



# ALAMEDA UNIFIED SCHOOL DISTRICT

## Facility Design Standards for Technology and Communications

**Final Draft**

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QUATTROCCHI KWOK  
ARCHITECTS



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## INTRODUCTION

On November 4, 2014 the voters of the Alameda City Unified School District (AUSD) passed bond Measure I. In June of 2014 the AUSD board of trustees has adopted an Implementation Plan for the Measure I bond program which places the development of District Wide Technology and Communications Standards as a top priority beginning Fall of 2015 in order to improve power, data and communications systems and to Provide the facilities and equipment needed so students



have access to 21st Century learning technology and to provide improved, up-to-date technology infrastructure. Specific language from Measure I reads as follows:

- 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, 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.

AUSD selected Quattrocchi Kwok Architects to facilitate the creation of this District Wide Facilities Design Standard for Technology.

### **Costs and Budget for Measure I projects:**

The budget for each project listed in the Measure I Ballot Proposition is an estimate and may be affected by factors beyond the District's control. The final cost of each project will be determined as plans are finalized, construction bids are awarded, and projects are completed. Based on the final costs of each project, certain projects may be delayed or may not be completed with Measure I funds.

### **The Technology and Communications**

#### **Committee**

The Technology and Communications Committee has been formed to review the district's technology standards, and began meeting in the fall of 2015. The Committee is composed of District Staff and School teachers, librarians, and administrators. This committee met four times to develop these standards. The findings and recommendations of this report are the result of the recommendations of the Committee over the course of these meetings. All notes from the meetings are contained in an appendix at the end of this document. The intent is not to define exactly what facilities each school campus will have, but instead, to provide a clear set of generalized technology standards that can be adapted to each campus. Further, the intent is that these standards can be applied as individual improvement projects throughout the district, or implemented as part of broader campus modernization projects for each campus. Thus, the standards can be implemented in a way that coordinates with the 2014 district-wide master plan

while at the same time allowing for flexibility in scheduling.

### **Standard Operating Policies and Procedures**

In addition to these design standards for technology and communications systems, it is critical that AUSD District and school staff implement and

consistently enforce clear and comprehensive standard operating policies and procedures (SOP's). Periodic training and updating of these SOP's is also recommended for staff members, educators, and students. Even the best upgrades can be undone if policies and procedures are not understood and followed on a regular basis.

## **ACKNOWLEDGEMENTS**

The task of developing these District Design Standards could not have been accomplished without the dedication and contributions of the members of the Technology and Communications Committee. We would like to take this opportunity to thank the following people for their contribution of time, leadership, and direction necessary to develop these Standards:

### **DISTRICT**

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## APPLICABLE STANDARDS AND REGULATIONS

These District Wide Design Standards were developed in the context of and with reference to a variety of existing standards, requirements, and policies.

### California Department of Education (CDE)

CDE and the California Education Code provide guidelines and standards for Educational Facilities. The recommendations and decisions of the committee shall be configured and implemented in such a way as to meet the intent of the committee while meeting the requirements of these CDE facilities standards. It is the intent of these standards for all schools to comply with CDE facility recommendations.

### Division of the State Architect (DSA)

Projects for all school construction, renovations and additions are required to meet the standards and regulations of the Division of the State Architect. Requirements for California Building Code compliance, as well as, the Americans with Disabilities Act (ADA) and requirements for emergency vehicle access will be addressed in the development of all projects. All modernization or new construction projects will comply with the requirements of the current edition of the California Building Code as adopted by DSA.

## PURPOSE

The purpose of the District Wide Technology and Communications Standards is to guide facilities design across the District and to enhance and support curriculum where possible. The standards are intended to provide improved, up-to-date technology infrastructure so that AUSD sites can utilize the most up to date Audio, Visual, and communication devices in their learning environments and their curriculum design and execution. They are intended to provide a standard level and minimum quantity of connection points to help ensure equity among

campuses throughout the District. These standards will serve as a starting point for campus specific modernization and improvement projects to be undertaken at each site. Further, 21<sup>st</sup> century learning is a primary concern of AUSD and an important consideration in any facilities decision, in order to allow students to attend college or to compete in today's job market by providing them with technology skills and a strong background in science, math, business and technology. There is a fundamental educational program need to maintain the school as modern, up to date, and evolving learning environments. The main purpose of these standards is to develop standard recommendations to:

- 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, upgrade electrical wiring at all District-owned sites.
- Upgrade and replace computer infrastructure systems, classroom and library technology and teaching equipment to enhance instruction.

These goals were also previously discussed and addressed during three significant milestones:

- During the development of the AUSD Technology Plan, dated July 1 2013 and incorporated into the Education Specifications that were approved by the Board and published in 2014.
- During the development of the AUSD Education Specifications that were approved by the Board and published in 2014.
- During the development of the District Wide Facilities Master Plan (FMP), at which time each school site committee discussed technology at length, and their input is reflected in the Facilities Master Plan that was approved by the Board and published in 2014. These conversations touched on many aspects of technology, including power and data infrastructure, Wireless WiFi capabilities, and the use of technology in the classroom as well as in specialized labs, libraries, and multi-purpose spaces.

## DISTRICT WIDE STANDARDS FOR TECHNOLOGY

### Typical Classrooms:

A typical Classroom should include the following technology infrastructure, as identified in schematic form in Appendix A:

1. Power infrastructure to accommodate the various uses described below.
2. Data system infrastructure (both wired and wireless).
3. Room and use-appropriate size flat panel display or interactive short-throw projector at teaching wall.
4. Dual AV system input locations.
5. Ceiling or wall mounted AV system equipment enclosure.
6. Ceiling or wall mounted AV system speakers.
7. Hard wired telephone communications handset.
8. Wall clock (central wired or wireless GPS battery powered).

**Power:** The typical Classroom should accommodate power requirements for various uses such as:

1. Teachers Computer.
2. Multiple Student Desktop Computers.
3. Display Source (Flat Panel or Short-throw Projector).
4. Audio / Visual Control Equipment Enclosure.
5. Laptop Charger Cart.
6. General convenience power.
7. USB charger ports integrated into specific outlet locations.

Power should normally be provided as individual quad style wall outlets, but some Classroom configurations may require other solutions such as overhead power supply, power pole assemblies, surface wall mounted raceways along the Classroom perimeter, or any combination of each of these.

Sufficient power capacity should be built into each Classroom, to support at least (4) dedicated 20 amp, 120V branch circuits; One dedicated for AV equipment (media display, amplifier, and controls), two for a dedicated multiple computer locations; and one for general power, which may include the Teachers desk, and misc. convenience receptacles with USB charger ports at accessible wall locations. Dedicated Laptop chargers (if used in standard Classrooms), may also require additional circuits or special circuit configurations to support the intended charger equipment.



**Data:** The typical Classroom should accommodate sufficient data connectivity to serve up to 35 Students with a combination of wireless and wired connections. Wireless will be the primary connection method in a standard Classroom. Each Classroom should have provisions for a single centrally located ceiling or wall location for (2) Category 6 data drops, dedicated to serve a Wireless Access Point (WAP) router. The WAP device will not require 120V power, as it will be power-over-Ethernet style. This will require power-over-Ethernet switches to be provided at each IDF Cabinet, for proper network distribution of the required data power capacity.



