SAN RAFAEL CITY SCHOOLS

PROJECT SPECIFIC EDUCATIONAL SPECIFICATIONS

May 14, 2018

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INTRODUCTION

The purpose of the *project specific* Secondary Educational Specifications is to provide guidance to the design professionals on the educational and programmatic needs of San Rafael High School (SRHS).

Place matters. We know through research that clean air, ample day lighting, and a small, quiet, comfortable, and safe learning environment is important for students' academic achievement and well-being. School design has the power to reach the whole learner—cognitive, physical and emotional—when educators and students are thoughtfully engaged in the planning process. Beginning with the educational vision and ending with the activities and spaces that engage students. The Educational Specifications are designed to communicate the programmatic, functional, spatial, and environmental requirements for the San Rafael High School project.

School and classroom design should facilitate twenty-first century learning that prepares students for college, careers, and community. Project based learning, personalized instruction, blended learning, and other twenty-first century teaching methods should be well supported in the design of San Rafael's high schools. Student mastery of content as well as the "Four Cs"—critical thinking, communication, collaboration, and creativity—are the foundation of the District's educational goals that begin this document.

In 2015 the voters in the San Rafael City Schools approved Measure B, a $161 million bond measure for the high school district. These funds, together with other capital funds, will provide capital improvements to the high schools and include significant funding directed at creating safe, innovative learning environments and instructional technology to support twenty-first century learning. Additional classrooms and labs will reduce overcrowding at SRHS and will meet the growing demand for hands-on Science, Technology, Engineering, the Arts, and Math (STEAM) classes. The new Commons will create informal collaborative spaces for *all* students and staff. The Educational Specifications will guide these investments to support the District's educational program for learner-centered environments.

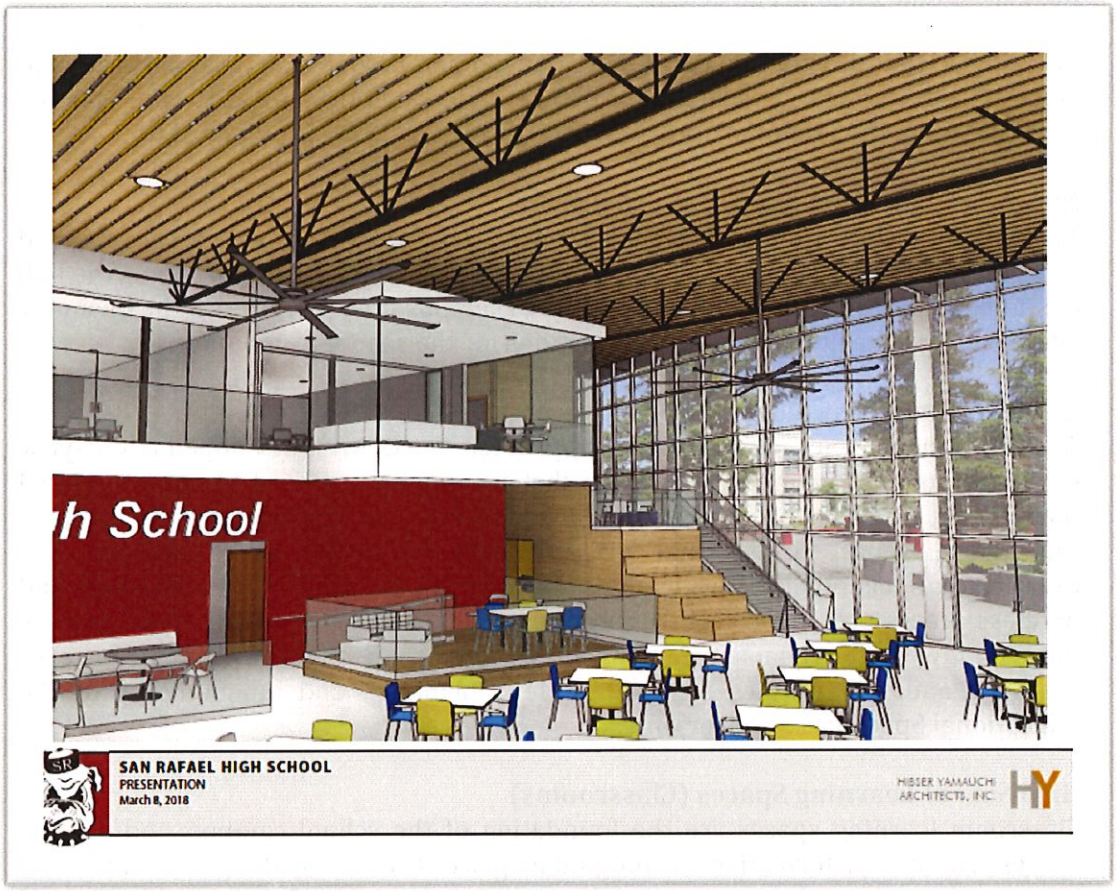
The District wishes to acknowledge the many teachers, staff and students that contributed to the development of this document (see Acknowledgments). Through both survey and on-site meetings, and guided by the principal, the District developed these educational guidelines for SRHS.

Not all recommendations within the Educational Specifications will be realized due to budget, site, or other constraints. The Educational Specifications are intended to serve as a guideline for programmatic needs and to give the design professionals flexibility in addressing the unique requirements of the site.

EDUCATIONAL SPECIFICATIONS HIGHLIGHTS

The SRHS Educational Specifications encompass educational requirements for the Measure B projects that will occur on the campus over the next five years including a student Commons, STEAM building, a new Administration and Student Services building, reconfiguration of prior administrative space into classrooms and teacher collaborative space, and upgrades to the physical education facilities. Highlights of these specifications include:

Student Commons



The vision is to move from a cafeteria space limited in its offerings and appeal to a student commons ("Commons") space that provides *all* students with a place to dine, hang out, study, relax, socialize, conduct student government and business, and collaborate with each other and with teachers and staff.

High school Commons with cafeterias are replicating those found on college campuses today, where institutional dining is disappearing and being replaced by café styled spaces where food is made to order and "grab-and-go," and there is ample daylighting and connection to outdoor eating. Commons are inviting

contemporary spaces adorned with student art and providing display areas for campus-wide events and clubs.

The Commons complex houses the multipurpose area, kitchen, and Associated Student Body (ASB) store and office and will connect to the Career Center located on the second floor of the Student Services Center.

STEAM Building
The vision for the new STEAM building is to design a student-centered space that enhances Career Technical Education (CTE) offerings and builds STEAM interdisciplinary and project based learning possibilities.

The educational direction is to support the existing Engineering CTE pathway and create flexibility for new college and career paths for SRHS students while linking such sectors to the Common Core and Next Generation Science Standards.

