AUSD District Standards

For Technology and Communications

ALAMEDA UNIFIED SCHOOL DISTRICT
Excellence & Equity For All Students

QUATTROCCHI KWOK
ARCHITECTS

Agenda

- Background and Process

- Committee Recommendations

- Implementation of Standards – for Measure I and beyond
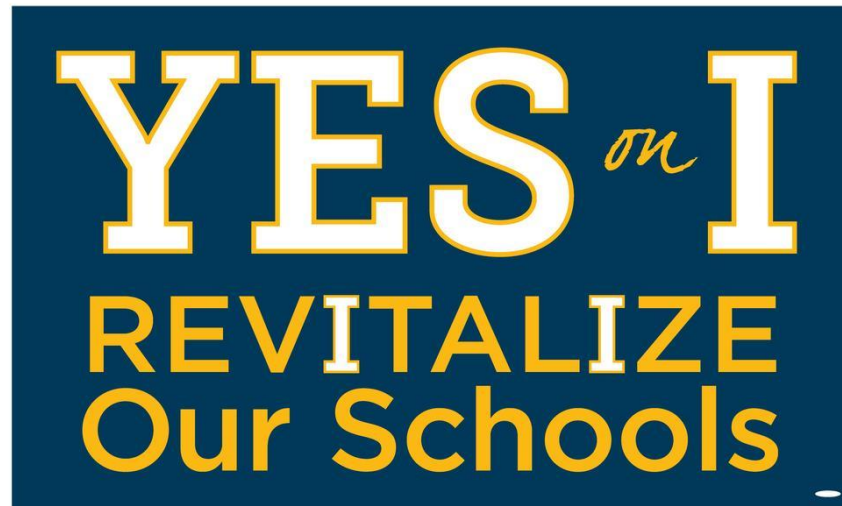
- Questions

Background and Process

- During the 2013-2014 school year, Quattrocchi Kwok Architects and District staff developed AUSD's Facilities Master Plan

- In June of 2014 Board took action to approve the first implementation of the Master Plan (Implementation Plan B)

- Implementation Plan B includes technology and communications measures at all sites

- In November 2015 the Measure I bond was passed by the Alameda voters, providing initial funding

Background and Process

From Exhibit B of the Measure I bond, 3 specific project types are listed:

- Critical Needs Projects

- Safety and Security Projects

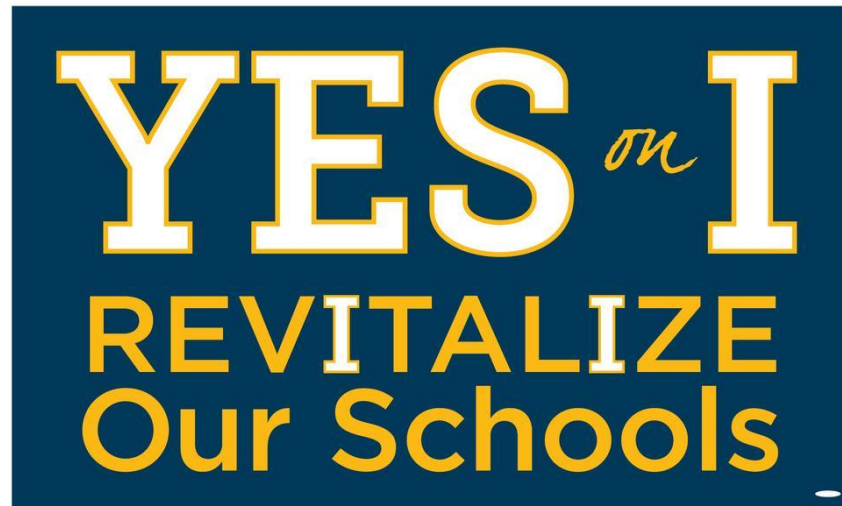- District-Wide Instructional Technology and Wiring Projects to Provide a 21st Century Education

