

OPERATIONS—MAINTENANCE AND CUSTODIAL

GENERAL MAINTENANCE

- Doors
 - All interior doors to classrooms are to be wood, solid core, with vision-lite windows.
 - Exterior doors, depending on location, are to be either
 - hollow metal
 - storefront
 - Hardware
 - Locksets – Schlage Primus with card readers for exterior
 - Panic hardware Von Duprin
 - Columbine-style locking
 - Closures are Norton
 - Interior doors have kick plates
- Classroom and office casework are to be laminated particleboard (aka Melamine). No drawers should be wider than 30 inches. All drawers over 24 inches wide to have full extensions and wrap around knuckle hinges.
- No plastic handles or pulls. Metal handles and pulls only, with through-the-face mounting.
- Multipurpose Room storage areas should have a 4-foot high FRP wainscoting.
- Where applicable, all other architectural areas should not be skateboard attractive.
- All speakers on the exterior of site buildings must be installed under an overhang or include a water-resistant cover. All exterior speakers must be manufactured and approved for outdoor use.
- Ceilings are T-Bar, suspended, with 2 foot x 4 foot removable panels in classrooms (Check brand and style with M&O department).
- “Hard lids” should be utilized in toilet rooms, storage and utility areas.
- Interior wall surfaces where painted are washable semigloss.
- Exterior drinking fountains are vandal proof and have bottle fillers with hydration stations without water filters.
- Door hardware is Schlage Primus at all campuses with card readers at exterior doors that shall have crash bars and Columbine locks.
- Hallways: protective wainscot FRP or laminate with top trim.

Flooring

- Carpet only in the office, library, and some areas as noted in specification.
- Resilient flooring in all spaces except above.
- Resilient floors to meet Cal Green Standards.

Restrooms

- All restroom walls are covered with tile, which may terminate at 8 feet.
- Each site should have a restroom capable of accommodating full inclusion students, including space for a changing table and a lift station (either portable or with built-in bracing to support the load).
- There should be hose bibs in the restrooms.
- All electrical outlets should be GFIs, regardless of the location within the restroom.
- Student restroom floors should be tile.
- Restrooms are equipped with solid phenolic partitions.
- Falcon waterless urinals (TBD model).
- Globe electric hand dryers with hush kit.
- Haws electric flushometers.
- Two (2) center floor drains with cleanouts.
- Glass with stainless steel frame mirrors.
- Waxie toilet paper dispensers.
- Individual porcelain wall hung sinks.
- Motion activated Haws faucets.
- Waxie Toilet paper dispenser–large double-roll.
- Stainless steel soap dispensers, bulk fill.
- Single valve mixed hot water supplied to the student restrooms.

Exterior

- For each building, there must be a cold-water hose bib on the roof to provide for easier maintenance of HVAC units, insulated or otherwise protected for freeze protection.
- Building exteriors are of stucco, Hardiplank with tile accents.
- Signage for the buildings is embedded in concrete so the letters cannot be removed, popped out or defaced.
- Building identification signage is required: die cast, aluminum systems.
- Stewart marquees that are digital and wireless.
- Building exterior finish materials adjacent to playgrounds must be of a durable construction to withstand balls.

Locks (See above door specification)

- All multi-purpose rooms, and library rooms shall have doors with exit device style hardware with the capability to be locked from the interior. A keyed dogging mechanism should be provided.
- Door locks are high security “Kaba” or equivalent.

Roofs

- Roof access should be from the interior of the building (custodial closets).

- Flashing should be stainless steel, low maintenance.

Electrical

- 2 foot by 4 foot drop in light fixtures with electronic ballast.
- Multipurpose Room wall-mounted light fixtures should include wire guards or be ball resistant.
- Floor box receptacles are to be discouraged, but when necessary shall be floor mount and not monument style.
- All classrooms should have A/B switching.
- Exterior lighting to include only vandal resistant covers.
- All exterior lighting shall be controlled via photocell sensors.

CUSTODIAL

Custodial Supply Storage Room/Office

- Utility and mop sink with hot and cold water supplies is installed and surrounded by tile.
- Heating and ventilation system is part of a centralized system for the site.
- There are no less than 400 linear feet of adjustable shelving for supply storage.
- Center floor drain is installed.
- Adequate electrical outlets and lighting are supplied and wired on a separate circuit.
- Walls are covered with appropriate material to allow for hanging tools and storing supplies.
- Access is by way of a 3 foot walk-through door and an 8 foot steel roll-up door for loading and unloading supplies.
- Location is planned to ensure close accessibility to the site equipment and the supply loading and unloading area.
- Entire area of storage room is included in the planning of fire sprinkler system.
- Site security alarm system encompasses storage room.
- A separate controlled ventilator fan is included in the service area.
- Computer and phone jacks are near a desk area.
- There is a lockable cabinet.
- There is a flame-resistant cabinet.

Custodial Supply Closets

- Floor space of each individual closet is no less than 75 square feet.
- Utility and mop sink with hot and cold water supplies is installed.
- Custodial room wall and mop sinks should be sealed and tiled for a minimum of 24 inch around and above the faucet and tubs.
- There are no less than 20 linear feet of adjustable shelving for supply storage.

- Adequate electrical outlets and lighting are supplied.
- Walls are covered with appropriate material to allow for hanging tools and storing supplies.
- There are custodial supply closets in each wing.
- Access is by way of 3 foot walk-through door.
- All custodial closets are to be ventilated with motorized fan.

OPERATIONS—GROUNDS, SECURITY AND TRANSPORTATION

GROUNDS

Landscaping

- Fully automatic Furo I Central irrigation system installed to service all turf and planter areas over entire site.
- All planter areas near walkways or in quad are raised. Grade level planters are next to lawn areas.
- All landscape shrubs and trees are selected from common nursery stock that is easily replaceable.
- Type of grass is determined after soil analysis and is drought resistant.
- All trees and shrubs submitted on landscape plans are free of thorns, do not bear any fruit or berries, and do not attract bees or other insects.
- Trees and shrubs do not interfere with
 - any field activities;
 - any vehicular traffic on campus;
 - the visual ingress and egress of students, staff or visitors accessing the school site;
 - line of sight supervision from the site administration.
- Attractive native plants and available drought tolerant plants are used.
- The site is well planned and graded for drainage.
- All backflow regulators are to include a lockable, insulated cover.
- Trees are planted to avoid shutting out light from exterior fixtures.

SECURITY

Alarm Systems

- Master panels are centrally located and easily accessible. One (1) keypad is in the main school office. Multipurpose rooms and gyms should contain separate alarm system and keypad to facilitate evening and weekend events at this location without disarming the entire school campus.
- A perimeter alarm system that does not indicate which door is open is acceptable.
- System permits coded or user card access and provides a record of openings and closings.

- Motion detectors that cover all exterior windows should be included. The zone of coverage should cover possible areas of entry.
- Childcare facilities should be included on the District alarm system.
- Bay Alarm is the preferred security alarm vendor.

Fencing

- Fencing with lockable gates should be provided on the interior perimeter of the campus.
- Fencing from the community with controlled and lockable access points should be provided for the fields and hard court areas.
- Panic bars are required on street exit gates.

Windows

- No louvered windows or Plexiglas windows are installed in any building or doorway on campus.

Roofs

- Many creative methods are used to discourage intrusion onto the roofs. For example, covered walkways next to buildings can be cantilevered so supports and downspouts are recessed and not available for shinning.

TRANSPORTATION

Walkers Travel Path

- Walking students have a safe, direct path to travel from their homes to the school.
- Streets leading to the school site from all directions have crosswalks for students' safety.
- Streets have sidewalks leading to the school site.

Bicycle Area

- Bicycle parking area is in a separate area, NOT adjacent to either the auto or bus parking areas.
- Bicycle ingress and egress avoids having the students travel through either the auto or bus parking areas.
- Enough racks appropriate to site size (ask principal) for bicycles are installed and bolted in place.
- Entire bicycle rack area is surfaced with asphalt.
- Bicycle rack area is encircled with a six (6) foot high anti-climb fences and with a couple gate at least eight (8) feet wide when fully opened.

Bus Parking

- Length of the zone is adequate for number of buses that serve site.
- Red curb markings.

- School and principal office should have direct visual access to the bus-loading zone.
- Kindergarten classrooms should have direct visual access to the bus-loading zone.
- School access from the bus zone is a direct path of travel so students can be viewed from the bus to the school and classrooms.
- No crosswalks are allowed within the bus zone to discourage “walking students” from entering the bus zone.
- Appropriate street lighting for security and safety purposes.
- Extra wide sidewalks leading up to the bus zone, running the full length of the bus zone to allow adequate space for students to line up during the loading process.