An additional (10) hard-wired Category 6 data drops per Classroom should be provided as follows:

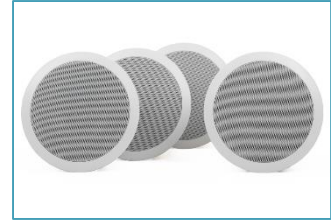
1. (4) jacks at a designated Teachers desk location (for computer and VoIP phone).
2. (1) jack at the AV Equipment Enclosure (for network connectivity of AV system control).
3. (4) jacks at designated Student network device locations (for device connection).
4. (1) jack at the media display (for network connectivity).

**Audio / Visual (AV):** The typical Classroom should be provided with an integrated Audio/Visual display and sound system infrastructure to support local media display and audio. Each system should include:

1. (2) media input locations (at opposite corners of the room), for hard-wired input of HDMI, VGA, USB, and/or direct audio input to the system.
2. A wall or ceiling mounted AV enclosure to house the related interconnection components and audio amplifier. The enclosure can be flush mounted in available suspended ceiling locations, or can be surface mounted on the wall, where no concealed ceiling spaces exist.
3. (2) ceiling or wall mounted media speakers to provide amplified audio to the Classroom environment. Speakers can be flush mounted in available suspended ceiling locations, or surface wall mounted, where no ceiling space exists.
4. A Teacher voice amplification should be provided with a wireless microphone that the Teacher wears on their shirt or around the neck, which will help amplify the Teacher's voice during lessons, using the same media speakers noted above.

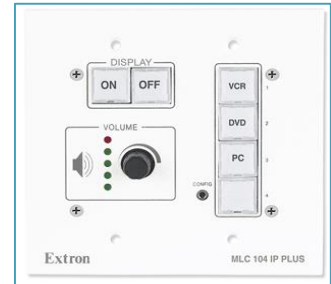


5. The media speakers may also be used as a replacement for a typical Bell/PA Classroom speaker, when properly interconnected to a head-end network option that originates the bell and PA signals from a central Staff location.



6. Media input may also be accomplished over the wireless data network, when the display device and input device are on the same wireless router network connection. This would require a wireless casting device such as Chromecast, Apple TV, or a similar wireless AV device for each display/input pair.

**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.



**Communication:** Each Classroom will require a dedicated telephone handset for inter-School and external communication ability. The telephone handset should be a Voice over IP style, connected to the data network system, to allow call-out of local and external phone calls as required. Since the telephone communication device is important for School security, back-up uninterruptable power supply (UPS) equipment will need to be provided at each data system cabinet. These supplies will ensure that the phone and PA systems stay up and running over the data system, in the event of a normal power failure. 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. Classroom zones can be served from the AV speakers noted above (with proper interface). Corridor, other spaces, and exterior site speakers should be provided in each area for PA coverage throughout the campus. All PA announcements shall be capable from a staff telephone set with the appropriate PA system access code.



**Clocks:** Each Classroom will require a local wall clock. The clocks should generally not be located centered on a Classroom wall, since this may interfere with displays and media equipment. 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.



### Specialized Computer Lab / Graphics or CAD Lab:

**Power:** The typical Computer or CAD Lab space should be provided with additional power capacity to support up to (35) dedicated computers, with associated network printers and/or plotters. Due to the high density of computers, each Computer Lab should be provided with a dedicated branch power panel, with local branch power circuits to the computers. The local power panel should include a voltage surge suppression device, to help protect the computer power supplies from transient spikes that may occur in these environments. The room should include power receptacles for:

1. Teachers Computer.
2. (35) Student Desktop Computers (minimum of 12 branch circuits – 3 computers / screens per circuit).
3. Display Source (Flat Panel or Short-throw Projector) – dedicated circuit.
4. Audio / Visual Control Equipment Enclosure – dedicated circuit.
5. Laptop Charger Cart – dedicated circuit (sized for charger requirements).
6. General convenience power.
7. USB charger ports integrated into specific outlet locations.

Power outlets should be distributed around the room as required to serve the space layout, but may include flush floor outlets at designated locations, surface wall mounted raceways along the Classroom perimeter, power-pole drops to desk clusters. Additional power capacity should be provided to support the AV equipment (media display, amplifier, and controls), and general power, which may include misc. convenience receptacles with USB charger ports at accessible wall locations. Dedicated Laptop chargers will also require additional circuits or special circuit configurations to support the intended charger equipment. All of these loads should be fed from the local Computer Lab power panel.

**Data:** The Computer Lab should accommodate sufficient data connectivity to serve up to 35 Student computers and (4) Teacher computer, including VOIP phone data connector. This will require a dedicated Intermediate Distribution Frame (IDF) Cabinet at the Computer Lab, to serve just the Lab itself. The IDF should be wired with fiber optic cable to the Main Distribution Frame (MDF) at the School, for network server access. Hard-wired connectivity will be the primary method of connection in Computer Labs, but each should also be provided with wireless connectivity. As with a standard Classroom, provisions should be included for a single centrally located ceiling or wall location for (2) Category 6 data drops, dedicated to serve a Wireless Access Point (WAP). The WAP device will not require 120V power, as it will be power-over-Ethernet style. This will require power-over-Ethernet switches to be provided in the Computer Room IDF Cabinet, for proper network distribution of the required data power capacity.

An additional (4) hard-wired Category 6 data drops per Lab should be provided as follows:

1. (1) jack at the AV Equipment Enclosure (for network connectivity of AV system control).
2. (1) jack at the media display (for network connectivity).
3. (2) jacks for network printers.

This means that each Computer / CAD Lab should be provided with total of (45) Category 6 data drops (39+2+4) and a dedicated IDF Cabinet. The IDF cabinet shall be lockable and provided with sufficient cooling or exhaust to serve the equipment.

Each Computer / CAD Lab Classroom will also require additional cooling capacity to accommodate the added heat load in these rooms, from the computer equipment.

**Audio / Visual (AV):** Each Computer / CAD Lab should be provided with an integrated Audio/Visual display and sound system infrastructure, similar to a standard Classroom. Each system should include:

1. A media input locations at the designated Teachers location, for hard-wired input of HDMI, USB, VGA, and/or direct audio input to the system.
2. A wall or ceiling mounted AV enclosure to house the related interconnection components and audio amplifier. The enclosure can be flush mounted in available suspended ceiling locations, or can be surface mounted on the wall, where no concealed ceiling spaces exist.
3. (2) ceiling or wall mounted media speakers to provide amplified audio to the Classroom environment. Speakers can be flush mounted in available suspended ceiling locations, or surface wall mounted, where no ceiling space exists.
4. A Teacher voice amplification option should be provided with a wireless microphone that the Teacher wears on their shirt or around the neck, which will help amplify the Teacher's voice during lessons, using the same media speakers noted above.
5. The media speakers may also be used as a replacement for a typical Bell/PA Classroom speaker, when properly interconnected to a head-end network option that originates the bell and PA signals from a central Staff location.
6. Media input may also be accomplished over the wireless data network, when the display device and input device are on the same wireless router network connection. This would require a wireless casting device such as Chromecast, Apple TV, or a similar wireless AV device for each display/input pair.

**Controls:** The typical AV equipment system should include a set of hard-wired wall controls at the 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.

**Communication:** Each Computer / CAD Lab Classroom will require a dedicated telephone handset for inter-School and external communication ability. The telephone handset should be a Voice over IP style, connected to

the data network system, to allow call-out of local and external phone calls as required. Since the telephone communication device is important for School security, back-up uninterruptable power supply (UPS) equipment will need to be provided at each data system cabinet. These supplies will ensure that the phone systems stay up and running over the data system, in the event of a normal power failure. A public address system should be incorporated into the telephone system to allow Lab Room paging capabilities. The Lab zone can be served from the AV speakers noted above (with proper interface). All PA announcements shall be capable from a staff telephone set with the appropriate PA system access code.