From Exhibit B of Measure I bond

Background and Process

District-Wide Instructional Technology and Wiring Projects to Provide a 21st Century Education <u>Goal and Purpose</u>:

To upgrade classroom computers and computer technology to allow our students to attend college or to compete in today's job market by providing them with 21st century technology skills and a strong background in science, math, business, and technology

From Exhibit B of Measure I bond

Background and Process

District-Wide Instructional Technology and Wiring Projects to Provide a 21st Century Education **Goal and Purpose**:

To upgrade classroom computers and computer technology to allow our students to attend college or to compete in today's job market by providing them with 21st century technology skills and a strong background in science, math, business, and technology

- Upgrade instructional technology in the classroom for improved student learning.

- Provide and maintain up-to-date technology, data, and communication equipment.

- Upgrade and expand wireless systems, telecommunications, Internet and network connections, and upgrade electrical wiring at all District-owned sites.

- Upgrade and replace computers, hardware and infrastructure systems, classroom and library technology, and teaching equipment to enhance instruction.

From Exhibit B of Measure I bond

Background and Process

District-Wide Instructional Technology and Wiring Projects to Provide a 21st Century Education __Implementation__:

- The District assembled a Committee composed of MOF staff, District IT staff, school teachers and librarians, and Principals

- The Technology and Communications District Standards project began on September 29, 2015 with the first of 4 committee meetings

- The District IT staff set up a "Test Classroom" for educators to try out different technologies

- Once approved, these standards become baseline for all upgrades and new construction at each site, as budgets allow, and will serve to guide future projects

NOTE: Not all Technology and Communications Measures will be completed as part of current Implementation Plan

Background and Process - Committee

SCHOOL STAFF AND COMMUNITY PARTICIPANTS

Kelly Gregor, Alameda HS

Roxanne Clement, Bay Farm

Michael O'Neill, Earhart Elem.

Katherine Reilly

Bethany-Iping Ling, Teacher

Zoe Boese, Teacher/Librarian, Edison

Diana Kenney, Teacher

Benjamin Lundholm, Teacher/Librarian

Steve Allen, Teacher

Lynn Kinsey, Teacher/Librarian, Lum

Dana Adams, Teacher/Librarian, Maya Lin

Connie Chapman, Teacher/Librarian, Otis Elem.

Deborah Kjelland, Teacher

Erin Head, Teacher/Librarian, Paden Elem.

Jeffrey Gordon, Teacher

Susan Jones-Szabo, Teacher/Librarian

Jessica Lucio, Teacher

Janice Carroll, TSA Instructional Tech.

DISTRICT PARTICIPANTS

Robbie Lyng, Maintenance, Operations and Facilities (MOF)