Auto Parking

- Adequate parking appropriate to school and staff size.
- Adequate parking for visitors, five (5) spaces.
- Designated loading and unloading area within the auto parking area for parent traffic. Appropriate curb markings for loading only, discourages actual parking of visitor vehicles and enhances safety for students as they enter the school grounds from their vehicles.
- Auto parking area is located away from bus loading area, preferably not on the same street.
- Clear signs direct visitor-parking area and parent loading area.
- Parking spaces are marked or identified appropriately for “visitor” and “handicap.”

CDE Requirements

- Buses do not pass through staff parking areas to enter or exit school site unless a barrier is provided that prevents vehicles from backing directly into the bus loading area.
- Parent drop off area is adjacent to school entrance and separate from bus area and staff parking.
- Vehicle traffic pattern does not interfere with foot traffic patterns. Foot traffic does not have to pass through entrance driveways to enter school. Crosswalks are clearly marked to define desired footpath to school entrance.
- Parking stalls are not located so vehicles must back into bus or loading areas used by parents. Island fencing or curbs are used to separate parking areas from loading and unloading areas.
- To provide equal access to ensure the purposes of the least restrictive environment, bus drop students with disabilities is in the same location as for able-bodied students.

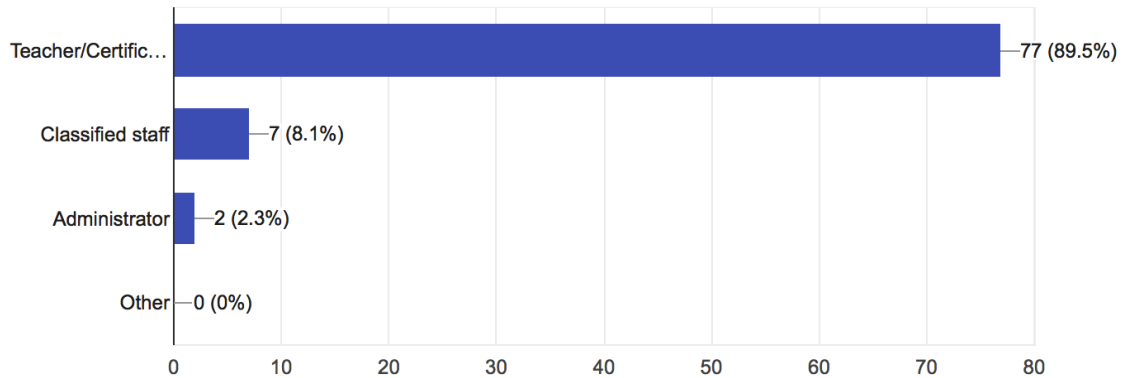
APPENDICES

Exhibit A

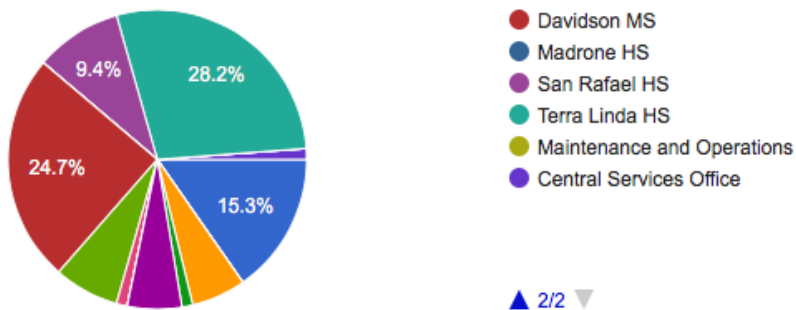
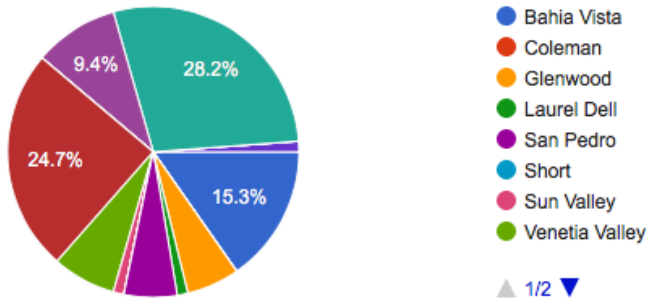
San Rafael City Schools – Educational Specification Survey Results May 2017

Please indicate your role.

86 responses



Site:



3. What 2-5 features of the physical learning environment ARE MOST IMPORTANT to student learning?

Teaching walls, spaces to show student work and charts, storage,
Access to materials (math manipulatives, classroom library, etc.) and a variety of learning spaces (tables, floor space, desks, etc.).
room to move around, mounted interactive projectors, the matte whiteboard at the district office made for markers and projection
lots of windows; access to outdoors; deep sinks with hot water; plenty of storage; large classroom.
Comfort, adequate space, acoustics, lighting (no glare)
air conditioning in classrooms, covered play area for kids, updated outdoor patio tables, and hook up projectors to ceilings in 1st floor classrooms.
Community, Comfort, Space (personal)
1. Large area for meetings, circle time, on the carper area. 2. Different areas around the classroom to create different spaces for center time. 3. A lot of electrical outlets for iPad/Chromebook charging stations. 4. Large outside area. 5. Multi-purpose room and/or gym for physical activity, assemblies, rainy day recess inside, etc.
Clean organized learning spaces with lighting, technology, sound proofing. Easy access to library and other educational supports. Design that encourages pride of ownership and upkeep by students and staff.
Air conditioning, Increased locker room capacity, well thought-out and organized technology spaces
comfortable temperature, movable student desks/tables for collaboration, easy viewing of board/projector screen
Brightness, Colors, comfortable
Overhead projectors, enough room that students can maintain at least a small area of personal space, sufficient whiteboard space that is visible from any area of the room
classrooms free of water damage and mold.
Classroom/Quiet breakout rooms (which we don't have right now)/a beautiful yard
Lots of natural light, A/C, lots of whiteboard space that is easily visible for students, overhead projection to present notes/student work, reliable working Wi-Fi/internet.
1. Shape & size of room for maximum visibility at any vantage point 2. Ability to keep a comfortable temperature, either through heating/ AC or building materials 3. Natural light (although if windows are too big, it gets very hot in the classroom).
proper desks/chairs,
temperature, space, safe
Lots of whiteboards, Overhead projectors Places to put student work Lots of Wi-Fi bandwidth comfortable chairs
-air conditioning -student work stations that support the use of one-to-one computer technology Document Reader White Board
air conditioning and space in classrooms
Air conditioning, a clean room with no mold or mildew issues
temperature of the classroom and number of desks in the room
Adequate Technology Useable outdoor space Nice bathrooms spacious classrooms organic/fresh lunches

Safe open group learning spaces Access to technology 7 am- 9 pm Clean, updated facilities
AC, No Bullying, and teacher support

Storage, Small Group Workspace, Natural Lighting, 2 doors, adequate space for student desks
Enough space, cleanliness/modern, updated technology, SPACE!

Music - floor space, storage space and practice rooms in that order.

enough space/big enough room, good lighting, comfortable room temperature, good
desks/tables/chairs, clean air (no mold, etc.)

temperature, lighting, space for students and teacher to move around freely

Enough room/space for up to 35 students Air circulation maximizing clean air classroom
environment Adequate shelving for teacher/lesson materials Adequate technology/whiteboard
space for learning

Comfort. Technology. Aesthetics.

Bright, warm environment, lots of wall space for charts, graphs, closet and drawer space for
storage for books, art supplies, files, class materials, etc., heating/cooling systems, both student
and teacher access to bathrooms/sinks. Etc., clean white walls, not that yucky off-yellow or green
that usually gets painted in classrooms, whiteboards

table space for students to lay out projects and for me to lay out supplies for students, light
(quality of light crucial!), wall space for display, ample space for students to move through the
studio to different work centers, better/more sinks!

Appropriate bandwidth for WIFI, classroom temperature (enough windows that open or AC/heater
that can be controlled by each classroom, covered area on yard to protect from heat/rain

Classrooms and collaborative spaces like the library

enough space, enough light, enough whiteboard space, technology that works & is optimally set
up (example: the doc camera is all the way in the back of the room right now), AIR

CONDITIONING - thank you for getting this!

ICT/STEM building, student commons, library, technology improvements, collaborative spaces for
students to work

Large enough to hold up to 35 students while maintaining safety both in the classroom and the
laboratory (I teach science), flexible for individual or group work, temperature and light control for
comfort and ease of seeing the projector.