**Clocks:** Each Computer / CAD Lab will require a local wall clock. The clocks should generally not be located centered on a Classroom wall, since this may interfere with displays and media equipment. 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, with black letters on a white background.

## Library:

**Power:** The typical Library space should accommodate power requirements for various uses such as:

1. Librarian and Check-Out Desk Computers / Printers.
2. Multiple Student Desktop Computers / Printers.
3. Two centrally located Display Sources (Flat Panel or Short-throw Projectors) – dedicated circuits to each.
4. Audio / Visual Control Equipment Enclosure (at media display locations) – dedicated circuit to each.
5. Laptop Charger Cart – dedicated circuit (sized for charger requirements).
6. General convenience power.
7. USB charger ports integrated into specific outlet locations. Library should have ample USB charger ports for Chrome Books, tablets, and other electronic recharging loads.

Power should normally be provided as individual quad style wall outlets throughout the Library space. Flush floor outlets or other solution for providing power to student tables should be provided at designated Student Table locations, to provide power connectivity for laptop computer use. Additional surface wall mounted raceways may also be provided at designated Computer bench locations. Sufficient power capacity should be built into each Library space, to support the loads. This may include: one dedicated circuit for AV equipment (media display, amplifier, and controls), two or three circuits for a dedicated multiple computer location; multiple circuits for general power; three circuits at the Librarian / Check-Out desk (for computers / printers); and misc. convenience receptacles with USB charger ports at accessible wall locations. Library locations may make heavy use of Laptop Computers, so a dedicated Laptop charger power location may also require additional circuits or special circuit configurations to support the intended charger equipment.

**Data:** The typical Library should accommodate sufficient data connectivity to serve up to 50 Students with a combination of wireless and wired connections. Wireless will be the primary connection method in a Library, due to the transient nature of the space. The Library should have provisions for two ceiling or wall locations for (2) Category 6 data drops each (total of 4), dedicated to serve Wireless Access Point (WAP). The WAP devices will not require 120V power, as they will be power-over-Ethernet style. This will require power-over-Ethernet switches to be provided at each IDF Cabinet, for proper network distribution of the required data power capacity.

Up to an additional (29) hard-wired Category 6 data drops for the Library should be provided as follows:

1. (4) jacks at a designated Librarian desk location (for computer, network printer, and VoIP phone).
2. (6) jacks at the Check-Out Desk location (for 2 computers, 2 network printers, VoIP phone, and Book Theft Security equipment).
3. (1) jack at the AV Equipment Enclosure (for network connectivity of AV system control).
4. Optional up to (16) jacks at a designated Student Desktop Computer locations (for computers).

5. (1) jack at each the media display (for network connectivity) – total of (2).

**Audio / Visual (AV):** The Library should include two media locations, provided with an integrated Audio/Visual display at each location and sound system infrastructure for the whole room, similar to a standard Classroom. There should be input location to support both media display and audio locations. The typical Library system should include:

1. A single media input location for hard-wired input of HDMI, VGA, and/or direct audio input to the system. The single input should feed both media display locations.
2. A wall or ceiling mounted AV enclosure to house the related interconnection components and audio amplifier. The enclosure can be flush mounted in available suspended ceiling locations, or can be surface mounted on the wall, where no concealed ceiling spaces exist.
3. (4) ceiling or wall mounted media speakers to provide amplified audio to the media area in the Library. Speakers can be flush mounted in available suspended ceiling locations, or surface wall mounted, where no ceiling space exists.
4. A Teacher voice amplification option should be provided with a wireless microphone that the Teacher wears on their shirt or around the neck, which will help amplify the Teacher's voice during presentations, using the same media speakers noted above.
5. The media speakers may also be used as a replacement for a typical Bell/PA speaker, when properly interconnected to a head-end network option that originates the bell and PA signals from a central Staff location.
6. Media input may also be accomplished over the wireless data network, when the display device and input device are on the same wireless router network connection. This would require a wireless casting device such as Chromecast, Apple TV, or a similar wireless AV device for each display/input pair.

**Controls:** The typical AV equipment system should include a set of hard-wired wall controls at the 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.

**Communication:** The Library will require a dedicated telephone handset for inter-School and external communication ability. The telephone handset should be a Voice over IP style, connected to the data network system, to allow call-out of local and external phone calls as required. Since the telephone communication device is important for School security, back-up uninterruptable power supply (UPS) equipment will need to be provided at each data system cabinet. These supplies will ensure that the phone systems stay up and running over the data system, in the event of a normal power failure. A public address system should be incorporated into the telephone system to allow Library paging capability. The Library zone can be served from the AV speakers noted above

(with proper interface). All PA announcements shall be capable from a staff telephone set with the appropriate PA system access code.

**Clocks:** The Library will require a local wall clock. Clocks should be placed in an appropriate location for maximum visibility. 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, with black letters on a white background.

### Multi-Purpose Room (MPR) Spaces:

**Power:** The typical MPR should accommodate power requirements for various uses such as:

1. Portable equipment for presentations / events.
2. Sports scoring equipment.
3. Centrally located Display Source (Overhead Projector System with Screen) – dedicated circuit.
4. Audio / Visual Control Equipment Enclosure (at media display location) – dedicated circuit.
5. General convenience power.
6. USB charger ports integrated into specific outlet locations.

Power should normally be provided as individual quad style wall outlets throughout the MPR space. Flush floor outlets should generally be avoided to maintain a flat floor with no tripping hazards. Due to varied uses, including ball use, surface wall mounted raceways and boxes should also be avoided. MPR loads may include; One dedicated circuit for AV equipment (media display, amplifier, and controls), one circuit for an overhead motorized projection screen; multiple circuits for general power; misc. convenience receptacles with USB charger ports at accessible wall locations.

**Data:** Since MPR spaces may be used for testing with Laptop Computers, the MPR should accommodate sufficient data connectivity to serve up to 30 Students with a combination of wireless and wired connections, similar to the Library. Wireless will be the primary connection method in the MPR, due to the transient nature of the space. The MPR should have provisions for two ceiling or wall locations for (2) Category 6 data drops each (total of 4), dedicated to serve Wireless Access Points (WAP). The WAP devices will not require 120V power, as they will be power-over-Ethernet style. This will require power-over-Ethernet switches to be provided at each IDF Cabinet, for proper network distribution of the required data power capacity.

An addition of (10) hard-wired Category 6 data drops for the MPR should be provided as follows:

1. (1) jack at the AV Equipment Enclosure (for network connectivity of AV system control).
2. (1) jack at the Projector location (for network connectivity).
3. (8) jacks at designated wall locations (for misc. computer connections).

**Audio / Visual (AV):** Due to the size of most MPR's, the media location should consist of a ceiling or wall mounted long-throw projector system, with roll-down motorized screen. The media location may typically be geared towards the stage area, where one exists in an MPR, or on a common wall suitable for central viewing. The system should include display and sound system infrastructure, similar to a Classroom, but on a larger scale. The system should include:

1. A media input location for hard-wired input of HDMI, VGA, and/or direct audio input to the system. This location can be used by Staff and/or other users of the space during presentations.
2. A wall mounted AV enclosure cabinet to house the related interconnection components and audio amplifier equipment. The enclosure will typically be surface wall mounted, with a lockable enclosure to protect the AV equipment.
3. AV equipment amplifier, source mixer, and related equipment for wireless microphones, DVD player, or other AV required equipment (to be located in the lockable AV Equipment Cabinet).
4. Wall mounted media system speakers to provide amplified audio to the MPR space. These speakers should typically be larger self-amplified (120V) units, wall mounted in a location on either side of the projection screen, tied to the AV equipment cabinet.
5. The MPR system should include multiple wireless microphone and related control equipment, to allow flexible presentations without cords.