Shariq Khan, CBO, AUSD

Rob van Herk, Director Technology Services

Jamie Ferrante, PM, Maintenance, Operations & Facilities

Brenda Parella, PM, Maintenance, Operations & Facilities

Committee Meeting #1 September 29, 2015

Committee Meeting #2 October 22, 2015

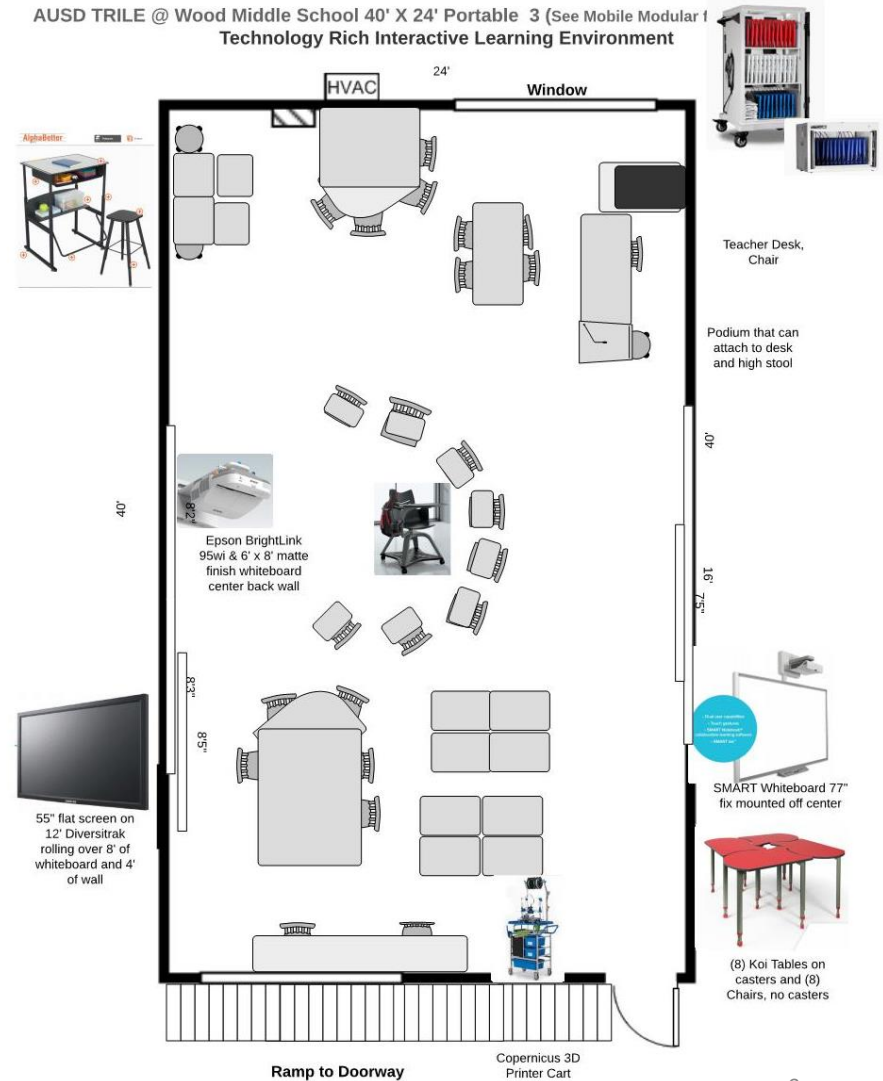Committee Meeting #3 April 27, 2016 – Draft document

Committee Meeting #4 September 27, 2016 – Final document

Background and Process – Test Classroom

- The AUSD Tech. Department set up a "Test" classroom at Wood Middle School in the spring of 2016

- The classroom was outfitted with a variety of "21st century" furnishings and AV technology

- Educators were invited to test out the various devices and furnishings and offer their feedback

- This is currently on-going

AUSD TRILE @ Wood Middle School 40' X 24' Portable 3 (See Mobile Modular f...
Technology Rich Interactive Learning Environment

9

Committee Recommendations

The Technology and Communications Committee recommends standards for the following spaces, and each are addressed individually within the Standards:

- Typical classrooms

- Specialized computer lab / Graphics or CAD Lab

- Library spaces

- Multi-Purpose Rooms (MPR's)

- Administration and office space

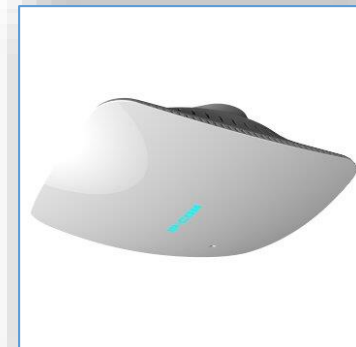- Typical administration conference room/Principal's office

Committee Recommendations

The Technology and Communications Committee recommends standards for the following infrastructure within each space:

- Power and data distribution
- Audio / Visual (A/V) capabilities and controls
- Communications (Phones, Intercoms, Public Address, etc.)
- Clocks