1). Ample space to meet the students personal and educational needs. No one should feel like
they are learning on an airplane. 2) Sound isolation is key for many students to develop a focused
state of mind. 3) Cleanliness, including mold, bacteria, etc. 4) Heating and air conditioning
systems that work and don't force some kids to freeze while others are sweating 5) The space
should be adaptable to individual teachers and learning styles

Functional and reliable technology devices, complete Wi-Fi coverage with plenty of bandwidth,
comfortable furniture, easily navigated rooms, sinks and water faucets in every room

1. Wall and/or bulletin space to hang anchor charts and display student work. 2. Big
windows/natural light with shades to help see the screen. (Dark rooms are depressing. 3. AC and
heat. Airy well ventilated room. 4. Removable wall (allows opportunities to team teach) 5.

Multimedia equipment (smart board) with classroom chrome books, computers, etc.

Adequate space in classroom for student movement, temperature control, minimal distractions
from campus activities (PE classes, lunch, etc.), adequate internet connection speed,
desks/tables that "fit" a variety of body types

1. Square room-NOT a rectangle so that all students can access learning resources on the wall 2.
Light (nice windows) 3. Tile floor NOT carpet 4. Sink and water fountain in the classroom 5. A
LARGE room with lots of space and storage

A well-compensated teacher, a clean classroom, clean campus, and maintained landscapes

We have a science teacher in a classroom without a sink. None of the science classrooms have the basic required safety equipment. The biology prep room has a leaking sink that has not been repaired. We need some upgrades to the science space, and we need adequate funding for lab consumables so that we can have a rigorous science program. Science classes are being cut at a time when we need more students entering STEM degrees/careers. The district needs to take a critical look at how they are undermining the science department.

space, natural lighting, carpet, standing desks, advanced technology

flexibility w/ regards to use options, natural lighting, ventilation and climate control, cleanliness/sanitation, enough outlets/portals to facilitate twenty-first century learning

Well ventilated classroom and enough equipment like computers.

cleanliness, appearance, useful space

heat, AC,

heat/AC

Comfortable classroom setting, furnishings.

enough SPACE: school way too crowded! safe routes to walk/bike to school. more bike racks. AC in more spaces.

Room temperature - when classrooms are too hot, students can focus and learn; we need AC!

Seating arrangements

Furniture that can be configured multiple ways within a class period. Comfortable air temperature.

Lots of board space. A reliable projector system. A reliable sound system.

air conditioning/cross ventilation (outside air) /cool temps in classroom, plenty of plugs for fans, twenty-first century desks and chairs, amazing technology and library spaces, music/science space.

1. Temperature of the room, students and teachers cannot work in a room that is over 80 degrees

2. Ventilation 3. clean bathrooms that the students feel comfortable using

space, circulation/heat/air conditioning, seating, ample whiteboard space, room for technology

Air conditioning!

Comfortable temperature, good natural light

Enough chairs and desks or tables for each student. Projectors and computers that work in each room. Enough materials to do hands-on laboratories.

Students should be physically and emotionally comfortable.

Clean, well maintained, mold free, and healthy environment.

Appropriate temperature inside the classrooms; windows that open enough to provide adequate circulation and cool-down; space for students to safely and comfortably move around in the classroom.

Climate control and cleanliness

Air condition and ceiling mounted projectors and more computers and tablets in the classroom

Physical comfort and safety (free from severe heat and cold and danger), adequate space for students to move around freely and to access materials, easier access to technology (ceiling mounted projector instead of projector cart), and easy access to bathrooms and water

Space to both work in groups as well as space where kids can work independently, easy viewing of projected materials from all locations in the room, access to electrical plugs for tools the kids or teachers may use, different seating options for different styles of learners, access to technology (Chromebooks, iPads, etc.)

Space for small group intervention Temperature Functional Furniture Computers High quality Playground material

table groups large table for guided reading rug area natural light - windows Bulletin Board wall space

Some sort of temperature control - natural or not windows and light

good lighting, comfortable working spaces, clean & uncluttered spaces,
Temperature, Lighting, Personal space availability.
AC, comfort, room, clean and safe
Adaptability of the space, ability to reconfigure easily and effectively.
having space for CTE Projects

4. What 2-5 features of the physical learning environment BEST SUPPORT student engagement in the learning process?

same as above
same as above
Furniture that is flexible, accessibility to technology,
Plenty of open wall space for anchor charts and bright windows.
chrome carts in every room, internet that is reliable, desks that are large enough for 8th graders
Good lighting & natural light; enough space for tables and table groups; flexible space for different groupings of tables or easels; instruction areas (whiteboards, projector screen) easily visible from student work areas.
tables (not desks), good work space
Community (conducive learning environment), Comfort, Access to materials
1. Large carpet meeting area 2. Large whiteboards for student access.
All students can easily see and hear instruction. Adequate space for storage of classroom and personal items.
centralized student information center, properly funded athletic program, school facilities to be proud of
this seems repetitive from question 3
whiteboards, paint colors
Flexible seating options (i.e., standing desks)
light, bright, and welcoming classroom environment, windows, air conditioning
Air conditioning, different types of seating
Flexibility to allow easy transitions from lecture style to student presentation to student collaboration project based learning. Windows/natural light and aesthetically pleasing environment - someplace you would want to be.
Anything that allows students to be comfortable and free of distractions. Simple design, good chairs/ desks, students can see, don't hear noise from other classrooms.
access to the internet, Chromebook and projectors
temperature, spacing
whiteboard areas for students to work access to Wi-Fi so students can access technology
I would love to have the physical space and the classroom furniture to support one-to-one technology. I have seen student work stations that have computer connectors build into the furniture and on wheels so that the room can easily change configurations and support the chrome books.
Easy access to laptops/tech, smaller classes, air conditioning
Same as above
desks set up in a communal environment, interactive projectors
spacious classrooms flexible seating/furniture outdoor learning spaces organic/fresh lunches
Teacher support

large mobile whiteboard, computer area designated for technology, enough space to have multiple collaborative groups occurring simultaneously, sound system and appropriate technology for projecting multimedia

Enough space, cleanliness/modern, updated technology, SPACE!

Air conditioning. Size of the room.

arrangement of desks/tables, good view of teacher's demonstrations (e.g., mounted projectors with big screens), and the things I listed in the previous answer

desks and chairs that can easily be moved around, access to technology

tables instead of desks with comfortable seating Screen/whiteboard location for easy viewing same

Space for students to move around and engage in other areas than just the desk, user friendly technology/infrastructure for both teacher and students, rug or carpeted space for floor activities, student accessible storage for art supplies, etc.

again: light, space to work, space to move around, organized open shelving and storage that is student accessible.

Tables rather than desks and access to technology

See #3. Desks that aren't broken

Cafeteria, library, student commons, STEM/ict building. Student voice and classroom visits and presentations along with my newsletter are my primary places to access student ideas.

See prior answer,

1) Sound isolation 2) Quality lighting with variable settings 3) Technology usage should be considered in the design. Students' physical placement in the classroom should not be dictated by where the projector has to go to meet district emphasis on the use of technology 4) Each classroom should be designed with the active use of computer technology in mind, including ample charging stations and storage for said technology

Functional and reliable technology, facilities maintained to not just function but look cared for, ability to navigate room to interact with students easily, lots of places to display work and announcements, lack of distractions (like tons of low windows).

1. Multimedia equipment 2. Wall and bulletin space 3. computers

Space allows for flexible grouping and alternative class configuration, technology availability - student computers and speedy connection

See above

A well-compensated teacher, open space and clean classrooms, open space campus with shade and protection from the elements.

Collaborative spaces, furniture that can be easily rearranged for different groupings

open space to learn and move, options for desks to meet academic and emotional needs, resources for different learning styles such as computers, iPad, chrome books, etc.

ventilation and climate control, flexible use options, multiple display areas/whiteboards/screens their ability to access resources, enough space for each resource (counselor, specialists, etc.)

inviting spaces

space, light

light and space

Teachers and their essential tools.

safe and flexible spaces. more space!

Room temperature Seating arrangements

See the above

air conditioning/outside air/cool temps in classroom, technology and library spaces, twenty-first century desks and chairs,

1. Comfortable temperature 2. adequate space for materials and furniture 3. Cleanliness to be healthy

seating arrangement, room for activities, ample whiteboard space, room for technology

Air conditioning!

Large rooms with breakout space - couches, tables, computers, etc.

Clean, modern, usable rooms. Air conditioning. Modern electronic science equipment that will expand to a university setting.

Working in a classroom with good ventilation.

Classrooms that have doors and windows that function, roofs that don't leak, and heaters that work.

Appropriate temperature inside the classrooms; windows that open enough to provide adequate circulation and cool-down; space for students to safely and comfortably move around in the classroom.