New Administration and Student Services
The new administration and student services building will provide a consolidated complex to serve students, teachers, parents and the community at SRHS. As the hub of student services, this building is central to campus life and includes the business, administrative, health and guidance functions for the school community.

Instructional Technology
As part of the educational specifications process, the District developed a four-year road map for instructional technology that includes a Standard Classroom Model that will have a PC-based desktop for teachers, a document camera, a project display (interactive short throw), and an enhanced classroom audio system. The Instructional Technology specifications also quantify the number of data drops and wireless access points for each classroom, provide charging station areas, and lay the groundwork for reliable campus-wide wireless connectivity. Technology is ever changing and will require frequent review, planning, and amendments to the Educational Specifications over time.

High School Learning Spaces (Classrooms)
Classroom learning spaces are the foundation of the school campus, and are the spaces where transformative learning takes place throughout the grades. Learning happens throughout the campus—in the outdoor spaces, the Commons, library, and specialty spaces—but is centered in the classroom with the classroom teacher. During the educational specifications process, teachers and staff guided the preparation of the size and content of the classroom space, including instructional technology, flooring, cabinetry, utilities, and furniture and equipment emphasizing stand-up desks for a movement rich environment.

Teacher and Student Collaborative Space

The vision is to provide teachers collaboration spaces when remodeling and modernization opportunities occur. More and more, teachers desire space where they can collaborate with their peers, incubate ideas and exchange best practices outside of regular classroom space. Collaborative and small group instruction spaces for students are also specified in this document. Collaborative spaces in education are taking many forms—from private breakout rooms, to nooks within hallways and under stairs, to nodes comprised in sunken floor areas—and can be used by teachers, staff, students, and community partners.

Collaborative space example, Utah

Sustainability

Through the work of the District's Sustainability Committee, Facilities Department and program management team, it is recommended that SRCS adhere to the Collaborative for High Performance Schools (CHPS) design standards under the CHPS Designed™ recognition program. CHPS standards help make schools energy, water and material efficient, well-lit, thermally comfortable, acoustically sound, safe, healthy, and easy to operate.

General Standards

The Educational Specifications include standards, developed with the Maintenance and Operations and Facilities Department teams, for doors, windows, floors, roofs restrooms, landscaping, security, fencing, parking and bus areas. These standards will both assist with parity across the SRCS campuses and efficiency in operations.

ACKNOWLEDGEMENTS

Executive Committee
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Dr. Myra Perez, Deputy Superintendent, Instruction
Kevin Kerr, Director, 9–12 Teaching & Learning
Mike Gardner, Director of Student Services
Kathy Frye, Director, English Learners Programs
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SRHS MISSION AND EXPECTED SCHOOLWIDE LEARNING RESULTS

SAN RAFAEL HIGH SCHOOL MISSION STATEMENT

Our mission at San Rafael High School is for each student to acquire the skills and knowledge necessary to succeed in the future and to contribute to society while recognizing the dignity and worth of each individual.

EXPECTED SCHOOLWIDE LEARNING RESULTS (ESLR'S)

To fulfill this mission the San Rafael High School staff, in partnership with the parents and students, expect graduates to be:

Aware, ethical and involved citizens who:

- participate in school, local communities and develop an awareness of one global community.
- engage in decision making that considers the economic, social, ethical and political consequences of their actions and accepts responsibility for them.
- value diversity of culture, language, ideas and gender.

Collaborative workers who:

- use cooperative skills to contribute to the accomplishment of group goals.
- utilized effective communication and problem solving skills.
- select and use a variety of tools including technology to acquire, organize, analyze and communicate information.

Critical thinkers who:

- analyze ideas and issues with an open and inquiring mind.
- plan, organize and carry out complex tasks.
- apply past learning experiences to new situations.

Effective communicators who:

- listen, speak, read and write competently.
- organize and express their thoughts in an informed and meaningful way using a variety of media.
- appreciate, critique, and create diverse forms of visual and performing arts.

Life-long learners who:

- assume personal responsibility for their learning.
- develop and evaluate personal educational and career plans.
- have the skills for life-long learning, fitness and wellness.

SRCS MISSION, VISION, PRINCIPLES, AND GOALS

SRCS Mission
Lifting student achievement. Every student, every day.

Vision
Every student will be a confident learner, an effective communicator, a critical thinker, and a positive contributor to the global community.

Education Principles
Every student has a fundamental right to a quality education that supports their path to achieve their full potential.

Students thrive in physically and emotionally safe environments that are conducive to learning for all.

Our community has a shared responsibility for everyone's success and encourages everyone's participation.

We value integrity, honesty, and truthfulness, and believe in the inherent dignity and worth of every individual.

Goals from the Local Control Accountability Plan (LCAP)
Each student receives rigorous instruction and support and is held to high expectations so that they can foster critical thinking, collaboration, creativity, and communication skills to master the Common Core State Standards while continuing to be college, career, and community ready.

Provide all staff with differentiated professional development with a focus on collaboration, alignment, and high-quality staff retention and support, to maximize student learning and achievement. Manage our resources responsibly, transparently, and in alignment with District goals and priorities so that the District is able to focus its efforts to move the needle for student success. Develop and implement highly effective two-way systems between the District and its stakeholders to ensure increased awareness about, participation in, and support for decision-making about the District's goals. Establish effective systems and welcoming environment that allow staff, students, and families to feel safe and included so that they can participate fully in student learning and the school community.

The 2017 high school LCAP highlights include: Implementing Canvas, a learning management system; Enhancing Student Voice; Increasing Parent Engagement; and Building More Inclusive Schools.

MASTER FACILITIES PLAN INSTRUCTIONAL GOALS

The District engaged in a facilities master plan process in 2015. Goals for facility standards, sustainability, technology, maintenance and operations, and parity were established. Goals for facilities to support curriculum were discussed both at the site committee level and at the district level during the master plan process. "From the individual sites, the most common concern is not having enough space for administration and counseling, pull out programs and break out spaces. At the district level, the focus is on providing adequate space for specialty curriculum. These concerns highlight the need to provide science or other multi-use classrooms at the elementary sites and improved career technical education spaces at the middle and high schools that more adequately prepare those spaces to be flexible in accommodating future programs." [i]

The vision that upgraded facilities must provide environments that allow learning to occur in any space was also articulated during the master plan process. "Cafeterias should be more like commons with Wi-Fi access ubiquitous and supportive of 1:1 student to device ratios." [ii]

The Master Facilities Plan articulated, "that all telephone and clock and bell systems be migrated to a Voice Over Internet Protocol (VoIP) system for better controllability. Data infrastructure both in terms of cabling and appropriate MDF and (or) IDF closets with appropriate cooling and power is imperative for a robust infrastructure that will continue to meet the requirements of technology-heavy instruction that is anticipated as the United States moves into the twenty-first century.