Power and Data Distribution

- The Committee made specific recommendations to ensure minimum levels of power and data distribution and connectivity throughout all sites

- Indicated specific recommendations for classrooms, labs, offices, multi-use, and gathering spaces

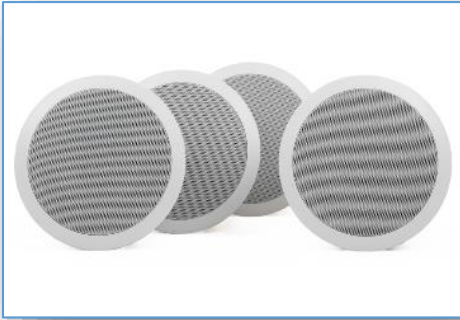- Wireless will be the primary connection method with hardwired connections on an as-needed basis

Audio/Visual (AV)

- The committee agreed upon infrastructure for wall mounted display technology (rather than ceiling mounted)
- Specific display devices not selected

Audio/Visual (AV)

- The recommendations include amplified sound as well, including mobile microphone devices and ceiling mounted speaker systems
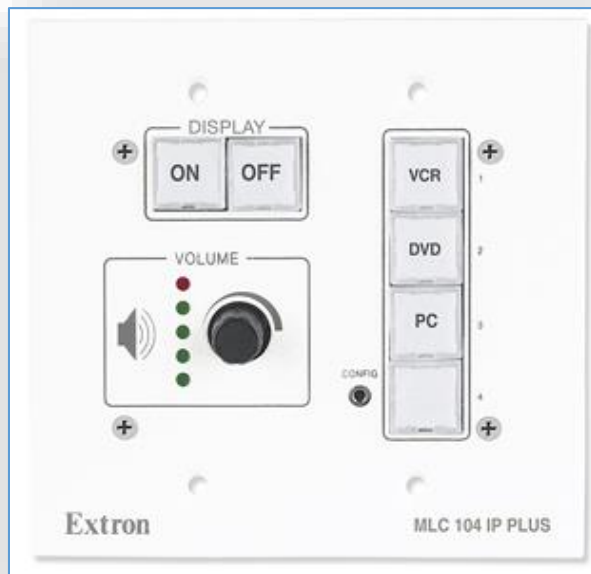

Speakers

Microphone

Audio/Visual (AV)