Organization and modernization

Air condition, ceiling mounted projectors and more computers and tablets in the classroom

Adequate storage and wall space that students can interact with, easy access to technology (various spaces for computers throughout the room, rather than just upon one wall)

Access to technology, flexible seating and collaborative grouping, ability to view necessary materials from every seat, extra spaces for maker activities

Space/furniture for small group instruction Temperature Functional furniture

Mounted document camera Areas for students to work in small groups air-conditioning room design that allows for different desk configurations

Technology, Variety of surfaces and set-ups.

safe and bully free

whiteboard space, collaborative space

hands on learning of CTE Programs

5. What 2-5 features of the physical learning environment are related to STAFF JOB SATISFACTION?

Technology tools that work, work stations, storage

Organizational areas (shelves, cabinets, closets), ease of technology (i.e. teacher computer, document camera, printer, phone in close proximity).

interactive projectors, doc cams

Sinks with hot water, natural light, large room, plenty of storage options, access to outdoors.

Comfort, adequate space, acoustics, lighting (no glare)

same

Community, Support, Appreciation

Large classrooms, lots of storage, clean and organized rooms and layouts. Rooms that allow for different areas of learning and flexible seating (think stations and Starbucks).

Spaces/furniture which are easy to organize, reorganize and clean up. Close access to sinks and water for cleanup.

parking (organized, enforced, plentiful), air conditioning, better use of the staff room (how can we get more teachers to use)

n/a

Fast internet and computer,

Air conditioning, lots of storage, room to display student work, light and bright welcoming environment, enough whiteboard space that is clearly visible to students

Air conditioning and areas set up for technology

collaborative peers/understanding and supportive principal/clean and safe school

Environmental controls (A/C, heat, etc...), working technology (Wi-Fi, ceiling mounted overhead projector, etc...), classroom flexibility to accommodate different teaching styles (lecture, student presentation, group work, everyone can easily see the board)

Having rooms that work well (don't have to fight the layout,), comfortable temperature (it is hard to teach when you are overheated), lots of storage and surfaces for materials.

Safety, spacious, storage

bathrooms that are clean, well lit, and have ventilation areas for staff to meet and consult in small groups

Air conditioning. It is difficult for staff and students to focus on the lesson when they are sitting in a classroom that is over 90 degrees.

Lack of Air Conditioning hinders student learning and job satisfaction

air conditioning, smaller classes, and um, air conditioning

Air conditioning, a clean room with no mold or mildew issues, putting the insulation back in the ceiling so that we don't all hear each other's teaching through the wall

digital support for teaching and computer systems that are up to date

Modern classrooms Equitable technology Modern bathrooms

Inviting staff lounge; clean modern toilets

Teachers valued by District

accessible technology (electrical outlets available, efficient Wi-Fi connection, printers), accessible bathroom, natural lighting, storage, appropriate classroom furniture (desks, small group tables, bookshelves, computer tables)

Enough space, cleanliness/modern Enough space, cleanliness/modern, updated technology, SPACE!, updated technology, SPACE!

Sink with drinking faucet. Space for a portable Digital chalkboard

good natural lighting, comfortable room temperature, clean air (no mold, etc.), quiet HVAC system, enough space for storage of materials and equipment

easy access windows, enough space for PD room, community room, conference room, plenty of office space, heat and air conditioning

Ample work/desk space Freedom of movement in classroom to assist with PBL

Comfort. Technology.

Bright comfortable rooms, lots of storage options, heating/cooling systems in place, uncrowded rooms/room to move, wall space to hang charts, graphs, as needed, easy access to technological infrastructure

light, space to display student work, storage space!!! my own computer would be nice...

staff room that can support the bandwidth and space necessities of color copier, multiple printers, workspace counter, sitting area to eat/meet, enough parking for our volunteers/parents/teachers/other staff

Staff lounge and renovated classrooms

enough desk/drawer space, shades & windows that work

HVAC!!!!!!!!!!!! Faculty room for collaboration, technology improvements

Ergonomically designed teacher workspace. Technology in the right place to be controlled while in front of the class without obstructing the student's views. Good, controllable temperature and lighting, and the correct safety equipment installed in the right places.

1) Ample storage for several years of projects, lesson plans, and supplies. 2) Enough space so that we do not literally have to step over students to move about the room 3) Natural lighting whenever possible 4) Climate control and air quality 5) I never want to feel like I have reached the limit of what I can accomplish do to the room(s) I work in.

Functional and reliable technology, facilities maintained to not just function but look cared for, ability to navigate room to interact with students easily, decent storage, ability to easily interact with colleagues

1. AC and heat 2. Cleanliness 3. Well ventilated rooms 4. Shades for windows 5. Cabinets for storage

Ease of technology use, adequate storage space for materials, close proximity to photocopiers & teaching supplies

See above

A well-compensated teacher, an entrance to the front of the school as it was originally designed to set the tone for the day.

We were given safety training, but then not supplied with any of the safety equipment necessary to meet basic requirements of a lab. The science department is frustrated that we are responsible for student safety, yet we are not provided with the basic facilities/equipment.

natural lighting, safe campus, state of the art equipment

ventilation and climate control, adequate storage for mixed items (drawers, shelves, cupboards), natural lighting, multiple display areas/whiteboards/screens to facilitate versatile teaching

We should have a reliable internet and phone connection.

cleanliness, sufficient work space, sufficient space/privacy for counselors/other specialists: speech/RSP/etc.

Lots of natural light in the classroom

access to students

Access to students

Team work and appreciation.

more and better staff bathrooms! bigger faculty room and outdoor eating area that's actually inviting. more tables outside with shade!

Room temperature Classroom furniture (desks, chairs)

Heating and cooling system Hot water in the bathroom

cool temps in classrooms and staff areas, enough plugs for fans, fast internet available at all times, twenty-first century desks, chairs and technology, enough staff bathrooms

1. comfortable temperature, cool enough to not be sweating in the classroom on warm days and warm enough in the winter 2. Clean classrooms, bathrooms and break rooms

space, room for activities, circulation/heat/air conditioning, seating, ample whiteboard space, room for technology, space for desk/work area

Air conditioning!

Proximity to and shared space with colleagues (e.g. department lounge),

Electronics that work consistently and can be repaired. Science supplies that are accessible.

Having good ventilation and a comfortable temperature in the classroom.

Classrooms and buildings that do not smell of mold, that have been maintained and do not have liquid running down the walls from leaking ceilings.

Cannot be satisfied with my job when I know my students are suffering because of excess heat and poorly placed technology.

Climate control and appropriate technology

Air condition and ceiling mounted projectors and ability to access the internet anywhere on campus

Physical comfort and safety (free from severe heat and cold and danger), adequate storage for materials, easy access to technology (ceiling mounted projector), wall space

A large enough room to arrange desks/tables in different formations, mounted projectors that are connected to doc cameras at teacher's workstations, walls into which you can staple work or posters, access to electrical outlets in multiple places in the room. Wall mounted Chromebook

storage would also be nice. The carts are HUGE! Also, the campus should have extra small group meeting/work rooms that can be supervised from outside by a teacher in an adjoining room. (Like Coleman's anterooms.)

All the above

better internet access

physical closeness to colleagues that we work with common areas pleasant outside areas to sit
closeness to copiers, mail, etc.

well-designed space (form following function), use of natural materials, tech support, storage,
space (as in enough)

all of the above, Organized Storage Space, A variety of Display Space

small class sizes

Functioning presentation technology, ability to post physical items to walls, natural light
being able to have the space to do all CTE Projects

6. What 2-5 features of the physical learning environment IMPROVE STAFF'S overall senses of physical comfort?

Technology, work stations

Enough faculty restrooms to share during limited breaks, a comfortable staff room to eat lunch.
space, no cords to trip over, sink, STORAGE STORAGE STORAGE, printers, laptops,
non-student spaces with sinks with hot water; natural area in classroom for teacher personal
space (for desk, etc.); natural light; windows that open.

Comfort, adequate space, acoustics, lighting (no glare)

air conditioning is a must in our school

Positive mood & support

Lots of storage and large classrooms.

Water stations, access to work space (copier, staplers, etc.)

same as above

n/a

windows, air conditioning, clean classroom

I already took this survey, I forgot to add air conditioning.

Air conditioning, water fountains/sinks in the classroom, phones by the desks (not across the
room), multiple doors from both inside the building and outside

Air conditioning and spacious classroom

being able to set the temp to what is comfortable for my students and myself/ desks, seats, and
tables that are comfy for kids

Environmental controls (A/C, heat, etc...), working technology (Wi-Fi, ceiling mounted overhead
projector, etc...)