As new buildings are developed, the following requirements should be taken into consideration with respect to classrooms:

- AV systems should be integrated into the room
- Short-throw projectors are to be used with whiteboards designed for display; projectors should be wireless capable
- Voice amplification for teachers to improve the instructional environment...
- ...All spaces (indoor and outdoor) should have robust wireless access so that all spaces can be part of the learning environment." [iii]

DESIGN GUIDING PRINCIPLES

The following design guiding principles were developed by the Educational Specifications Executive Committee and confirmed by the Educational Specifications Survey administered in early May 2017.

Guiding Principle #1: Learning Environments

- Create twenty-first century learning environments which:
    - Are flexible
    - Are engaging
    - Are technologically up-to-date
    - Facilitate student-teacher interaction in the education process
    - Enhance collaborative learning and working
    - Accommodate different teaching styles
    - Allow for learning anywhere, anytime
- Be student and teacher friendly—design learning spaces with:
    - Well insulated walls and quiet mechanical systems
    - Individual environmental controls
    - Flexible use of wall surfaces including tackable surfaces
    - Modern, comfortable furniture
    - Low-emitting materials

Guiding Principle #2: Safety and Security

- Design schools with pleasing aesthetics that are welcoming and secure:
    - Design structures, fences, and site amenities to:
        - Maintain safety
        - Prevent unauthorized access
        - Deter vandalism

- Limit opportunities to gain access to roofs and second stories

Guiding Principle #3: Community Focus

- Create schools to serve as neighborhood centers by:
  - Creating easy access zones without allowing full campus access
  - Making designated rooms (library, multipurpose and performing arts) accessible on evenings and weekends for joint use of facilities by the community
  - Making schools available to serve a wide audience for extended learning concepts

Guiding Principle #4: Architectural Quality

- The appearance and overall character of each school should be:
  - Pleasing and stimulating to students, teachers, families, and the surrounding community
  - Welcoming and attractive places to visit or to spend the day
  - Easy to understand how to enter and exit buildings with ease, and how to navigate the campus with attractive signage (wayfinding)

SRHS CAPITAL PROJECT

San Rafael City Schools is investing in its schools through the voter-approved Measure B capital program, including the following projects at SRHS:

Phase 1: New Stadium and HVAC

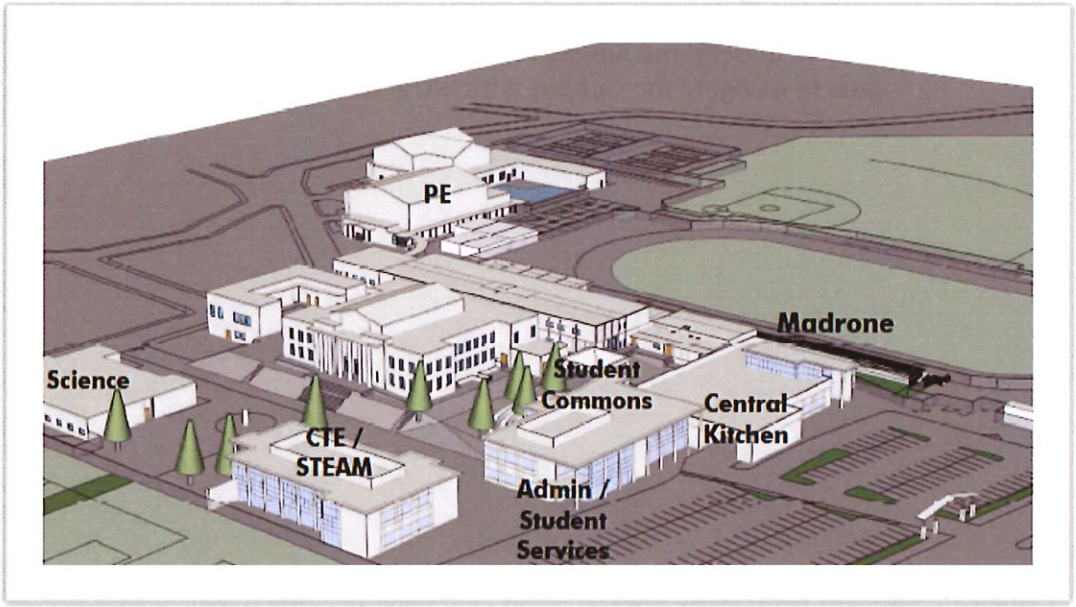
Phase II: Interim Relocation of Career Technical Education, Ceramics, Photo
New Administration and Student Support Building

Phase III: New Student Commons Building and Central Kitchen

Phase IV: New STEAM Building

Phase V: Remodel of Former Administration Space into Classrooms and Collaborative Space

Phase VI: Locker Room Expansion, New Fitness Room



HY Architects, SRHS project concept

EDUCATIONAL PROGRAM AND REFORM

Over the last decade, California adopted the Common Core State Standards, created a sea change in how schools are funded with the Local Control Funding Formula, adopted Next Generation Science Standards, and new English Language Development Standards, and identified ten essential elements of quality schools through the Quality Schooling Frameworks. Each of these initiatives continues to shape SRCS's educational programming and the capital program supports necessary to deliver high-quality education to all SRCS high school students. Together with English Language Development, literacy is a top priority of the SRCS at all grade levels.

San Rafael City Schools administers many programs to improve student achievement, literacy, and college-going rates including Title 1 and Advancement Via Individual Determination (AVID).

Common Core State Standards (CCSS)
California adopted the CCSS in 2010 for both mathematics and English-language arts. The standards are rigorous, research-based, and designed to prepare every student for success in college and the workforce. The standards are internationally benchmarked to ensure that California students are able to compete with students around the globe.

CCSS: English-Language Arts and Literacy in History/Social Science, and Technical Subjects
The standards set requirements not only for English Language Arts (ELA) but also for literacy in history and social studies, science, and technical subjects. The standards specify the literacy skills and understanding required for college and career readiness in multiple disciplines.

The CCSS for ELA are divided into four strands: reading, writing, speaking and listening, and language. The standards are organized by grade span for high school.

At each high school grade span, the reading strand includes standards for both literature and informational text. Literature encompasses a broad range of cultures, periods, and genres. Informational texts include biographies and autobiographies; writing about history-social sciences, science and the arts; technical texts; and digital sources.

The writing standards call for students to write for a variety of purposes and to use technology to produce and publish their writing. Students learn to express ideas, work together, and listen carefully to integrate and evaluate information. Skills are not learned in isolation, but in connection with reading analyzing grade-level texts and topics. Technology is used to gather and present information.