AV Controls: The typical AV equipment system should include a set of hard-wired wall controls at each input location for source selection and volume control. Control should also be possible through an AV system software app on the Teacher's computer, to allow source and volume control as required.
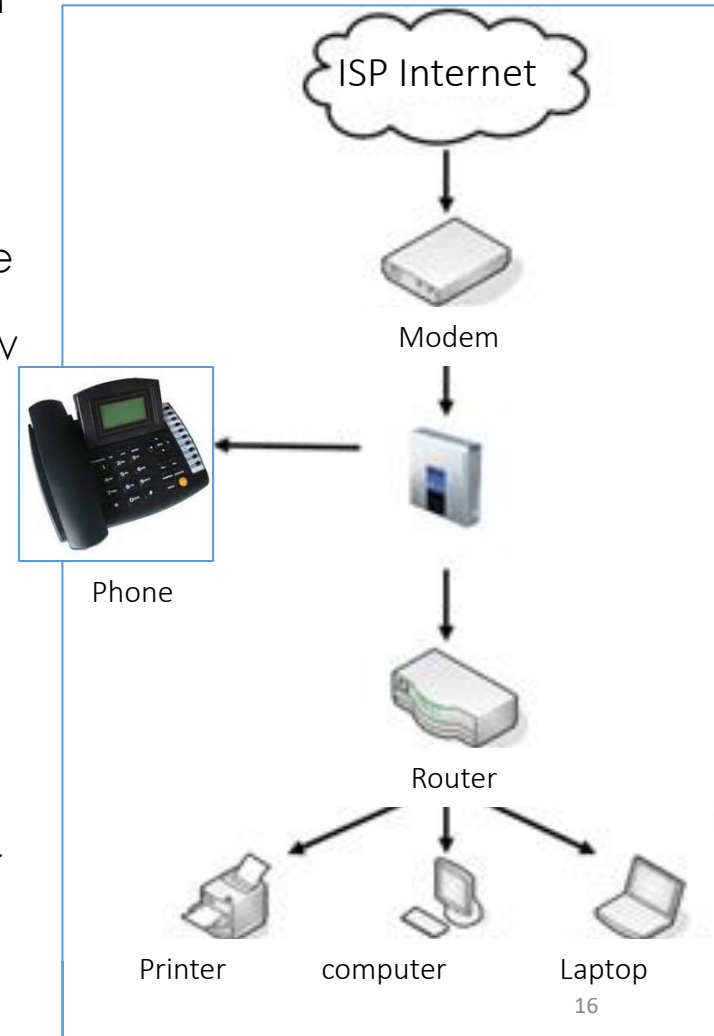
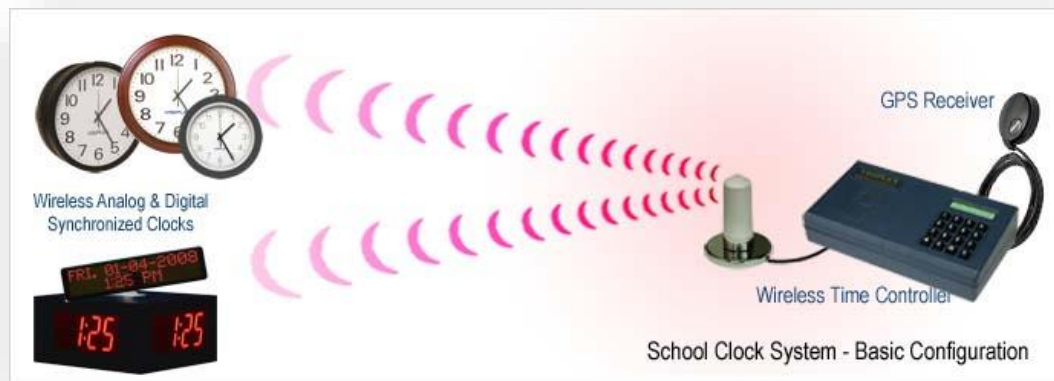

Control panel

Device input panel

Communications

- The Committee made specific recommendations for a dedicated telephone handset for inter-school and external communication ability.

- The telephone handset should be a Voice over IP style (VoIP), connected to the data network system, to allow call-out of local and external phone calls as required.

- Back-up uninterruptable power supply (UPS) equipment will need to be provided at each data system cabinet.

- A public address system should be incorporated into the telephone system to allow individual classroom or all-call and exterior paging capabilities to each area of the school.