Air conditioning, natural light, space for personal belongings, maybe some kind of fence around
campus (so we don't have to worry about campus intruders).

Learning spaces within and outdoor experience

technology that enables staff to write on whiteboard electronically desks that are not metal, ugly,
and don't have sharp jagged corners

A working heating system and air conditioning. The windows in my class room are not double
paned and are very drafty in the winter. In the summer, my room cooks at over 90 degrees
making it difficult for me and students to concentrate.

air conditioning

Air conditioning, a clean room with no mold or mildew issues, spraying for bugs so we don't have
cockroaches running across my desk or the floor during class lessons

cooling and heat that work. no overcrowding of desks

Modern classrooms Modern Bathrooms

Dependable access to technology; teaching space for all; clean non-descript space that can be used by any teacher

AC and equal pay

Smartboard or large interactive projector, quick staff room, copy room and bathroom access from classroom, comfortable chairs for small group instruction, natural lighting, storage and organizational systems in place (shelving units, behind the whiteboard storage, cabinets)

Enough space, cleanliness/modern, updated technology, SPACE!, AC

air conditioning and heat.

good natural lighting, comfortable room temperature, clean air (no mold, etc.), quiet HVAC system same as above

Air conditioning Quiet Heater/Ventilation

Air Conditioning. Technology

All of the above!

a welcoming staff-only lounge, not always filled with students using it as extra classroom! more, nicer bathrooms.

A/C, enclosed campus, covered walkways from one end of the campus to the other (currently we cannot go to the MU and be protected from the elements), appropriate bandwidth to support twenty-first century teaching

AC and the ability to create flexible learning spaces

Air conditioning! Again, thank you. Things that work; things that aren't broken. Enough work & shelf space.

HVAC - all I hear about Faculty room Collaboration space Tutorial space

See #5

1) Rooms and spaces equipped with professional office supplies, not just the cheapest things we could find at IKEA 2) Clean, cold water should be available everywhere on campus (i.e., filtered water bottle filling stations) 3) A campus designed to accommodate rainy days in the winter. Currently, rain means that I will be wet most of the day due to the current layout 4) Quality restrooms with warm water in the faucets

Access to staff restrooms, navigable rooms, A/C in classrooms, comfortable furniture, natural light

1. Air Conditioning and heat (but not over-heated....) Control thermostat 2. Cleanliness and well ventilated 3. Natural light and shades

neutral teaching area - can adequately teach left or right handed, close proximity to restrooms, area for small coffee pot/refrigerator, pleasant environment- clean, natural light, etc., efficient heating/cooling system

See above

A well-compensated teacher, clean campus including the surrounding neighborhood, quality food on the campus.

A nice faculty lounge. Good ventilation.

comfort, lighting, safe campus

ventilation and climate control, natural lighting (fluorescents are damaging to eyes), adequate restrooms to meet needs of large staff with same exact use times (between classes)

We are in need of furniture like tables, computers. safe, file cabinets and chairs.

clear access, defined/designated spaces, free space

Plentiful restrooms, Window blinds that close correctly and completely in case of lockdown

besides heat and AC, ergonomic desk/computer set ups.

ergonomic computer set up,

Classroom not too hot, not too cold. Knowing someone is there to help.

better/more bathrooms!

Room temperature

See the above

cool temps in classroom, enough staff bathrooms

1. Temperature 2. Ventilation 3. Cleanliness

space, circulation/heat/air conditioning, seating, ample whiteboard space, room for technology, space for desk/work area

Air conditioning!

Proper ventilation.

Well maintained buildings.

Appropriate room temperature; enough physical space to move around inside the classrooms without tripping over electrical cords from the projectors on the tables; enough whiteboard and wall space for instruction and displaying student work; printers and copiers that work on a consistent basis; immediate access to internet at all times.

Climate control and available technology

Air condition!!!!

Adequate heating and air-conditioning during severe weather, security cameras on campus operating during non-student hours

1) SPACE in the classroom! My classroom in Sun Valley's two-story is so cramped that it makes it hard for small groups to work. 2) Mounted projectors connected to doc cameras. As it is now, I have to constantly raise and lower my projector on a table. 3) Natural light. 4) Insulation under the carpet - we stand all day.

All of the above

air conditioning mounted document camera

natural light, adequate lighting, sound proofing, air flow, design

Temperature, Lighting, Flexibility of a space

AC and heat

Natural light, dedicated teacher space, air conditioning

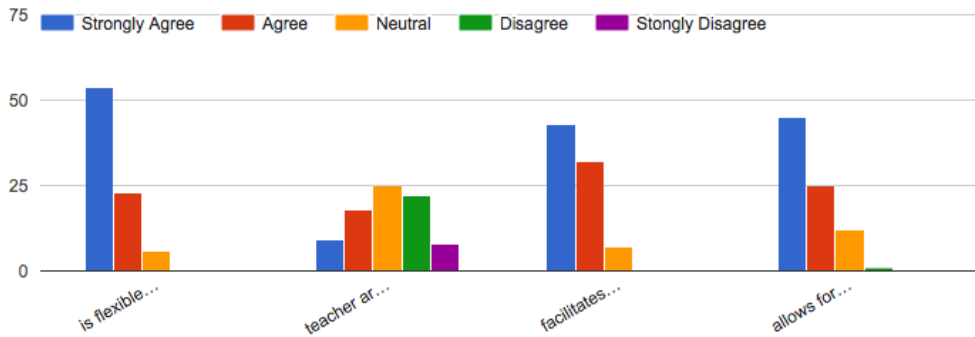
Temperature, Lighting, Flexibility of a space

AC and heat

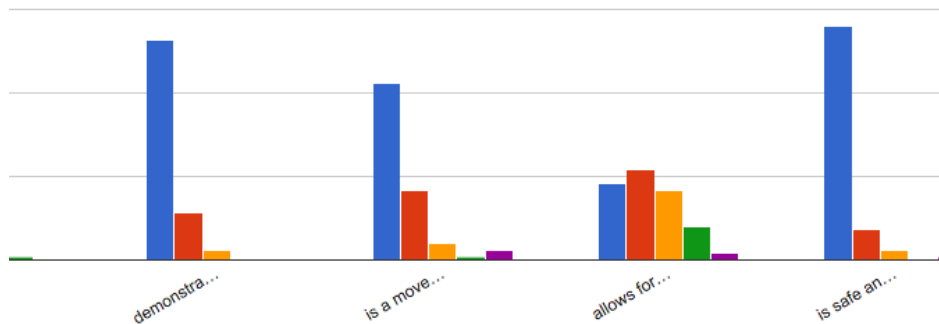
Natural light, dedicated teacher space, air conditioning

being able have storage accommodate all tools need to teach CTE

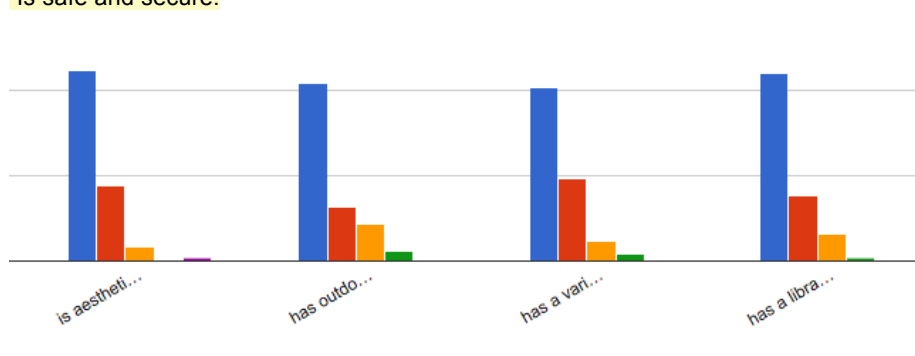
7. What type of school facilities should SRCS consider as it plans and implements the bond program initiatives? A facility that:



- is flexible and can adapt to changing educational practices.
- teacher areas are open and transparent (i.e. glass walls)
- facilitates maximum student-teacher interaction.
- allows for collaboration, interdisciplinary and team teaching (such as STEAM, Science/Tech/Engineering/Art/Math).



- demonstrates effective implementation of instructional technology.
- is a movement-rich environment, including flexible and varying types of furniture.
- allows for and encourages community use.
- Is safe and secure.



- is aesthetically pleasing and stimulating
- has outdoor learning spaces both formal and informal.
- has a variety of teaching spaces for varying group sizes.
- has a library/media center for gathering, reading, discussing, and research.

8. General comments related to Question 7. What type of school facilities should SRCS consider as it plans and implements the bond program initiatives?

I heard math got removed from the STEAM building. That is strange.