Students who are college and career ready in ELA demonstrate independence, build strong content knowledge, respond to the varying demands of audience, task purpose and discipline, comprehend as well as critique, value evidence, use technology and digital media strategically and capably, and come to understand other perspectives and cultures. [iv]

CCSS: Mathematics

The high school standards identify the mathematics that all students should study to be college and career ready. The standards are organized by conceptual categories: number and quantity, algebra, functions modeling, geometry, and statistics and probability. In addition, the CCSS include standards for Algebra 1, Calculus, Advanced Placement Probability and Statistics. The CCSS is consistent with the goal that all students succeed in Algebra 1.

Students are expected to apply mathematical ways of thinking to real world issues and challenges to construct sound mathematical arguments and to be precise in their mathematical communications.

English Language Development (ELD) Standards

The California ELD Standards, adopted in 2012, are aligned with the CCSS for ELA Standards. They describe key knowledge, skills, and abilities in core areas that students, who are learning English as a new language, need to achieve success in grade-level academic content. These standards provide a foundation for English learners in kindergarten through grade 12 so that each learner can gain access to academic subjects, engage with them and meet the state's subject matter standards for college and career readiness.

Next Generation Science Standards (NGSS)

In 2013 California adopted the NGSS for K–12. The NGSS identifies scientific and engineering practices, crosscutting concepts, and core ideas in science that all K–12 students should master to prepare for success in college and twenty-first century careers. Increasingly, more jobs will require science, technology, engineering and math (STEM) skills than in the past. The NGSS provides a strong science education that equips students with the ability to think critically, analyze information, and solve complex problems—skills needed to pursue opportunities within and beyond STEM fields. NGSS is intended for students to develop an in-depth understanding of content and gain knowledge and develop skills—communication, collaboration, inquiry, problem solving, and flexibility—that will serve them throughout their educational and professional lives.

High-quality education standards allow educators to teach effectively, moving their practice toward how students learn best—in a hands-on, collaborative, and integrated environment rooted in inquiry and discovery. Teaching based on the NGSS calls for more student-centered learning that enables students to think on their own, problem-solve, communicate, and collaborate—in addition to learning important scientific concepts.[v]

Science Technology Engineering Art and Math (STEAM)
SRCS is focused on improving STEAM education within its core academics. "Bolstering the STE[A]M workforce is not the only reason to concern ourselves with these issues. Exposure to high-quality STE[A]M experiences can inspire wonder and curiosity in students about the natural and human-constructed worlds and motivate them to want to learn more. Study of the STE[A]M disciplines can foster students' ability to think critically about issues in a world that is now dominated by science and technology. Successful STE[A]M learning develops in young people the ability to make rational decisions for themselves, their families and their communities." [vi]

Career Technical Education (CTE) Standards
In 2013 California updated its 2005 CTE standards to align with Common Core – each standard is now aligned with one or more Common Core English language arts and mathematics standards, Next Generation Science Core Ideas and history/social studies standards. According to the California Department of Education, the revised standards will help CTE programs keep pace with the new economic and educational opportunities in California and are designed to assist California districts and schools in developing high-quality curriculums and instruction to help ensue that students are career and college ready. Across the 15 industry sectors are 11 anchor standards: Academics, Communications; Career Planning and Management; Technology; Problem Solving and Critical Thinking; Health and Safety; Responsibility and Flexibility; Ethics and Legal Responsibilities; Leadership and Teamwork; Technical Knowledge and Skills; and, Demonstration and Application.

Quality Schooling Frameworks (QSF)
The California Department of Education's QSF is a set of ten "interrelated elements with students learning and thriving at its center. QSF elements are research-based and they describe universal features of quality schooling that remain relatively constant despite the rapidly changing context of twenty-first century schools. Students Learning and Thriving—the aim of QSF—represents outcomes that Californians envision their public-school system will achieve for its students. These outcomes include not only academic outcomes based on the California state standards across all subject areas, but those outcomes that will ensure our students lead healthy lifestyles, are engaged members of our democracy, are prepared for the world of work, and are able to make good ethical decisions." [vii]

The ten (10) QSF elements are: Assessment, Culture and Climate, Curriculum, Equity, Family and Community, Instruction, Leaders, Professional Learning, Resource Alignment, and Teachers.

Local Control Funding Formula and Local Control Accountability Plan
Landmark legislation established the Local Control Funding Formula (LCFF) in 2013–14, and it replaced the previous kindergarten through grade 12 finance system that had been in existence for roughly 40 years. The LCFF establishes base, supplemental, and concentration grants in place of the myriad of previously existing

K–12 funding streams, including revenue limits, general purpose block grants, and most of the fifty-plus state categorical programs that existed at the time.

School districts must write a Local Control Accountability Plan (LCAP) to explain their goals and strategies for improving achievement for all students. Districts receive extra money for each student who is low-income, an English learner, or a foster youth. The plan must detail how these funds will be used to increase and improve services specifically for these students. The LCAP will spell out the strategy and goals for three years. The school district must then develop a budget that matches spending to the goals outlined in the plan.

SRCS's LCAP goals are enumerated in the Mission section of this document and concentrate on improving literacy for all students.

Title 1
Title I is a K–12 program that provides additional academic support and learning opportunities for students at schools with high percentages of socioeconomically disadvantaged children. The program is intended to help ensure that all students meet state academic standards.

Advancement Via Individual Determination (AVID)
AVID's goal is to prepare all students for college, starting with the core elective class and expanding schoolwide.

The AVID Elective class targets students in the academic middle, who have the desire to go to college and are capable of completing rigorous curriculum. Typically, AVID Elective students will be the first in their families to attend college, and many are from low-income or minority families.

Middle and high school teachers collaborated with college professors to develop the AVID curriculum based on rigorous standards and on best teaching practices in writing, inquiry, collaboration, organization, and reading. It is supported by state and national content standards. AVID curriculum is used in the AVID Elective and content-area classes in AVID schools to guide teachers and students, while planning strategies for success, by focusing on time management and study skills.

EDUCATIONAL SPECIFICATIONS SURVEY

An Educational Specifications Survey was sent to all SRCS staff on April 28, 2017. Eighty-six staff members responded and all school sites were represented including all three high schools. A summary of the survey results is in Exhibit A. Staff were asked open-ended questions about what two to five features of the physical learning environment are most important and most engaging for student learning and what two to five features are most important for staff satisfaction and comfort.

Around the topic of student learning environments, six themes emerged:

- Comfortable temperatures and HVAC
- Cleanliness
- Plentiful daylighting
- Access and placement of technology
- Mobile and adjustable furniture
- Space to configure different types of learning environments.