**Controls:** The typical AV equipment cabinet should include all controls required for source selection and volume control. This will be different than a typical integrated Classroom AV system, since the MPR system is a larger system with additional equipment requirements to serve the larger space.

**Communication:** A telephone handset will typically not be provided at the MPR space, since no Staff are present at all times. This may be modified on a specific School basis, depending on the space available for a supervised telephone location. Public address system speakers should be incorporated into the room to allow paging capabilities from the main School PA system. All PA announcements shall be capable from a staff telephone set with the appropriate PA system access code.

**Clocks:** The MPR will require a local wall clock. Clocks should be placed in an appropriate location for maximum visibility and should be provided with a wire guard for ball protection (if the MPR will have ball sports). 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, with black letters on a white background.

### **Administration and Office Space:**

**Power:** The typical administration space should accommodate power requirements for staff computers, printers, copiers, and other office loads.

Power should normally be provided as individual quad style wall outlets at each Desk location. Flush floor outlets are generally not required in these areas, but may be required if/ feeding electrified office furniture in a larger Open Office area. Power capacity will vary depending on quantity of Offices and Staff desks. Enough capacity should be provided to support an average of one dedicated power circuit per two Staff desks. Additional dedicated circuits should be provided for network printers, copiers, and other Staff related equipment. At least one power outlet at each Staff station should be provided with integral USB charger ports.

**Data:** A typical Office space should accommodate a minimum of (4) data ports per Staff position. This will include a computer, printer, telephone, and one additional jack. Wireless connectivity should also be provided at Staff areas. Each Staff / Admin area should have provisions for a single centrally located ceiling or wall location for (2) Category 6 data drops, dedicated to serve a Wireless Access Point (WAP). The WAP device will not require 120V power, as it will be power-over-Ethernet style. This will require power-over-Ethernet switches to be provided at each IDF Cabinet, for proper network distribution of the required data power capacity.

**Communication:** Each Admin space (Office / Desk position) will require a dedicated telephone handset for inter-School and external communication ability. The telephone handset should be a Voice over IP style, connected to the data network system, to allow call-out of local and external phone calls as required. Since the telephone communication device is important for School security, back-up uninterruptable power supply (UPS) equipment will need to be provided at each data system cabinet. These supplies will ensure that the phone systems stay up and running over the data system, in the event of a normal power failure. A public address system should be incorporated into the telephone system to allow individual space or all-call and exterior paging capabilities to each area of the School. Dedicated PA system speakers should be provided in each Admin area for PA coverage. All PA announcements shall be capable from a staff telephone set with the appropriate PA system access code.

**Clocks:** Each Admin Office will require a local wall clock. 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, with black letters on a white background.

### **Typical Administration Conference Room/Principals Office:**

**Power:** The typical administration conference room space should accommodate power requirements for local computer plug-in and a flat panel display for media presentations. This may include a flush floor mounted power receptacle under the conference room table for both power and AV system input. Each wall receptacle should also include integral USB charger ports to allow device charging.

**Data:** A typical Admin administration conference room space should accommodate a minimum of (9) data ports; (4) on opposing walls (total of 8) and (1) at the Flat Panel media display location. Wireless connectivity should be possible from the WAP access provided in each Admin area as described above.

**Audio / Visual (AV):** Due to the small size of most conference rooms, the media location should consist of a flat panel display or a short-throw projector. No dedicated AV system amplification would normally be required in a standard size conference room. The system should include straight through VGA, Audio, and HDMI cabling from an input location (usually floor mounted under the table), to the back of the flat panel display. All audio can be accommodated from the flat panel integrated speakers, so that no additional room speakers would be required. Media input may also be accomplished over the wireless data network, when the display device and input device are on the same wireless router network connection. This would require a wireless casting device such as Chromecast, Apple TV, or a similar wireless AV device for each display/input pair.

**Controls:** All AV controls would be handled through the flat panel remote control and/or computer input.

**Communication:** Each conference room space will require a dedicated telephone handset for inter-School and external communication ability. The telephone handset should be a Voice over IP style, connected to the data network system, similar to all Admin areas. Each staff phone set should also have the capability to access the School PA system for individual room and/or all-call capabilities with a special access code.

**Clocks:** Each conference room will require a local wall clock. The clock should be located so as not to interfere with the flat panel wall display location. 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, with black letters on a white background.

## PROCEDURES AND PROTOCOLS

Following is a short list of items to be addressed through procedures and protocols 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

## SITE SPECIFIC TECHNOLOGY MEASURES

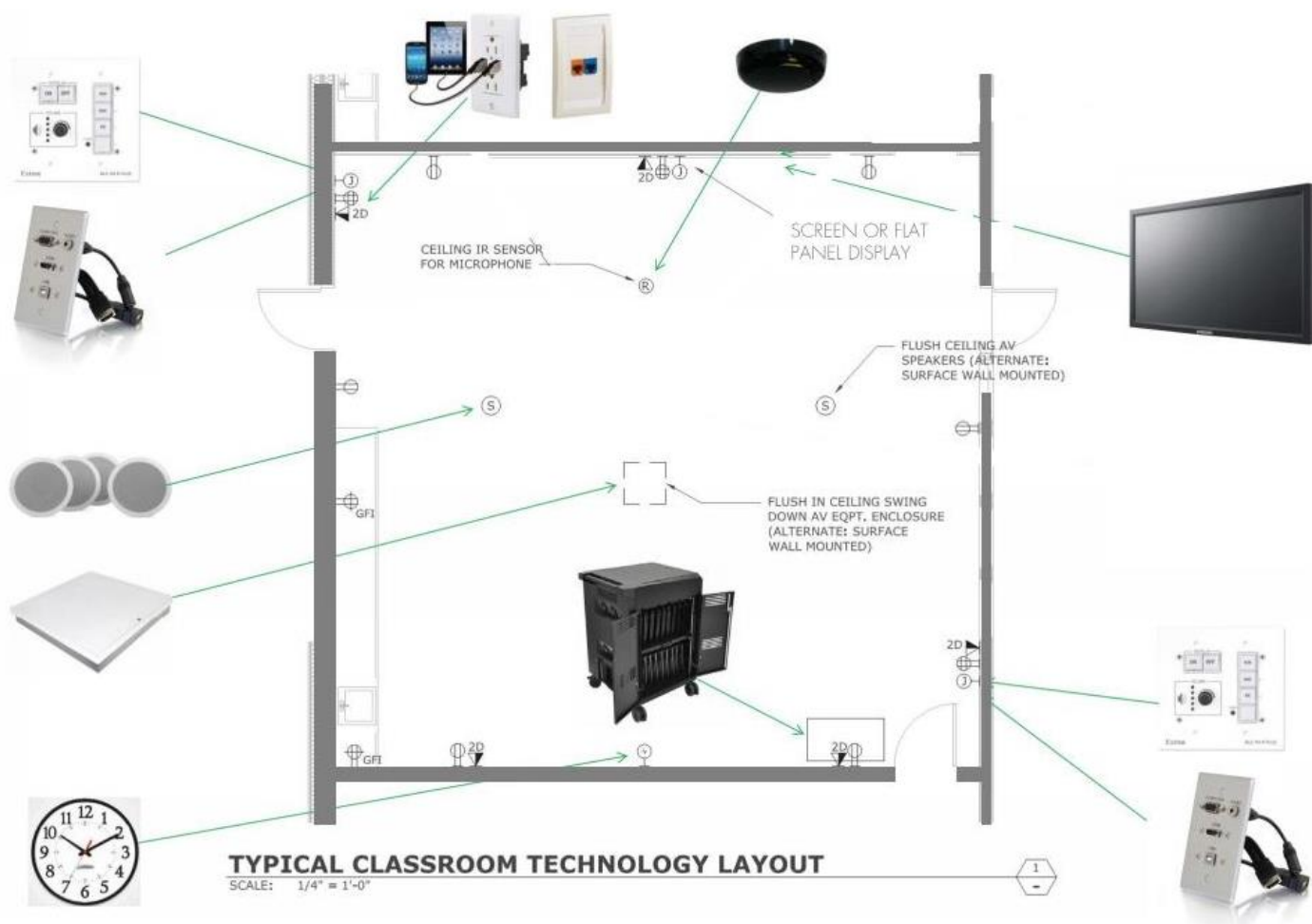
Measure I is based on the 2014 Facilities Master Plan, which identified \$590 million worth of renovations, modernizations, and repairs needed in AUSD's school sites.