Designing spaces that incorporate technology in a flexible way would be great. Good Wi-Fi, smart boards as well as whiteboards in all spaces so that groups could utilize various spaces interchangeably. Maximum interaction between faculty/staff and students, but with places faculty/staff can get away.

Flexibility is key. Hard to know what the future brings, but having the flexibility and openness to change is important.

A library and media center and meeting spaces should be separate and distinct.

The wireless internet accessibility could be improved in gym facility. There are pockets of space in the building where wireless doesn't work...

It would be nice to see outdoor learning space be incorporated. Obviously, being safe and secure is the top priority. Having time to plan is always important.

Having the students and myself feeling safe and secure is the most important. This year, we have not felt that way with the air quality issues in the 10's wing, moldy ceiling tiles, mildewed insulation, etc.

STEAM

An outdoor/indoor stage and auditorium where students can sit outside when weather permits for assemblies would be a wonderful way to take advantage of the beautiful weather as a community. Music rooms need specific features

None of the choices in question 7 mentions the things I wrote about in earlier questions: clean air, comfortable temperatures, good (natural) lighting. Perhaps the committee is thinking that they are "givens" or "prerequisites" but they most certainly are not at DMS. We have moldy classrooms and buildings. We have classrooms that can hit 100 degrees in hot weather. We need more than "aesthetically pleasing" work spaces.

The fundamentals must be put first and foremost. Wi-Fi that is strong and that can handle many users at once.

Skip the "glass walls!" re: #2

more display space that is well designed and can be used and seen by all

We currently use the benches outside the 100 wing as an outdoor classroom. I would love to see a space for an outdoor classroom with seating to take its place in the rebuild.

I do not personally prioritize or even endorse STEAM, but I do believe in collaborate learning environments and interdisciplinary teaching. Also, I don't think that glass walls will help students focus, but I feel it is EXTREMELY important that a teacher be able to monitor their entire classroom from their personal work space. I also think that classrooms should be open to observation without creating a distraction for students.

We need state of the art multimedia equipment to prepare our students for twenty-first century.

Well-made, comfortable furniture in a large, naturally lighted room are the basics a teacher needs. She/he can organize and design the space from that basic foundation. A teacher likes the opportunity to be creative with their arrangement of the space. Teacher autonomy within the space is very important to utilize the teacher's knowledge and creativity to serve her/his kids.

At this time the campus is not maintained and the entrance to the school is uninspiring.

technology, hands on learning, and gardening should be considered for our children's overall academic and social emotional needs

Overall, it seems that this school is suffering from the "broken window effect." If students felt they were entering a modern, clean, colorful facility each day, they would likely feel more motivated, especially those who are coming from rougher neighborhoods. There are classrooms with paint peeling chipped and broken windows, rotten wood around door frames, stained carpet and ceiling tiles... all of this makes it a pretty gloomy place to learn. A facelift is definitely needed.

both flexibility of spaces and aesthetically pleasing spaces are important to me

Classrooms are extremely hot and stuffy. Fans in the classroom do not work, neither does leaving windows open. We need air conditioning in order to have a classroom environment conducive to learning.

Technology doesn't work miracles.

Large library, science, music, technology, tutoring spaces, outdoor shaded space for gatherings

1. up to date and well functioning cooling and heating systems

In order to have effective teaching/learning you must have a building that allows one to have air conditioning as needed. It is IMPOSSIBLE to teach or even be in a room that is 90degrees and students are vomiting and have nosebleeds! This is truly inhumane!

What does open and transparent teaching areas mean? I want to be able to hide sometimes!

Before investing money into new buildings fix/ repair the existing buildings. There are many classrooms and hallways with leaking ceilings, mold dripping down the walls, dry rot, doors that need to be repaired or replaced, counter tops that are ripped and broken, sinks that do not work, ceiling tiles that have been missing for months, windows that do not open and some rooms even have black, pink and brown tiles from growing mold. Having a maintained and healthy environment is a must on all levels.

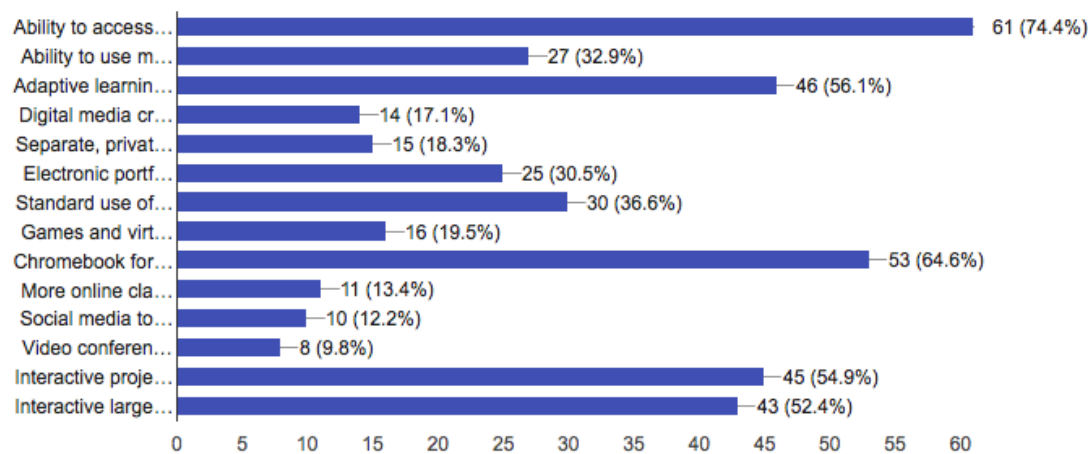
1: Bahia Vista was not built to support changing educational practices: many of us have our overhead projectors on standing tables (not on the ceiling) which means a dedicated spot in the center of the room that is dangerous for students and leads to students tripping on cords and knocking equipment on the floor. 2: We understand that our budget could not support air conditioning when the school was built-in 2006. Upstairs classrooms get as high as the upper 90's when the outside temperature goes above 80. The push-out windows don't allow for proper air circulation and fans do nothing. Children get nose bleeds, headaches, vomit, and can't think! Beautiful school; awful design!

Regarding technology, having a ceiling mounted projector would make a huge difference in the effectiveness of utilizing technology when teaching.

Variety of learning spaces

up grading all CTE program is a must

9. Imagine you are designing the ultimate school. Which of these tools would have the GREATEST positive impact on student learning? Select up to five.



- Ability to access the internet anywhere on campus
- Ability to use my own device
- Adaptive learning software geared to adjust levels of difficulty or content based on student needs
- Digital media creation tools (video/audio) to make movies
- Separate, private-like, space for digital media creative
- Electronic portfolios for students
- Standard use of learning management or digital exchange system for teacher/student interaction
- Games and virtual simulation systems to enhance instruction
- Chromebook for every student, grades 3-12
- More online classes, with tutor support
- Social media tools for collaboration and communications
- Interactive projectors
- Interactive large screen monitors

10. Is there anything else you wish to share with the Educational Specification Committee about twenty-first century learning environments?

internet concurrently.

Adobe Creative Suite available in some classrooms and all computer areas. Tablets (like Wacom Tablets) available to be checked out or used by various classes. More than one extra computer in each classroom. Fast, reliable Wi-Fi and hardwired networks!

Computers/tablets (not Chromebooks) for every student, funding to internet access for students with home access, better broadband and Wi-Fi access, interdisciplinary courses, elimination of periods (longer full block schedules), restructure school day (only 6 periods with daily advisories), more teacher collaborative time for PLC, ability to project individual screens to group or class screens,

Ipad for every student Grades K-3

Thank you for your work!

Chromebooks for all students and flexible seating options

Math instruction requires students to be able to write down and show their work. There is software that allows students to write on tablets with a stylus. this form of technology is better suited for math instruction compared to every student having a Chromebook.

the more interactive the better, don't commit to any one technology that boxes you into a single vendor

We need a better lunch program. Not prepackaged food. Organic, local food

Tried to get Prism Walls

I think the most effective learning environments are the ones where students are proud to be. Simple things such as natural lighting, high ceilings and adequate storage can contribute to aesthetically appealing environments that students and teachers enjoy. More sophisticated environments include furniture specific to student needs (ex: standing computer workstations, small group areas, and interactive projectors or smart-boards) I think the most successful use of the bond would be to implement as many supports as possible from both of these areas.

I like flat floor spaces for music rooms, not tiered seating.

You must have a robust internet and Wi-Fi system in place along with stronger cell service.