Similarly, the same themes emerged for staff job satisfaction and comfort with an emphasis on collaborative space.

A series of questions were asked about what type of facilities should SRCS consider as it plans and implements the bond program. Consensus results included:

- Flexible spaces that facilitate student-teacher interaction and allow for collaboration and interdisciplinary and team teaching are strongly supported whereas transparent spaces are not.
- Instructional technology, movement rich environments, good aesthetics, outdoor learning spaces, and a variety of teaching spaces, including libraries, are strongly supported.
- Safe and secure schools are a top priority for staff.

Staff was asked to rank the top five technology tools that would have the greatest impact on student learning. The top five choices included:

- The ability to access the internet anywhere on campus
- Chromebooks for every student (grades 3–12)
- Adaptive learning software geared to adjust levels of difficulty or content based on student needs
- Interactive projectors
- Interactive large screen monitors.

There were other open-ended questions on twenty-first century learning environments with thoughtful responses that emphasize students and teachers thrive in environments that inspire them and of which they can be proud.

OVERARCHING TRENDS

Flexible Design

The California Department of Education's (CDE)Flexible Learning Environments Best Practices document advises that "learner-centered classrooms should be designed to accommodate different teaching and learning formats, including: individual study and reflection; one-on-one instruction; peer-to-peer discussion; small group work; teacher directed instruction; and student presentation." A flexible classroom is fundamental to an instructor's ability to adapt to various learning styles. As enumerated in the best practice, one way to understand flexibility is through five properties that support constructive teaching pedagogy: fluidity, versatility, convertibility, scalability, and modifiability.

Mobile and flexible seating allows for cooperative learning and easy classroom transitions. Paragonic.com

> *"… technology, hands on learning, and gardening should be considered for our children's overall academic and social emotional needs."*
>
> *~Teacher, SRCS Educational Specifications Survey*

Flexible schools also provide space outside the classroom for collaborative learning, such as:

- Learning studios with abundant daylight, flexible furniture and space for group projects;
- Open areas, such as atriums and learning "streets"—instead of corridors—to encourage social interaction;
- Project rooms with high celings, work tables, and specialized equipment for inventing, creating, and building;
- Multiage rooms where students can mix and match according to interest and aptitudes; and
- Outside learning where students work on community service projects, and use community sites, such as museums and libraries, like classrooms. [viii]

Innovative school designs may incorporate rolling or sliding doors and movable interior walls that allow linked classrooms to work in common areas or on outdoor learning projects. "Shared learning spaces foster a sense of community as students work in teams on such areas as STEAM," according to the best practice document.

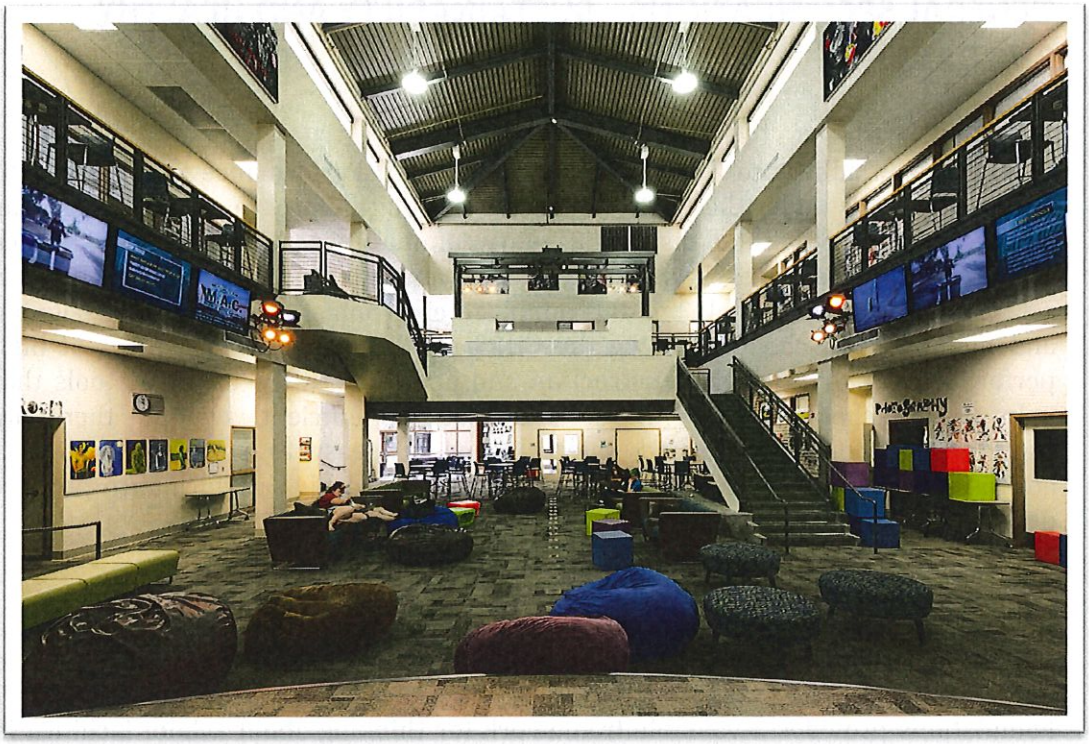
Gen7 STEAM modular classrooms—open to the outside

Engaging Technology
Engaging with technology will equip students with future-focused skills. The Educational Specification Survey summarized earlier in this document and the Instructional Technology chapter highlight the importance of access to Wi-Fi throughout the campuses and instructional technology as a tool for personalized learning. Technology is no longer solely addressed within a computer lab; rather it is available throughout the building design.

Connectivity to Outdoors
The best practices document summarizes that outdoor learning is integrated with standards-based academic subjects and should be utilized as more than a stand-alone learning option. Outdoor learning increases academic learning, and exposure to nature has social, emotional, and physical benefits for students. Sun and rain shelters are important components of campus design for outdoor learning.

Outdoor Learning Space, DLM HED Architects

Social Spaces
School design has the power to reach the whole learner—cognitive, physical, and emotional. Social spaces for students to gather informally, play, talk with their classmates, and develop as individuals is as important as the formal learning environments.



Commons and Social Space, DLM HED Architects

Collaboration

Collaborative learning environments foster peer-to-peer interaction and allow teachers to facilitate student learning and professionally mentor other teachers across the campus. Collaborative learning spaces call for flexible furniture to allow versatility and easy modification from large group instruction to small group instruction and quiet spaces to maker spaces.