ISP Internet

Modem

Phone

Router

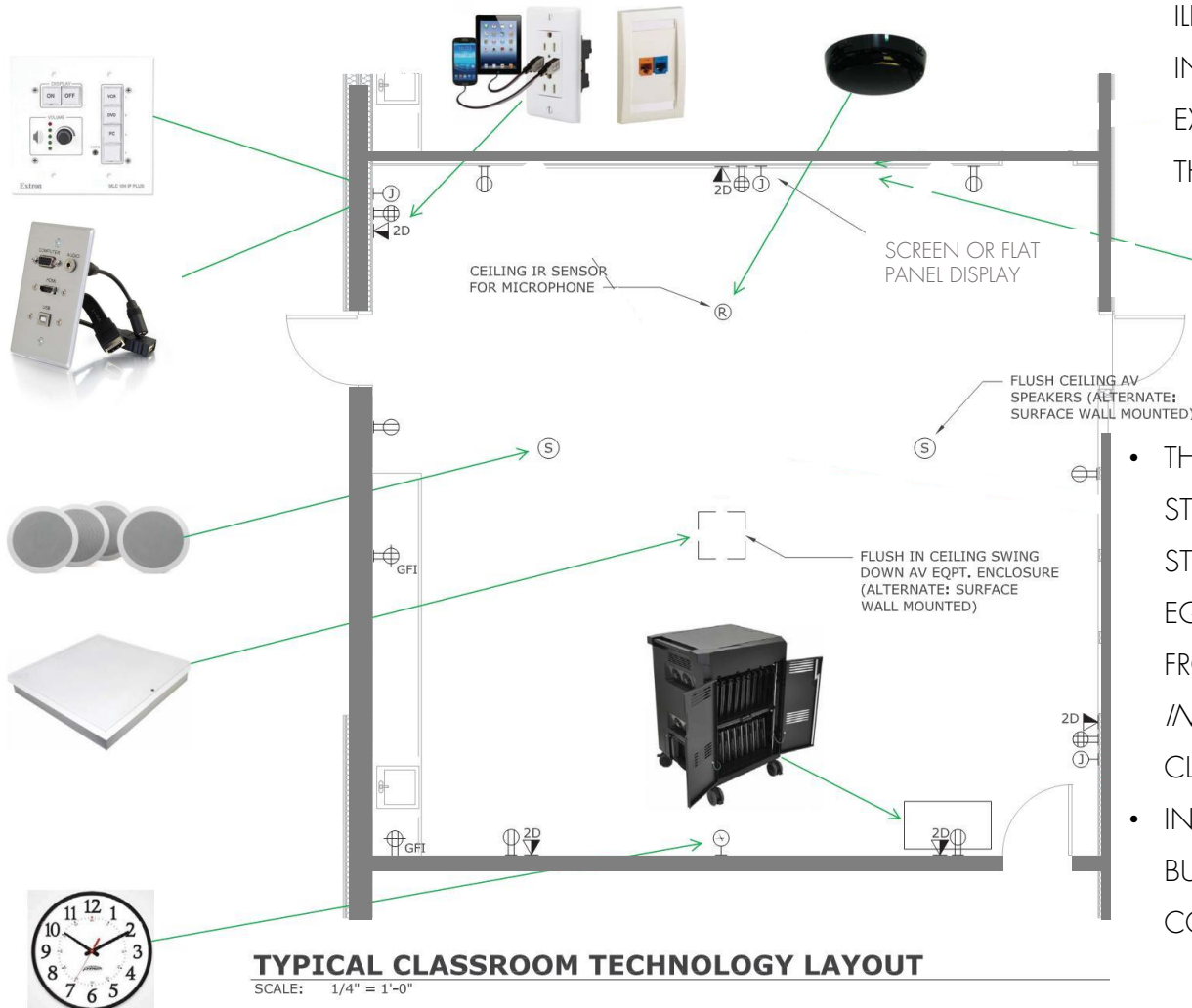Printer   computer   Laptop

16

Clocks

- The clocks may be wireless, battery powered, GPS controlled clocks or hard-wired conventional clocks wired to the head-end master clock system. Clocks shall be 12" round, flush wall mounted, analog type, or square digital type with black letters on a white background.

Typical Classroom

NOTES:

- THIS IS A GENERIC CLASSROOM LAYOUT FOR ILLUSTRATIVE PURPOSES ONLY. IT IS NOT INTENDED TO BE AN EXACT MATCH OF ANY EXISTING OR NEW CLASSROOMS THROUGHOUT THE DISTRICT.

- THESE ARE **INFRASTRUCTURE** TECHNOLOGY STANDARDS, NOT EQUIPMENT AND TOOLS STANDARDS. EVEN THOUGH TECHNOLOGY EQUIPMENT AND TOOLS NEEDS MAY VARY FROM SITE TO SITE, IMPLEMENTATION OF *INFRASTRUCTURE* STANDARDS SHOULD BE CLOSE TO UNIVERSAL.