I know most of this won't happen, but please remember to gear your thinking to who will be using the space, not just what the latest technology is or trend is spouting. Kids need a bright, cheery, comfortable, space, with room to move around. Not gaudy or fancy! Teachers need wall and whiteboard space and storage! Old or young, we all want to feel safe and secure at school!

support staff and students in green/recycling efforts

Before we consider any of the above, we need Wi-Fi that can support it. Currently, having the wireless printers using bandwidth is an issue. Once that is resolved, I would love to see any/all of the above.

Sorry - I could just pick 5 on that last question. You all rock! Thanks for all your support! Go SRCS. I'm ready to start phone calling for our next bond□

If we want to strongly implement technology practices in our schools, then we need to design facilities prepared to adapt to new waves of technology that will inevitably be coming in the next few years. I strongly recommend that the technology adaptations that will be applied to our campus designs be designed in a way that we have ample space to expand those technologies, and not to over-invest on the technologies we are currently working with. Chromebooks will get us through testing now, but we will need a whole new system in a matter of years. It is crucial that our campuses are designed to adapt, and are not static to the current trend of educational technologies.

Teachers and students need to be in environments that they feel proud of (clean), inspire them to learn and physically comfortable (not too hot or too cold and well ventilated).

The design of the school needs to inspire teachers and students as they walk onto, drive into, and cycle onto the campus. Opening up the front of the school as the entrance would be a great step in that direction.

We must adapt and change with our students. We do not want to be left behind and find our students choosing other schools over ours. Change is progress.

twenty-first century learning environments will only extend as far as the school campus, unless there is also a community effort to improve remote accessibility so that students can use their chromebooks for homework and access learning tools.

Thanks for your communication!

While "high tech" is great I hope the "human touch" will not be forgotten

Our classrooms at Bahia Vista are very hot during heat waves- no drinking fountains in classrooms, no cross ventilation (windows open only inches and single doors open to a closed in hallway) no shade structures currently outside, no shade trees, limited drinking fountains outside. Hot temperatures are not conducive to student learning, student health (bloody noses, vomit, headaches), healthy of elderly volunteers, and staff morale. If the classroom is hot, nothing else matters. Design schools so that they can have cross-ventilation, shady areas, and stay under 80 degrees. That is number 1 priority.

All students and teachers deserve to work and learn under decent, comfortable conditions

Refer back to answer from #8

It's very difficult for students to concentrate and do their best work when the classroom is overly hot.

It would be good to do a survey of each building to really see the condition, healthy environments are of the utmost importance. Teachers and students spend long hours at school, we want to make sure that they are in environments that promote learning and are healthy environments.

None of the above can possibly matter if our learning environment doesn't support the health and safety of our students. Please see comments above. Thank you!

Children cannot learn in hot classrooms, especially on very hot days. Air condition is a must! Also, all projectors should be mounted on the ceiling. It is very dangerous to have the cords on the floor where students and elderly volunteers can trip over. This is a safety issue!

Before our students can become twenty-first century learners, we need to consider their basic needs. During the most recent heat wave we had many students vomiting due to heat exhaustion, and having persistent nose bleeds. It is extremely difficult to teach students who are suffering in a classroom that is 90 degrees. I believe that in order to best assist our students as growing twenty-first century learners, we must first determine if we are meeting their very basic needs of comfort and safety.

All proposals should be run by teachers currently in the classroom.

Thank you for seeking feedback

Since my projector for my document camera is on my desk, rather than being mounted to the ceiling, I am afraid that the loose cords will cause my second grade students or my elderly volunteers to trip. Also, because the projector is angled to the side, the image always projects unevenly, which is distracting to students. Because Bahia Vista is a two-story building, we need air-conditioning. Many students feel nauseous or have nose bleeds on hot days. There should be equity across the schools.

My classroom is 84 degrees on hot days. Students can not focus or give their best. We are all uncomfortable and sweating. Some are getting sick with headaches, including myself. An air conditioned environment is imperative to a productive and healthy learning environment.

I tried to get TL prism walls, but the company did not comply.

Exhibit B

SAN RAFAEL CITY SCHOOLS TECHNOLOGY STANDARDS and ROADMAP 2016-19

This roadmap is a compilation of State of California and regional research focused on integrating technology into everyday instructional delivery at San Rafael City Schools (SRCS). Additionally, this district technology standards and roadmap create benchmarks for technology use by all teachers and staff. Sources that contributed to this analysis include

- The State Blueprint for California Education Technology
- State Frameworks
- The Consortium of School Networking (CoSN)
- The District's Local Control and Accountability Plan (LCAP), and
- The District's 2015 Facilities Master Plan.

It is noted that the collective opinion is that students will control more of their learning through personalized learning. The tools of technology will aid in this type of learning as teachers and students monitor and design the learning specific to the student's needs. The 2015 Facilities Master Plan set the groundwork by listing the technology tools needed in a standard classroom.

STATE PLAN

The State of California has offered some guidance for the use of technology in schools. Empowering Learning: A Blueprint for California Education Technology indicates, *"Education technology will be as effective and productive a tool in the school environment as it is in the world beyond schools."* SRCS can use the Call to Action as part of its own model for creating a Technology Roadmap.

STATE PLAN - Call to Action: *Facilitate the infusion of 1:1 computing in school, after school and in the home; provide devices, Internet access, new digital curriculum materials, capacity for ongoing diagnostic assessment, professional development and network support, and institute an open standard for the exchange of educational information (p.13, A Blueprint for Great Schools).*

EDUCATION FRAMEWORK WITH TECHNOLOGY

"Technology pervades modern society. It impacts most aspects of the personal and academic/professional lives of youth and adults. Furthermore, it has the potential to substantially support the achievement of many of the twenty first century skills discussed previously in this chapter: Its wise use demands critical thinking, it expands and enriches opportunities for communication and collaboration, it is a powerful tool for creativity and innovation, and it can contribute to global awareness and competence. Furthermore, technology as a tool for learning and expression can contribute to progress in each of the themes of the CA CCSS for ELA/ELD and the CA ELD Standards: Meaning Making, Language Development, Effective Expression, Content Knowledge, and Foundational Skills." (Excerpt from the State Education Frameworks)

FUTURE TRENDS

The Consortium of School Networking (CoSN) publishes an annual report geared toward technology trends spanning five years. This report, called the NMC/CoSN Horizon Report, offers a guide into the future as trends become reality. The 2016 K-12 Education report charts long-term and short-term trends, including:

...redesigning learning spaces to accommodate more immersive, hands-on activities, and rethinking how schools work in order to keep pace with the demands of the 21st workforce and equip students with future-focused skills.

...In the short-term, the rise of coding and programming skills as a literacy emerged. These skills will bolster problem-solving, creativity, and critical thinking skills. (NMC/CoSN Horizon Report: 2016 K-12 Education, Page 1)

DISTRICT LCAP- TECHNOLOGY

The following items specify the funding allocations to support Instructional Technology

Elementary

Goal 2

- Action 4 d) Continue training and support for implementation of educational technology tools (Tech Jedis.)
- Action 5 e) 1:1 Chromebook: Enrich the Chromebook ratio as we move toward 1:1 with a focus on middle school to support implementation of ELA/ELD digital curriculum.

Goal 3

- Action 6 b) Purchase computers and/or tablets to maintain or improve student device ratio for targeted population.
- Action 7 c) Purchase computers and/or tablets and/or video projectors to replace outdated hardware devices for staff.

High School

Goal 2

- Action 2 b) Continue to implement CCSS-aligned units of instruction and assessments which will be uploaded to an online repository for teachers to access district-wide-- purchase Canvas as LMS. Provide support for the creation of student ePortfolio beginning 2017-18, 9th grade class.

Goal 3

- Action 4 b) Continue to purchase computers and/or tablets all high schools to maintain or improve student device ratio.
- Action 5.c) Continue to purchase computers and/or tablets to replace outdated hardware devices for staff as needed. Purchase video projectors (and additional replacement bulbs) for staff as needed.

2015 SRCS MASTER FACILITIES PLAN

While some of the District's infrastructure is in good shape, a greater amount needs substantial upgrade and expansion. It is the goal of the District to provide an educational environment that supports a 1:1 student to device ratio. Additionally, it is the intent that all telephone and clock/bell systems be migrated to a Voice over Internet Protocol (VoIP) system for better controllability. Also, data infrastructure both in terms of cabling and appropriate MDF/IDF closets with appropriate cooling and power is imperative for a robust infrastructure that will continue to meet the requirements of technology-heavy instruction.

As new buildings are created, the following requirements should be taken into consideration:

1. Audio/visual systems should be integrated into the classroom.
2. Short throw projectors to be used with whiteboard designed for display. Projectors should be wireless capable.
3. Voice amplification should be used for teachers to improve the instructional environment.
4. Teachers to have both tablets and laptops with docking stations.
5. All spaces (indoor and outdoor) should have robust wireless access so that all spaces can be part of the learning environment.