> *"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."*
>
> *~Teacher, SRCS Educational Specification Survey*

GENERAL SPECIFICATIONS—SUSTAINABILTY AND HEALTHY BUILDINGS

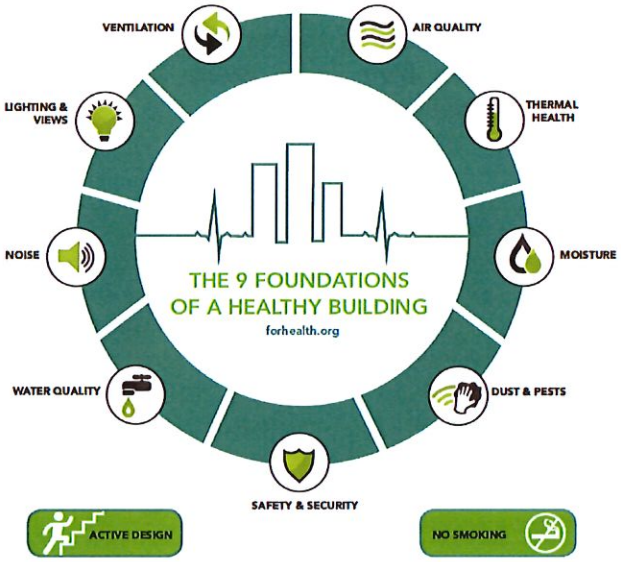
Sustainability

The SRCS will adhere to The Collaborative for High Performance Schools (CHPS) design standards under the CHPS Designed™ recognition program. CHPS standards are designed to help school districts in every community across the country reduce operating costs, achieve higher student performance, increase daily attendance, retain quality teachers and staff and minimize environmental impact by designing and modernizing schools utilizing the CHPS scorecard about all aspects of high performance school design, construction and operation. CHPS develops tools that help make schools energy, water and material efficient, well-lit, thermally comfortable, acoustically sound, safe, healthy, and easy to operate. CHPS also addresses low emitting material types and provides a high performance product database.

Healthy Buildings

In 2016, the Healthy Buildings team at Harvard released The 9 Foundations of a Healthy Building, which synthesized 30 years of scientific evidence into nine fundamental building factors that influence health and performance. The 9 Foundations provides a valuable framework for thinking about school facilities in the United States and other developed nations.

Architectural teams, in addition to the CHPS standards above, should consider the framework of these nine foundations as they approach each SRCS project:



(*9Foundations.ForHealth.org*)

INSTRUCTIONAL TECHNOLOGY

Vision

This instructional technology specification is a summary of the roadmap included as Exhibit B. It is a compilation of State of California and regional research focused on integrating technology into everyday instructional delivery at SRCS. The District technology standards and roadmap create benchmarks for technology use by all teachers and staff. Sources that contributed include the State Blueprint for California Education Technology, State Frameworks, The Consortium of School Networking (CoSN), the District's 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 students' needs. The 2015 Facilities Master Plan set the groundwork by listing the technology tools needed in a standard classroom.

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 his/her learning
- Blending of curriculum and technology
- Highly complex instruction and learning
- Flexible and responsive instructional practices
- Increased teacher productivity, collaboration, efficiency, and efficacy

Trends

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

- In the short-term, the rise of coding and programming skills as literacy emerged. These skills will bolster problem-solving, creativity and critical thinking skills. [ix]
- Redesigning learning spaces to accommodate more immersive, hands-on activities, and rethinking how schools work to keep pace with the demands of the twenty-first century workforce and equip students with future-focused skills.

District Technology Standards—Classroom and Office Spaces
Classrooms will be modernized with displays and projectors so teacher and student are able to quickly and seamlessly show their work on the classroom screen spaces must be retooled to create collaborative and flexible work station environments.

- Standard Classroom Model will have PC-based desktop, document camera, projector display (interactive ultra-short-throw), and enhanced audio system (voice amplification with priority page system adjustment)
- Matte-finish magnetic whiteboards
- Classrooms equipped counter-level access of three (3) duplex outlets for charging six (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)
- Nine (9) (3 locations x 3 drops) cat 6a plenum rated network data drops
- One (1) IP-based speaker/clock combo
- One (1) VoIP basic handset
- One (1) wireless access point—minimum Meraki MR42
- One (1) audio/visual connection plate, including audio adjustment-off-set front of the room and includes; USB, HDMI, mini (3.5) data connections
- Other staff or office set up: PC desktop (optional laptops for administration); VoIP super handset; printers as determined at each site

District Technology Standards—Other Spaces

- Libraries will function more like media centers. As the District moves 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 project stations should be designed that allow for quiet zones that allow for video production.
- All common or courtyard spaces must have wireless connectivity to support after-hours access.

Spaces will be retooled to create collaborative and flexible working environments. The demand for more digitally produced work invokes the need for a mini video production environment so students can demonstrate their work.

HIGH SCHOOL LEARNING SPACES (CLASSROOMS)

Vision and Program Statement

The SRCS community ensures that every student receives an empowering education. High expectations and skillful individualized instruction enable all students to embrace their own learning, think critically, and experience success. Our welcoming school climate ensures that our diverse community of students, families, staff, and community members are treated with dignity and respect, creating opportunities for participation, engagement and support. Every student graduates ready for college and/or a career, able to take responsibility for a future that includes life-long learning.

Trends

Personalized learning continues to be a dominant trend for education, including the differentiation of lessons for students of different skills levels and efforts to help students move at their own paces. Increasingly, students are given more control over their learning through technology and other means to help with how they learn best, what motivates them, and their academic goals.

Increasingly, students work cooperatively and learn collaboratively in cross-age level groups and mixed-age groupings. Critical thinking, decision-making, problem solving, and other important life skills associated with utilizing a wide variety of information resources are integral to the entire educational process.

Curriculum / Anticipated Use

These specifications are for classrooms dedicated to English, Social Science, World Language, English Language Development, and Mathematics. Square footage of specialty areas will vary according to the instructional needs of each are of defined in these specifications.

Curriculum includes:

- Common Core
  - English Language Arts (Reading, Writing, Listening, and Speaking)
  - Mathematics
- Science and Health (science specified separately for middle school)
- History and Social Science
- Visual and Performing Arts
- Physical Education
- Technology and Computer Skills
- English Language Development

Educational Process

The teaching and learning activities for the high school grades are done in many settings.

Students do individualized desk work, whole group learning with the teacher, small, flexible group work, and special projects that relate to real life within the community. Individuals and groups are in tutoring sessions. Demonstrations and breakout sessions are conducted. Workspaces with hands-on materials are utilized. Student work and special projects are amply displayed for numerous purposes. Student access to material areas and display areas is critical to instruction.

Teachers circulate around the classroom space to monitor individual student needs, work with various flexible groups, give small group demonstration lessons, conference with student on a one-0n-one basis as well as instruct the whole group for certain periods of time.