According to the schedule approved by the Board of Education in March, 2015, the first \$90 million in funds will be used for site specific renovation and modernization work to the school district's elementary, middle, and charter schools while design work begins on renovations to Encinal High School and Alameda High School. Subsequent projects will be funded as more of the bond funds are received through 2019 (from AUSD website regarding Measure I background).

Site specific measures will be developed through site assessment, site committee meetings and per the AUSD Measure I Bond Program Implementation Plan Schedule.

## APPENDIX A

### Typical Classroom Layout



#### 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.



## Technology Committee Meeting Notes

The following pages contain the meeting notes from the following meetings:

- Committee Meeting #1 September 29, 2015
- Committee Meeting #2 October 22, 2015
- Committee Meeting #3 April 27, 2016
- Committee Meeting #4 September 27, 2016



## MEETING NOTES

1491.01-B.2

September 29, 2015

### Alameda USD District Standards – Technology and Communications Committee Meeting No. 1

#### Meeting Notes

#### Attendees:

Kelly Gregor, Teacher Librarian  
Roxanne Clement, Teacher Librarian  
Bethany Iping Ling, Classroom teacher  
Zoe Boese, Teacher Librarian  
Diana Kenney, Teacher  
Steve Allen, Teacher  
Lynn Kinsey, Teacher Librarian  
Dana Adams, Teacher Librarian  
Deborah Kjelland, Teacher  
Erin Head, Teacher Librarian

Jeffrey Gordon, Teacher  
Janice Carroll, TSA Instructional Tech.  
Robbie Lyng, Director of Maintenance, Operations  
and Facilities, AUSD  
Jamie Ferranti, PM, Maintenance, Operations and  
Facilities, AUSD  
Rob van Herk, Director of I.T.  
Shariq Khan, Interim Chief Business Officer, AUSD  
Pieter Colenbrander, Electrical Engineer  
Nick Stephenson, Associate Architect, QKA

#### Distribution:

##### Attendees

Michael O'Neill  
Katherine Reilly  
Benjamin Lundholm

Connie Chapman  
Susan Jones-Szabo  
Jessica Lucio

#### Notes:

##### 1. Introductions

- a. Robbie introduced the project. District Wide Standards for school technology and communications for all schools.
- b. Scope will include developing technology standard requirements for classrooms, administration spaces, public and multi-use spaces, etc. in order to improve both teaching and learning as well as administration. Refer to agenda for additional topics identified by QKA.
- c. Each Committee member introduced themselves.

- d. Pieter Colenbrander, electrical engineer and experienced school systems designer is here today and will assist with the development of the standards.

## **2. Roles and Responsibilities**

- a. Nick will moderate the meetings. There will be four meetings in all, including today's. Nick will take and distribute notes to all attendees.
- b. Pieter is here to present various device options and configurations, and to answer technological questions.
- c. Rob van Herk, District Director of Information Technology, is also here to answer technological questions.

## **3. Infrastructure**

- a. It is consensus of the committee that the standards require both hardwired and wireless infrastructure in parallel at each campus. Wireless alone is not yet considered reliable enough.
- b. One wireless router per classroom was requested.
- c. It is the consensus of the committee that the standards include consideration of how legacy equipment works with new equipment.
- d. Phone systems: Primary phone system should be VoIP – Voice over Internet Protocol. This is the most integrated system available. Drawback is that it is subject to complete campus power outages. To rectify this, there should be UPS devices at each IDF to keep phones working during power outages. In addition, Rob suggested that the standards should include 1 or 2 land line phones at each site in addition to the VoIP phone systems.

## **4. Presentation of device options**

- a. Pieter presented a power point show illustrating the various device options used in 21<sup>st</sup> century classrooms. Refer to list that accompanied the agenda, and is attached here with additions per today's meeting.

## **5. Blended Learning**

- a. Cell phoned: cell phones lockers are requested. This may be for short term if cell phones become integrated into the teaching technology.
- b. Combination approach was discussed. Maybe not all one system. Pieter made clear that infrastructure will be the same for either flat panel or smart screen presentation device.
- c. Future:
  - Collaborative environment
  - "Agnostic" or universal software for flexibility and adaptability.
  - One to one cheap ubiquitous technology in classroom (chrome books for example)
- d. A committee member described a low tech interactive approach with many white boards in each math class (referred to Gunn High School math class).
- e. One device for every student ("one to one") is where they want to go with classroom technology in the future.
- f. Lower grades currently using tablets
- g. Every class room should be a multi-use room with respect to flexibility. Teaching, presenting, break out, small groups, project areas, etc.

## **6. Elementary Classrooms**

- a. Furniture is important: multi-purpose, moveable and ergonomic.

Safety and Security  
Meeting Notes Page 3 of 4

- b. Want interactivity.
- c. Lighting is also important.

**7. TK thru Second Grade Classrooms:**

- a. Smart Boards are very useful at this level. Teacher led multimedia interactive station is important (touch screen)
- b. Also each student to have their own device. Tablet technology is good. "Show what they know."
- c. Writable wall surface: balance with display (Bulletin boards, etc.) surfaces.
- d. Document Cameras are used by teachers currently.
- e. Flexibility via. maximized infrastructure is the committee consensus.
- f. Maybe not keyboarding at these grade levels.
- g. Sound amplification is necessary with microphones – both for teacher and for students.
- h. Rooms should be Blue Tooth capable.
- i. Infrastructure should be Wi-Fi and Bluetooth robust enough for one to one student to device ratio.
- j. If we keep projectors, keep them in the ceiling, and work them through Wi-Fi router.
- k. Both hard and software should be "open architecture/cross platform" to eliminate compatibility issues.
- l. The standards should require that the District test stuff out prior to use district wide use.
- n. Need to build in maintenance standard

**8. Resources and References**

- a. It was agreed that the committee would like information on what other districts are doing, and what lessons they may have learned, from the technology they are using.
- b. Nick will email resources to group.

**9. Next Steps**

- a. Continue with agenda at next meeting.