DISTRICT TECHNOLOGY STANDARDS AND ROAPMAP

CLASSROOM TOOLS

Technology enhances strong student learning by providing students with greater access and rich opportunities, through powerful instructional models supporting:

- Differentiation of instruction
- Self-directed and teacher-directed learning
- Student Centered Learning- developing student ownership of their learning
- Versatility of use of program/tools
- Blending of curriculum and technology
- Highly complex instruction and learning
- Flexible and responsive instructional practices
- Increased teacher productivity, collaboration, efficiency and efficacy

To implement these models, our technology roadmap needs to dramatically increase student access to instructionally appropriate mobile devices. New instructional models will incorporate digital materials and some content will be available completely online. “Cloud-based” tools, such as Google Suite and the Canvas learning management system, will allow students, teachers, and parents access to class resources from anywhere and at anytime. Base standards will guide our growth and success as we increase our integration of technology into our everyday learning.

DISTRICT TECHNOLOGY STANDARDS

CLASSROOM (regular)

- Standard Classroom Model will have PC-based desktop, document camera, projector display (interactive ultra short-throw), enhanced audio system (voice amplification)
- Matte-finish magnetic whiteboards
- Classrooms equipped counter-level access of (3) duplex outlets for charging 6 Chromebooks
- Mobile device for all classroom teachers
- Cloud-based applications (move from on-site server applications)
- Google Suite services
- Learning Management System (such as, Canvas or Google Classroom)
- VoIP basic handset

OTHER STAFF OR OFFICE SET -UP

- PC desktop (optional laptop for administrators)
- VoIP super handset
- Printers as determined at each site

SYSTEM STANDARDS

DATA CENTER & NETWORK STANDARDS

BICSI 002 and TIA 942 compliant

Data Center Requirements

POWER: Dedicated electrical power panel for all equipment racks and AC units with automated power transfer switch. TrippLite 8k units with additional batteries, run time of 4 hour minimum. Two additional units with power distributed between the units. Units configured to do weekly self-test.

TEMPERATURE: Dedicated AC unit targeted at 60 degrees, not to exceed 80 degrees, scaled to appropriate size allowing for further server room expansion.

LAYOUT: Rack system must be Cisco/Meraki compliant. Egress for all rack system must have no less than 36” clearance from walls or structures.

EQUIPMENT: Switches-- Current Meraki. Firewall-- Meraki MX600 with Advance Security Features. Fiber Aggregation-- Meraki MS425 series. Cable standard-- Cat 6e plenum rated

Main Distribution Frame (MDF)

Secure room (where exceptions approved enclosure.) Power with TrippLite with additional battery packs, minimum of 60 minutes run time with weekly self test. Meet Data Center Temperature requirements. Mounted below the switch w/ SNMP card. Cisco ISR4451-AX w/6K Akamai & WAAS. Firewall & Fiber standards.. Switches-- Current Meraki. Cable standard-- Cat 6e plenum rated.

Intermediate Distribution Frame (IDF)

Secure room (where exceptions approved enclosure XXX.) Power with TrippLite APC 1500, minimum of 30 minutes run time with weekly self test. Meet Data Center Temperature requirements, wherever possible, ensure vented doors. If used mounted below the switch w/ SNMP card. Fiber terminated at top of rack or enclosure. Cable standard Cat 6e plenum rated.

High port density, shall be above 96 and low port density 96 ports or less, all Meraki brands

Classrooms

(9) (3 locations x 3 drops) Cat 6a plenum rated- Network Data Drops

(1) IP-Based Speaker/Clock Combo

(1) VoIP basic handset

(1) Wireless access point- minimum Meraki MR42

(1) Audio/visual connection plates, including audio adjustment- off-set front of the room and includes: USB, HDMI, Mini (3.5) data connections

(1) Voice enhancement system with priority page system adjustment

LEARNING ENVIRONMENTS

Classrooms will be modernized with new displays/projectors and the capability for teachers and students to easily and seamlessly show their work on the classroom screen. Spaces must be retooled to create collaborative and flexible working environments. The demand on more digitally-produced work invokes the need for mini video production environment so student can demonstrate their work. Also, other common spaces should be reevaluated to allow for small and large group configuration. An example of this is noted in the Schools Planning & Management: Reimagine Your Media Center, <https://webspm.com/articles/2016/12/01/media-center.aspx?m=1>

Identifying your media center's role in the overall learning ecosystem is a crucial first step.

The media center's primary function is not to simply archive research materials. Information, through mobile devices, is literally everywhere.

If your community wants to create workspace for multimedia or STEM projects, or a quiet space for independent study, or a social place for small group activities, or a large instruction area to bring whole classes together, can your media center meet those needs?

COMMON SPACES

- Libraries will function more as media centers. As we move to 1:1 there will be a reduction of mini labs in the library so those spaces can be used for small group areas.
- Mini stations should be designed that allow for quiet zones or video projection zones.
- All common or courtyard spaces must have wireless connectivity to support after-hours access.

PROFESSIONAL DEVELOPMENT

Teachers must be supported through a range of professional learning opportunities in order to increase the adoption of electronic media. This includes the piloting and selection of curriculum and various technologies that can be used not only in the classroom, but as an extension to the students' learning day. As a model toward digital delivery of curriculum, teachers must be invited to learn at the level that best suits their knowledge and experience using technology. We will create opportunities to learn and engage that include, recorded or virtual learning courses that allows for repeat viewing of a topic. And designing course delivery that include proven outcomes rather than seat time. Staff members will be the owner of their learning.

Teacher and staff technology-delivery professional development includes:

- Video conferencing using Google Hangout or Go-To Meeting format
- Webinars through various learning environments and recorded trainings by SRCS coaches
- Google learning collaboration tool designed to discuss SRCS initiatives
- Using the “Flipped Classroom” model for professional development or staff meetings
- Certifying teachers with Google Classroom

ROADMAP			
2016-17	2017-18	2018-19	2019-20
<ul style="list-style-type: none"> • Design and implement a robust wireless network • Continue expansion of 1:1 program • Create demo site for 1:1 model • Prepare for increased bandwidth utilization • Create more virtual learning opportunities for staff, ie Go-To Meeting • Maintain four-year refresh cycle for all staff computers 	<ul style="list-style-type: none"> • Continue expansion of 1:1 program • Create an additional demo site for 1:1 model • Create instructional models: makerspace, flipped or blended classrooms • Issue mobile device to all classroom teachers • Move all secondary schools to a learning management system • Create demo sites for interactive technology and enhance audio systems • Maintain four-year refresh cycle for all staff computers • Increase Internet bandwidth • Create a redundant and load-balanced network • Evaluate more technology-delivery professional development for training sessions 	<ul style="list-style-type: none"> • Continue expansion of 1:1 program • Create 1:1 model at Middle Schools • Move all primary classroom to learning management system • Maintain four-year refresh cycle for all staff computers • Create instructional models for Robotics and Virtual Reality labs • Support additional online learning tools • Replace current phone system with Voice over Internet Protocol (VoIP) • Create a financial model to support non-construction classrooms to be updated • Move server base to cloud services 	<ul style="list-style-type: none"> • Create 1:1 model at High Schools • Maintain four-year refresh cycle for all staff computers • Update non-construction classroom to standard class model

Endnotes

- ⁱ (San Rafael City Schools Master Facilities Plan, 2015, page 2.11–12)
- ⁱⁱ (San Rafael City Schools Master Facilities Plan, 2015, page 2.11–12)
- ⁱⁱⁱ (San Rafael City Schools Master Facilities Plan, 2015, page 2.11–12)
- ^{iv} (CDE website) Introduction to Common Core State Standards, page 6
- ^v (NGSS webpage, <http://www.nextgenscience.org>).
- ^{vi} (How Cross-Sector Collaborations are Advancing STEM learning, Traphagen and Traill, February 2014, page 9
http://www.noycefdn.org/documents/STEM_ECOSYSTEMS_REPORT_140128.pdf)
- ^{vii} (CDE website, <http://www.cde.ca.gov/qs/ab/>)
- ^{viii} (Hanover Research, School Structures that Support twenty-first century Learning (Washington, DC, 2011, and Susan Black “Achievement by Design” American School Board Journal, October 2007) 39–41
<http://www.asbj.com/mainmenucategory/archive/2007/october/achievementbydesign.aspx>)
- ^{ix} (NMC/CoSN Horizon Report: 2016 K–12 Education, Page 1
<https://www.nmc.org/publication/nmc-cosn-horizon-report-2016-k-12-edition/>)