Orientation and Relationship
SRHS classrooms are clustered by department. The new STEAM building detailed in the subsequent section will foster interdisciplinary instruction and support CTE pathways.

Space Requirements
The high school learning space should include the following:

- 960-1,200 square feet
- Adjacent area for small group instruction
- Nano or another adjustable wall between classrooms for interdisciplinary instruction as budget allows
- Connection to outside for outdoor instruction
- Floor to ceiling magnetic whiteboard on teaching wall or whiteboard at student height with storage below
- Resilient adhesive floors that meet California Green Standards
- Blinds for windows

Technology (See Instructional Technology Section and Exhibit B)

Display
- Mobile whiteboard(s) (option)
- Tackable wall surfaces

Cabinetry/Storage
- Backpack storage
- Two (2) to four (4) full height, double door, lockable storage units (could be mobile), one (1) with wardrobe area to hang teacher's coat
- Two (2) or three (3) built-in book cases (could be mobile

Utilities
- Minimum two (2) electrical outlets per each wall
- Charging zone for Chromebooks and other devices (see Instructional Technology standards section)

- Climate control thermostat
- Light switch panel located near main classroom door

Furniture and Equipment

- Standup student desks or other easily configured modular tables and chairs for 36 students
- Basic VoIP handset
- Soft furnishings as appropriate

"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."

~Teacher, SRCS Educational Specifications Survey

"...Large enough to hold up to 35 student 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."

~Teacher, SRCS Educational Specifications Survey

"...Flexibility to allow easy transitions from lecture style to student presentation to student collaboration project based learning. Windows/natural light and aesthetically pleasing environment – some place you would want to be."

~Teacher, SRCS Educational Specifications Survey

TEACHER COLLABORATIVE SPACE

Vision and Program Statement
The vision is to provide teacher collaboration spaces when remodeling and modernization opportunities occur.

Trends
More and more, teachers desire space where they can collaborate with their peers, incubate ideas and exchange best practices outside of regular classroom space. Collaborative spaces in education are taking many forms—from private breakout rooms, to nooks within hallways and under stairs, to nodes comprised in sunken floor areas—and can be used by teachers, staff, students, and community partners.

Anticipated Use
The collaborative teacher areas are private and enclosed settings for one to six people. These areas might be used for staff, parent, or student meetings, for evaluation functions, or as quiet rooms for students.

Orientation and Relationship
Teacher collaborative spaces should be near academic wings.

Space Requirements
Teacher collaborative spaces will range from 200 to 500 square feet and should be enclosed spaces with transparency to the adjoining academic classroom areas. Within these spaces might be movable chairs around a movable table (or tables), soft seating, or fixed countertops. Since these spaces might be used for a variety of meetings, they should integrate hardwired computers, short-throw interactive projects, or LCD screens. These are also settings where teachers and learners could use their laptops, tablets, or handheld devices.

Collaborative space examples: Utah school example and Amazon headquarters, Seattle, Washington, HED Amazon photo credit

ADMINISTRATION (OFFICE) COMPLEX

Vision

The high school office complex is an integral part of the school environment. The office is the initial contact point for students, parents, and community members and serves as the school's information center; therefore, it has an attractive, inviting orientation that serves to welcome all students and visitors to the campus.

The school office contains a lobby and reception area, a public reception counter at which visitors conduct business, the offices of the principal, two assistant principals, athletic director and security officer(s), and offices for staff support personnel, including the principal's and assistant principals' administrative assistants, partnership office for outside entities, a space for attendance clerk, student assistant spaces, and offices for flexible use including future staff growth. This office complex will also include a space for alumni archives, display and storage areas. Built into the office design is a health office (nurse), staff workroom including mailroom, conference room connected to the principal's office and break room.

Trends

School office personnel provided information, assistance, and resources to members of the school community. As the focus on community and school partnership increases, the design of the school requires a welcoming atmosphere, as well as space to facilitate cooperative working relationships. Efficiency is a goal, achieved both as a result of the office's design and layout, as well as by thoughtful placement of technology access points. In addition to computer workstations at each employee's desk, the office allows for data for computers in the reception area to facilitate parent's access to future electronic registration for new students, and access to information on the district and school's web sites. Communication within the school, as well as communication between the school and home, is maximized with computer and video capabilities, including video conferencing. The inclusion of the student health office within the Administration building provides students with access to health services, but also offers health resources support to families. The office space is flexible to allow for multiple uses and various groupings.

Use

The administration and office staff efficiently and professionally conducts the business and administrative operations of the school, serving the needs of all stakeholders. The principal and assistant principals will work with students, parents, staff, and community members to plan, communicate, and monitor goals for students' academic achievement and behavior. The support staff team will greet visitors at the central, public counter and will either assist them directly, or refer them to other staff members, based on the nature of their business. Duties of the clerical staff include: computer work, bookkeeping, preparing bank deposits, filing, answering phones, completing student registrations, operating all copy and

duplicating machines, maintaining student records, supervising both the student and visitors' waiting areas, monitoring students who are ill or injured, maintaining inventory of office supplies, sorting and distributing school mail, preparing reports, and completing other duties as required. The School Health office is located in this the building.

The Health Office includes an office for the health clerk, a treatment area with a sink, counter, locking cupboards, and wiring for a refrigerator, a handicap-accessible restroom, with changing area for disabled students, and a quiet room with space for two health cots. A large observation window with closable blinds will be situated so that the area is easily supervised in the absence of the health clerk.

This space also includes an alumni room for archives, display and storage.

Orientation

The school office should be located near the visitor and staff parking lots to facilitate access. The office support team will have easy visual and physical access to the main entrance, public reception counter, and waiting area. The waiting area at the main entrance of the school will accommodate seating for six to twelve visitors/students. A large trophy or project case will be constructed in the waiting area. A large monitor will be located in the reception area that provides school information and news. The design and flow of the office will allow staff members unimpeded access to administration and support offices, the conference room, the staff workroom and mailroom, the supply room, restrooms, and phones. The staff work and mailrooms should not be visible from the main entrance, nor should staff's mailboxes be accessible to the normal flow of student traffic.

Assistant principals' and security officer's offices should have views of the main campus interior to facilitate the monitoring and security of the campus. Optimally, the principal's office should have a view of the main parking lot. Additionally, the principal's office should be located immediately adjacent to the school secretary's office area and the design and location of the secretary's area should restrict the public's direct access to the principal. A conference room large enough for twelve people should be located next to the principal's office, accessible directly from the principal's office through an interior door.