**Next Meeting Date:** TBD

Attachment: List of Key items for modern learning environments, edited per today's meeting

#### Key items for modern Learning Environments

1. AV system interfaces, with all the options like voice lift microphones, panic buttons, etc.
2. Hard wired input stations (HDM, VGA, Audio).
3. Controls (volume / source select – can be hard devices or software on PC).
4. Space for AV equipment (amplifiers / switchers / controls).
5. How the sound would be put in the room, with either visible or concealed ceiling speakers, or wall speakers.
6. Flat panel displays.
7. Projectors.
8. Pull down or motorized screens.
9. Network ports (Ethernet).
10. Wireless input from Students and Teachers direct to the displays.
11. Video / TV to the Classroom (i.e. network connections vs. legacy co-axial and head-end equipment).
12. How much use of TV channels?
13. How to deal with legacy equipment that may still be in use in the District moving forward (i.e. VGA vs. HDMI equipment).
14. Document viewers.
15. Clocks.
16. Campus Public Address.
17. I-pod Audio jacks / standard audio jacks.
18. Receptacles with USB charger ports.
19. Charging stations for personal devices?
20. Laptop charger carts. Policies and Procedures for internet safety and the appropriate and ethical use of technology
21. Others?
22. *VoIP – Voice over Internet Protocol. Include this with UPS devices at each IDF to keep phones working plus 1 or 2 land line phones at each site.*
23. *Blue Tooth Availability*



QUATTROCCHI KWOK  
ARCHITECTS

	September 29, 2015	3:30PM	AUSD
	Alameda USD Tech and Communications - Committee Meeting #1 Sign In Sheet		
	Name	Title	Email Address
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LL	Robbie Lyng		
RH	Rob van Herk	Director of IT	
X	Shariq Khan	Interim CBO, AUSD	
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	Roxanne Clement	Teacher Librarian, Bay Farm	rclement@alameda.k12.ca.us
	Michael O'Neill		
	Katherine Reilly		
	Bethany Iping Ling	Classroom Teacher	bling@alameda.k12.ca.us
	Zoe Boese	Teacher Lib. Edison	zboese@alameda.k12.ca.us
	Diana Kenney	Teacher	dkenne@alameda.k12.ca.us
	Benjamin Lundholm		
Steve	Stephen Allen	Teacher	sallen@alameda.k12.ca.us
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	Connie Chapman		
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W	Erin Head	Teacher Librarian, Baden	ehhead@alameda.k12.ca.us
	Jeffrey Gordon	Classroom Teacher	jgordon@alameda.k12.ca.us
	Susan Jones-Szabo		
	Jessica Lucio		
	Janice Carroll	TSA Instructional Tech	jcarroll@alameda.k12.ca.us
	Jamir Farooq	PM MOF	jfarooq@alameda.k12.ca.us



## MEETING NOTES

1491.01-B.2

October 22, 2015

### Alameda USD District Standards – Technology and Communications Committee Meeting No. 2

#### Meeting Notes

#### Attendees:

Kelly Gregor, Teacher Librarian  
Roxanne Clement, Teacher Librarian  
Michael O'Neill, Teacher  
Lynn Kinsey, Teacher Librarian  
Dana Adams, Teacher Librarian  
Janice Carroll, TSA Instructional Tech.  
Susan Jones-Szabo, Teacher Librarian

Robbie Lyng, Director of MOF, AUSD  
Jamie Ferranti, PM, MOF, AUSD  
Brenda Parella, PM, MOF, AUSD  
Rob van Herk, Director of I.T.  
Nick Stephenson, Associate Architect, QKA  
Benjamin Lundholm, Teacher Librarian  
Connie Chapman, Teacher Librarian

#### Distribution:

Attendees  
Katherine Reilly  
Jessica Lucio  
Zoe Boese, Teacher Librarian  
Pieter Colenbrander, Electrical Engineer  
Shariq Khan, Interim Chief Business Officer, AUSD

Diana Kenney, Teacher  
Steve Allen, Teacher  
Deborah Kjelland, Teacher  
Erin Head, Teacher Librarian  
Jeffrey Gordon, Teacher  
Bethany Iping Ling, Classroom teacher

#### Notes:

##### 1. Review of last meeting notes

- a. Nick began by explaining that we will briefly review the notes from the previous meeting and then continue with discussing technology and communications requirements for the balance of the elementary grades, and then attempt to move into a discussion around middle school requirements and how they may vary from elementary school requirements.
- b. Robbie began to review high lights of last meeting notes by sketching a floor plan of a classroom on the white board.

Safety and Security  
Meeting Notes Page 2 of 3

- c. Robbie mentioned that there could be two potential teaching locations per classroom. The committee seemed to be ok with this suggestion.
- d. Robbie sketched extension cords strung from the wall to an AV cart at center of the classroom sketch. He indicated that these are not acceptable but if they have covers on them (he sketched an example) that would be ok. Nick pointed out that the current technology of the projection device (flat screen panel, wireless connections, smart boards, etc.) may allow for elimination for the need to string extension cords along the floor.
- e. In recapping requirements for PK-2<sup>nd</sup> grade classrooms there was extended conversation around power and data distribution. May discussed need to have well distributed power and data around room at all walls. Nick suggested two of each per wall. It was requested that teaching walls have extra power and data, including being located at a teaching station.

**2. Continuing conversation about Classroom Requirements:**

- a. Power and Data Distribution: It was mentioned that one or two data “drops” should be sufficient, especially if Wi-Fi is adequate. Rob Van Herk mentioned that one is required for a teacher’s computer, one for a printer, and one for phone. A fourth could be provided to serve balance of needs. He suggested adding a “switch” not a “router” to enable one port to serve up to eight devices. Needs to be high quality switch.
- b. Standards should include language that power and data and Wi-Fi infrastructure should be assessed at each site and enhanced if necessary in order to support the technology required by these standards.
- c. These standards will be used to guide modernization projects as well.
- d. Computer Charging and Storage Carts: For multiple devices (one per student etc.) the use of a charging cart will be used to minimize power outlet requirements. Quality, storage and quantity: Should be high quality to withstand the extended use of school environment. Locations should be site specific. Should be easily accessible location that teachers can have keys to, either one location per classroom, or one location per floor or per classroom building. There should be tracking devices or tracking software on carts and on devices. Google calendar check out was mentioned. It was agreed that the standards should include the requirement for procedures on check out and tracking as well.
- e. Computer Labs: These should be phased out for general computing, replaced by chrome books utilized in classrooms. Specific curriculums such as media technology, etc. may still require some sort of “computer Lab” space. Existing general computer labs could be converted and utilized for other uses.
- f. Projectors and AV devices: The use and location of projectors was discussed. We discussed ceiling mounted vs. short throw wall mounted in lieu of located on a cart. There was conversation whether or not projectors will remain as the technology of choice. Touch screens or interactive flat screens with apple TV may replace them. Flat screen TV’s need to be large enough to see clearly from back of room. Interactive white boards were also discussed. Ultimately, it was agreed that it will come down to ensuring that the proper power, data and Wi-Fi infrastructure is in place to run the most current, and what future may bring.

**3. Next Steps**

- a. QKA will bring floor plans sketches to show suggested layouts of power, data, and technology and communication devices for typical classrooms to confirm what has been discussed thus far. QKA will also

Safety and Security  
Meeting Notes Page 3 of 3

include suggested layouts for specialized spaces (science classrooms, multi-purpose rooms, administration areas etc. These sketches will be used to guide the conversation of requirements for these spaces.

- b. QKA will also bring back feedback from other school districts on technology and communications devices being used in their schools in the hope of benefiting from "lessons learned"
- c. QKA will also reach out to other school districts that are employing newer technology and communication systems to inquire about this committee touring their sites.

**Next Meeting Date:** TBD

Attachment:

- Sign-In Sheet
- Meeting notes from meeting No. 1.
- Copy of slide presentation from meeting No. 1.