- INFRASTRUCTURE WILL BE IMPLEMENTED WHEN BUILDING IMPROVEMENTS AND NEW CONSTRUCTION PROJECTS OCCUR.

CEILING IR SENSOR FOR MICROPHONE

SCREEN OR FLAT PANEL DISPLAY

FLUSH CEILING AV SPEAKERS (ALTERNATE: SURFACE WALL MOUNTED)

FLUSH IN CEILING SWING DOWN AV EQPT. ENCLOSURE (ALTERNATE: SURFACE WALL MOUNTED)

TYPICAL CLASSROOM TECHNOLOGY LAYOUT
SCALE: 1/4" = 1'-0"

Implementation of Standards

The Committee acknowledges that funding will remain an ongoing effort and that the technology needs at each site will vary, from site to site, and even over time.

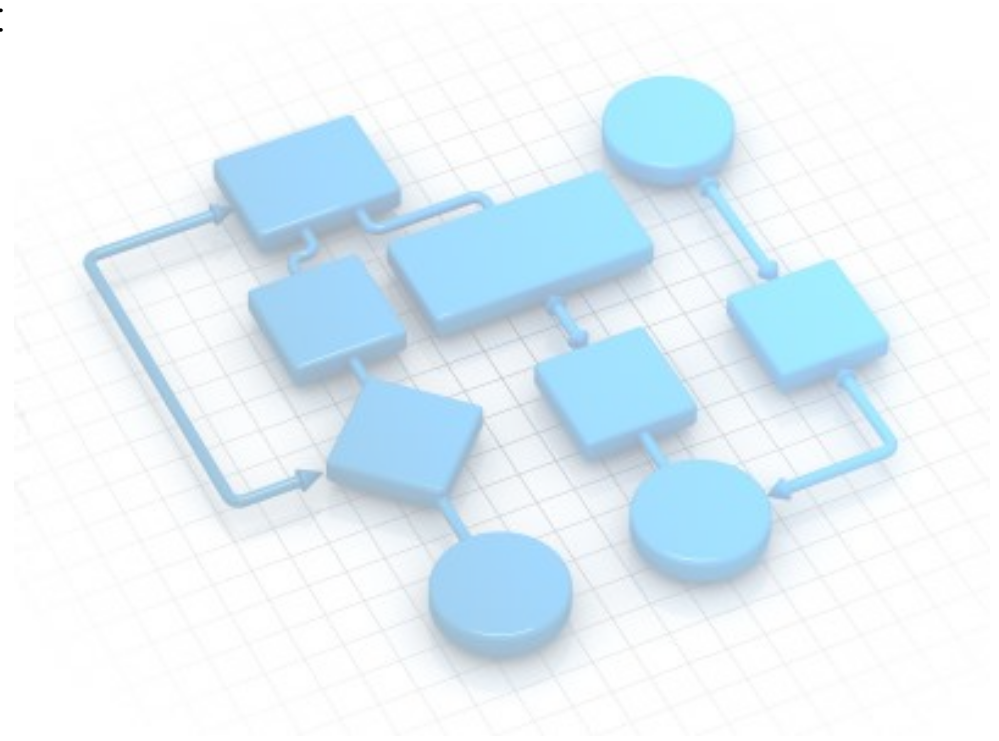The standards therefore indicate that site specific measures will be developed through:

- Site assessment
- Site committee meetings
- AUSD current and future Implementation Plan Schedules

NOTE: Not all Technology and Communications Measures will be completed as part of current Implementation Plan

Implementation of Standards

The Committee acknowledges that procedures and protocols need to be developed by AUSD to support, maintain, and ensure the proper execution of these technology and communications design standards:

- Staff training
- Online security and restrictions
- Device tracking and management
- Student accessibility: during school, after hours, and from off-site
- Open architecture
- Security management system

AUSD District Standards

Technology and Communications

QUESTIONS?

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