmed to shut systems down based on scheduling or event thresholds such as a delayed opening due to weather. Integrating classroom occupancy sensors can enable the systems to go into standby when no activity is present, substantially reducing power consumption costs while driving up the green footprint of your institution.

CLOSING SNAPSHOT: QUICK SUMMARY OF AMX SOLUTION BENEFITS	
TCO	*Drives down the Total Cost of Ownership for classroom technology.*
Energy	*Reduces energy consumption.*
User Adoption	*Increases standardization of control interface and improves user adoption and knowledge.*
Help Desk	*Improves the Help Desk experience and effectiveness.*
Ever Greening	*Supports and extends the life of legacy classroom technology equipment while moving forward with the latest technology evolutions.*
Proactive	*Provides transparency into the health of classroom technology devices so your support team can be proactive engineers versus reactive fire-fighters.*

Are you ready to learn more?

As an IT leader, you know the critical role that reliable technology plays in creating and maintaining an effective learning environment. You also know the exponential value of your Technical Support team when they are freed up to work on strategic initiatives instead of fire-fighting. To take the next step, contact an AMX Solutions Advisor to help you identify an ideal automation and control solution for your classrooms. You can also take advantage of the material on the *LEARN* and *PLAN* pages at www.amx.com including these topics of interest:

Topic	Suggested Reading
Help Desk Support	Ending the AV Tech Support Nightmare The Perfect Meeting for the CIO
Standardization	Same Stuff, Different Room: The Benefits of Standardization AMX and the Perfect Meeting
Remote Monitoring	AMX RMS Overview Guide to System Integration Practices
Multiple Standards	Guide to AV Systems Guide to AV Applications
Configuration	AMX RPM Overview
AV Purchase Process	How to Buy AV Systems AMX Solutions Overview AMX Room Solutions at a Glance
Green Initiatives	Enova DVX and Energy Savings