QUATTROCCHI KWOK  
ARCHITECTS

	Date: October 22, 2015	3:30PM	AUSD
	Alameda USD Tech and Communications - Committee Meeting Sign In Sheet		
	Name	Title	Email Address
X	Nick Stephenson	Associate Architect, QKA	nicks@qka.com
	Pieter Colenbrander	Elect Engineer, OMM	pcolenbrander@ommconsulting.com
✓	Robbie Lyng		
✓	Rob van Herk	Director of IT	
	Shariq Khan	Interim CBO, AUSD	
✓	Kelly Gregor	Teacher, Librarian - AHS	kgregor@alameda.k12.ca.us
✓	Roxanne Clement	Teacher, Librarian - Bay Farm	rclement@alameda.k12.ca.us
✓	Michael O'Neill	teacher - Earhart	moneill@alameda.k12.ca.us
	Katherine Reilly		
	Bethany Iping Ling	Classroom Teacher	bling@alameda.k12.ca.us
	Zoe Boese	Teacher, Librarian - Edison	zboese@alameda.k12.ca.us
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	Jeffrey Gordon	Classroom Teacher	jgordon@alameda.k12.ca.us
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	Jessica Lucio	classroom teacher	jlucio@alameda.k12.ca.us
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✓	Jamie Ferranti	PM MOF	iferranti@alameda.k12.ca.us
✓	BRENDA PARELLA	PM MOF	bparella@alameda.k12.ca.us



## MEETING NOTES

1491.01-B.2

April 27, 2016

### Alameda USD District Standards – Technology and Communications Committee Meeting No. 3 @ Wood MS

Meeting Notes

#### Attendees:

Nick Stephenson, Associate Architect, QKA  
Pieter Colenbrander, Electrical Engineer  
Shariq Khan, Interim Chief Business Officer, AUSD  
Roxanne Clement, Teacher Librarian  
Michael O'Neill, Teacher  
Lynn Kinsey, Teacher Librarian  
Susan Jones-Szabo, Teacher Librarian

Jamie Ferranti, PM, MOF, AUSD  
Rob van Herk, Director of I.T.  
Benjamin Lundholm, Teacher Librarian  
Connie Chapman, Teacher Librarian  
Diana Kenney, Teacher  
Erin Head, Teacher Librarian  
Jessica Lucio

#### Distribution:

Attendees  
Robbie Lyng, Director of MOF, AUSD  
Brenda Parella, PM, MOF, AUSD  
Katherine Reilly  
Zoe Boese, Teacher Librarian  
Pieter Colenbrander, Electrical Engineer

Dana Adams, Teacher Librarian  
Janice Carroll, TSA Instructional Tech.  
Steve Allen, Teacher  
Deborah Kjelland, Teacher  
Jeffrey Gordon, Teacher  
Bethany Iping Ling, Classroom teacher

#### Notes:

##### 1. Review of prototypical classroom

- Omit ceiling mounted projector
- all else keep. Infrastructure of all technologies excluding the ceiling mounted projector is the same so actual device selection will not require different infrastructure.
- allow for site specific adjustments to layout of device infrastructure.
- Include window blinds to control glare and ambient light for functionality of monitors
- Flexibility is important because in future any room can end up being used for a different purpose or grade level then currently assigned. So customizing tech infrastructure per grade level does not make sense.
- Move clock and speaker off center.

Safety and Security  
Meeting Notes Page 2 of 2

- Set up white boards so seam is not in the center.
- Use same prototypical layout for all grade levels
- Computer based labs - such as multi-media, gaming, coding etc., will require a use-specific infrastructure design so recommendation is to design the infrastructure for those spaces on a case by case basis.
- Look into “Diversatrak” for monitor mounting/white board assembly system
- Does measure I only cover tech and comm infrastructure, or does it cover any level of devices?

## **2. Libraries and Multi Use Spaces:**

- allow for a zoned layout, similar to how this room is laid out (the pilot tech space in portable 3 at Wood MS)
- Allow infrastructure so that libraries and multi use spaces can host groups of unto 50 people. so AV systems to amplify sound, multi screens off one laptop, zoning for medium and small group presentations, acoustics, etc. Movable furniture and storage also necessary for libraries to allow flexibility in this regard as well.
- Next steps:
- Rob will host teacher work groups in this space over the coming weeks. This will allow groups to use furniture and various AV technologies and provide feedback etc.
- QKA will develop the first draft of the tech standards and work with AUSD on how to share with committee - a meeting or via email of pdf, etc.

## **3. Next Steps**

- Rob will host teacher work groups in this space over the coming weeks. This will allow groups to use furniture and various AV technologies and provide feedback etc.
- QKA will develop the first draft of the tech standards and work with AUSD on how to share with committee - a meeting or via email of pdf, etc.

**Next Meeting Date:** TBD

Attachment:

- Sign-In Sheet
- Copy of sample floor plan drawing



QUATTROCCHI KWOK  
ARCHITECTS

	April 27, 2016	3:30PM	Wood Middle School "Demo Room"
Alameda USD Tech and Communications - Committee Meeting Sign In Sheet			
	Name	Title	Email Address
X	Nick Stephenson	Associate Architect, QKA	nicks@qka.com
X	Pieter Colenbrander	Elect Engineer, OMM	pcolenbrander@ommconsulting.com
	Robbie Lyng		
X	Rob van Herk		
	Shariq Khan	CBO, AUSD	
	Kelly Gregor	Teacher, Librarian - AHS	kgregor@alameda.k12.ca.us
X	Roxanne Clement	Teacher, Librarian	rclement@alameda.k12.ca.us
X	Michael O'Neill	Teacher, Earhart	Moneill@alameda.k12.ca.us
	Katherine Reilly		
	Bethany Iping Ling	Classroom Teacher	bling@alameda.k12.ca.us
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X	Benjamin Lundholm	Teacher Librarian	blundholm@alameda.k12.ca.us
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	Jeffrey Gordon	Classroom Teacher	jgordon@alameda.k12.ca.us
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X	Jamie Ferranti	PM MOF	jferranti@alameda.k12.ca.us



## MEETING NOTES

1491.01-B.2

September 27, 2016

### Alameda USD District Standards – Technology and Communications Committee Meeting No. 4 @ Wood MS

Meeting Notes

#### Attendees:

Nick Stephenson, Associate Architect, QKA  
Pieter Colenbrander, Electrical Engineer  
Shariq Khan, Interim Chief Business Officer, AUSD  
Roxanne Clement, Teacher Librarian  
Michael O'Neill, Teacher

Steve Allen, Teacher  
Paizley Spencer, Teacher Librarian  
Janice Carroll, TSA Instructional Tech.  
Rob van Herk, Director of I.T.

#### Distribution:

Attendees  
Robbie Lyng, Director of MOF, AUSD  
Brenda Parella, PM, MOF, AUSD  
Katherine Reilly  
Zoe Boese, Teacher Librarian  
Dana Adams, Teacher Librarian  
Deborah Kjelland, Teacher  
Jeffrey Gordon, Teacher

Bethany Iping Ling, Classroom teacher  
Jessica Lucio  
Lynn Kinsey, Teacher Librarian  
Susan Jones-Szabo, Teacher Librarian  
Benjamin Lundholm, Teacher Librarian  
Connie Chapman, Teacher Librarian  
Diana Kenney, Teacher  
Erin Head, Teacher Librarian

#### Notes:

##### 1. Review of draft Technology and Communication Standards Document

- The Technology and Communication Standards Document had previously been emailed out to the committee members and they were asked to review and come to today's meeting with any questions or concerns.

##### 2. Corrections:

- Nick displayed the document on the large monitor at the center of the room and the group discussed any questions or concerns section by section. Nick tracked notes on the document on his laptop and made revisions as they were discussed.

Technology and Communications  
Meeting Notes Page 2 of 2

- Revisions included minor content corrections, additions of clarifying verbiage, correction of typographical and grammatical errors.

### 3. Next Steps

- Nick and Pieter will do one final pass for coordination, grammar, and typographical errors.
- Nick will then issue the final draft to Rob and the committee members.
- District MOF staff to prepare for presentation to Board of Education for approval. Date of approval TBD.

**Next Meeting Date:** No further meetings.

Attachment:

- Sign-In Sheet



QUATTROCCHI KWOK  
ARCHITECTS

	September 27, 2016	3:30PM	Wood Middle School "Demo Room"
	Alameda USD Tech and Communications - Committee Meeting Sign In Sheet		
	Name	Title	Email Address
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	Robbie Lyng		
✓	Rob van Herk		
✓	Shariq Khan	CBO, AUSD	
	Kelly Gregor	Teacher, Librarian - AHS	kgregor@alameda.k12.ca.us
✓	Roxanne Clement	Teacher, Librarian	rclement@alameda.k12.ca.us
✓	Michael O'Neill	Teacher, Earhart	Moneill@alameda.k12.ca.us
	Katherine Reilly		
	Bethany Iping Ling	Classroom Teacher	bling@alameda.k12.ca.us
NO	Zoe Boese	Teacher, Librarian	zboese@alameda.k12.ca.us
	Diana Kenney	Teacher	dkenney@alameda.k12.ca.us
NO	Benjamin Lundholm	Teacher Librarian	blundholm@alameda.k12.ca.us
✓	Steve Allen	Teacher	sallen@alameda.k12.ca.us
	Lynn Kinsey	Teacher, Librarian - LVM	lkinsey@alameda.k12.ca.us
	Dana Adams	Teacher, Librarian	dhadams@alameda.k12.ca.us
	Connie Chapman	Teacher Librarian	conniechapman@alameda.k12.ca.us
	Deborah Kjelland	Classroom Teacher	dkjelland@alameda.k12.ca.us
	Erin Head	Teacher, Librarian - Paden	ehead@alameda.k12.ca.us
	Jeffrey Gordon	Classroom Teacher	jgordon@alameda.k12.ca.us
	Susan Jones-Szabo	Teacher Librarian	sjszabo@alameda.k12.ca.us
NO	Jessica Lucio	Classroom Teacher	jlucio@alameda.k12.ca.us
✓	Janice Carroll	TSA Instructional Tech	jcarroll@alameda.k12.ca.us
	Jamie Ferranti	PM MOF	jferranti@alameda.k12.ca.us
✓	Paizley Spencer	Teacher, Librarian	p Spencer@alameda.k12.ca.us

## APPENDIX D

### SUBSEQUENT DIRECTION AND CLARIFICATION FROM AUSD I.T. DEPARTMENT

**From:** Van Herk, Rob <[rvanherk@alameda.k12.ca.us](mailto:rvanherk@alameda.k12.ca.us)>  
**Sent:** Monday, June 20, 2016 1:38 PM  
**To:** Don Manthe; Nick Stephenson; Lyng, Robbie; Parella, Brenda; Ferranti, James  
**Cc:** Bryan Chubb; [pcolenbrander@ommconsulting.com](mailto:pcolenbrander@ommconsulting.com)  
**Subject:** RE: AUSD Tech Standards - Decisions yet on AV Devices?

Don:

Purchased by the district and contractor installed.  
I think we're looking forward to stub-out of connections.

Please call me if you have any questions,

Rob

**Rob van Herk**  
Director of Technology, Alameda Unified School District  
510-337-7140 | [rvanherk@alameda.k12.ca.us](mailto:rvanherk@alameda.k12.ca.us) |  
[www.alameda.k12.ca.us](http://www.alameda.k12.ca.us) | 2060 Challenger Dr Alameda, CA 94501

"My best work happened when I had a big challenge and not quite enough time" – Jake Knapp

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**From:** Don Manthe [<mailto:donm@qka.com>]  
**Sent:** Monday, June 20, 2016 1:36 PM  
**To:** Van Herk, Rob <[rvanherk@alameda.k12.ca.us](mailto:rvanherk@alameda.k12.ca.us)>; Nick Stephenson <[NickS@qka.com](mailto:NickS@qka.com)>; Lyng, Robbie <[rlyng@alameda.k12.ca.us](mailto:rlyng@alameda.k12.ca.us)>; Parella, Brenda <[bparella@alameda.k12.ca.us](mailto:bparella@alameda.k12.ca.us)>; Ferranti, James <[jferranti@alameda.k12.ca.us](mailto:jferranti@alameda.k12.ca.us)>  
**Cc:** Bryan Chubb <[bryanc@qka.com](mailto:bryanc@qka.com)>; [pcolenbrander@ommconsulting.com](mailto:pcolenbrander@ommconsulting.com)  
**Subject:** RE: AUSD Tech Standards - Decisions yet on AV Devices?

Rob;

Will the devices be purchased by the District and contractor installed and we just stub-out connections or will the contractor supply and install the devices?



**DON MANTHE**  
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f in t

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**From:** Van Herk, Rob [<mailto:rvanherk@alameda.k12.ca.us>]  
**Sent:** Monday, June 20, 2016 1:28 PM  
**To:** Nick Stephenson <[NickS@qka.com](mailto:NickS@qka.com)>; Lyng, Robbie <[rlyng@alameda.k12.ca.us](mailto:rlyng@alameda.k12.ca.us)>; Parella, Brenda <[bparella@alameda.k12.ca.us](mailto:bparella@alameda.k12.ca.us)>; Ferranti, James <[iferranti@alameda.k12.ca.us](mailto:iferranti@alameda.k12.ca.us)>  
**Cc:** Don Manthe <[donm@qka.com](mailto:donm@qka.com)>; Bryan Chubb <[bryanc@qka.com](mailto:bryanc@qka.com)>; [pcolenbrander@ommconsulting.com](mailto:pcolenbrander@ommconsulting.com)  
**Subject:** RE: AUSD Tech Standards - Decisions yet on AV Devices?

Hi Nick,

Short throw projectors and ceiling mounted speakers for teacher audio

Rob

**Rob van Herk**  
Director of Technology, Alameda Unified School District

**From:** Nick Stephenson [<mailto:NickS@qka.com>]  
**Sent:** Monday, June 20, 2016 1:27 PM  
**To:** Van Herk, Rob <[rvanherk@alameda.k12.ca.us](mailto:rvanherk@alameda.k12.ca.us)>; Lyng, Robbie <[rlyng@alameda.k12.ca.us](mailto:rlyng@alameda.k12.ca.us)>; Parella, Brenda <[bparella@alameda.k12.ca.us](mailto:bparella@alameda.k12.ca.us)>; Ferranti, James <[iferranti@alameda.k12.ca.us](mailto:iferranti@alameda.k12.ca.us)>  
**Cc:** Don Manthe <[donm@qka.com](mailto:donm@qka.com)>; Bryan Chubb <[bryanc@qka.com](mailto:bryanc@qka.com)>; [pcolenbrander@ommconsulting.com](mailto:pcolenbrander@ommconsulting.com)  
**Subject:** AUSD Tech Standards - Decisions yet on AV Devices?  
**Importance:** High

Rob,

Can you provide update on a couple critical items affecting projects in design?

1. Has the decision been made to go with flat screen monitors or smart boards with short throw projectors, or other?
2. Has a decision been made to go with ceiling or wall mounted speakers yet?



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End of Appendix D