The offices of the assistant principals should be located close to exterior doors leading to the main campus to facilitate the flow of student traffic into and out of the building. The vice-principals' area should not be directly visible from the main entrance and should be separated from other areas of the office by a wall or by windows and include its own waiting area for up to four to six students. A counter should be included in the design of the workspace to allow the counseling secretary to assist students and parents who must conduct business in the vice principals' area.

All offices and public areas will be equipped with a clock and intercom speaker and Voice over Internet Protocol (VoIP).

In the lobby and reception area, one workstation may be integrated into the counter unit or directly adjacent with the person utilizing this workstation serving as the school's receptionists. For future, a networked computer for public access will be available at one side of the counter.

An attendance window will be located at the end of the office, opposite the front door, in close proximity to the attendance technician's workspace as an option for the future. The interior area beneath the windows will be designed as a counter top on which to prepare attendance documents. Built-in filing cabinets will be constructed beneath the counter. The attendance windows will open out to exterior attendance lines where students will come conduct attendance or registration business.

A self-contained health office, as described in the previous section, is to be located near the entrance to facilitate parents' access when picking up students who are ill.

A counter area/break space for staff that contains cabinets, sink, and counter space for: microwave, refrigerator, coffee pot and other equipment.

Specific Requirements for Designated Areas

Program Area	**Educational Specification Requirement**
School Office	Located at entry point to Campus Located to maximize supervision of student activity areas All areas carpeted
Lobby Area	Project display and or trophy case Seating for six (6-12) people Large screen monitor
Public Counter	Located at public entrance Solid surface counter Project work space or adjacent for two (2) student assistants and staff

	VoIP handset Plentiful outlets Built-in filing cabinets Wiring for public access computer with networking
Administrative Assistant to Principal	Located near Principal VoIP super handset Computer, printer workspace with networking Electrical outlets Desk (stand-up option) with two (2) side chairs Two extra workstations Two (2) file cabinets Computer-printer table
Principal's Office	VoIP super handset Electrical outlets on all walls and data access on two Computer, printer workspace with networking Executive desk (stand up option) and credenza Computer-printer table 4-person conference table Two (2) Bookcases Adjacent to adjoining conference room
Principal's 12-Person Conference	Matte-finish magnetic whiteboard,

Room	interactive short throw projector VoIP handset Video conferencing capabilities Electrical outlets on all walls Space for table and 12 chairs
Two (2) Assistant Principals' Offices	(2) Offices Waiting area for 4-6 students, common to all offices and away from public reception area VoIP handset Video conferencing capabilities Executive desk (stand up option) with credenza Computer table and printer 4-person conference table Two (2) bookcases
Future Dean Office or other Administration Office (1)	VoIP handset Video conferencing capabilities Executive desk (stand up option) with credenza Computer table and printer 4-person conference table Two (2) bookcases
Three (3) Administrative Assistants Space; one is future	Three (3) desks (stand up option) with data connection

	Computer table VoIP handsets Four (4) file cabinets Two (2) bookcases
Security Officer's Office for two (2) staff and possibly one (1) future staff	Two (2) desks (stand up option) and workstations with data connections Space and equipment to view security footage Storage and power for charging walkie talkies One (1) bookcase 2 VoIP handsets
One (1) Athletic Director's Office	Tackable wall surfaces One (1) desk Computer printer table 4-person conference table One (1) bookcase Cabinets for awards and supplies Ample electrical outlets Space and electricity for small refrigerator VoIP handset
Partnership Office for Community Services	One (1) desk Computer printer table 4-person conference table Ample electrical outlets

	VoIP handset
Future Attendance/Registrar Office and Windows	Separate lockable office Accessible to VP's offices Desk (stand up option) 6'-8' workspace Side table for computer-printer Eight (8) file cabinets VoIP handset
Workroom	Shelving Work counters Storage cabinets Minimum (10) electrical outlets Counter w/sink Lockable cabinet Staff mailboxes (175) Dedicated wall for a copy w/duplicating and laminating machines
Health Office or Nurses Area	A treatment area with a sink, counter, locking cupboards Wiring for a refrigerator, ice machine A handicap-accessible restroom, with changing area for disabled students Space for two health cots A large observation window with closable blinds will be situated so that the area is easily supervised in the

	absence of the health clerk. If possible, 10 foot vision screening area Desk for nurse if not separate office Restroom
Storage Room(s)	Ample shelving for large boxes of supplies and other items (podium, graduation gowns) Area for historical record storage (different than alumni archives)
Records Retention Room	Six (6) attendance file cabinets
Alumni Room and Historic Records Room	Room for storage, archives and display
Staff and Public Restrooms	Gender neutral per code when single occupancy
Break Room	A break space for staff Cabinets Sink Counter space for: microwave, refrigerator, coffee pot and other equipment

SPACE PROGRAM: ADMINISTRATION

Administration	Number	Square Feet	Total
Reception, Lobby and Counter	1	500	500
Principal Office	1	200	200
Principal Conference Room for 12	1	300	300
Space for 4-6 students awaiting APs	1	150	150
Assistant Principal Office	2	150	300
Future Dean Office	1	150	150
Athletic Director Office	1	150	150
Security Office	1	150	150
Admin. Assistant to Principal	1	150	150
Admin. Assistant to AP Space including 1 future	3	80	240
Partners' Office	1	150	150
Student Assistants Workspace	2	80	160
Nurses Station/Restroom	1	250	250
Future Attendance/Registrar	1	150	150
Staff Work Room, Mailboxes (175)	1	400	400
Alumni Storage Room	1	150	150
Office Supply Storage	1	150	150
Historic Records Storage	1	200	200
Restrooms	2	125	250
Break Room	1	300	300
Custodian	1	75	75
Total Administration			**4,525**

STUDENT SERVICES CENTER

Vision

The Student Services Center houses a comprehensive guidance and student services program. The offices of the school counselors, school psychologist, therapists, career technician, registrar, data processor/attendance, counseling secretary, community liaison, and AVID coordinator are located in this area. Together, these staff members work with students in the areas of academic guidance, college and career preparation, and personal and social development. The vision is for a large open space central hub surrounded by student services' offices.

The Student Services Center facilitates communication among students and guidance staff members, as well as among parents, students and staff in order to promote student's academic, emotional, and social success.

Trends

The Student Services team provides guidance and support to students and their parents, and serves as a resource for teachers. The Student Services Center includes two conference rooms: a large conference room for 20 and another conference room for 12. Design of the office is flexible to allow for multiple uses and groupings.

Anticipated Use

The Student Services team supports students' academic success, college and career preparation, and social and emotional development in a number of ways. Counselors and support staff help to reduce barriers to learning, assist with the development of an educational plan for each student, and provide school and community based options, interventions, and referrals for students and families when appropriate. Student Services includes clerical and other task duties such as: answering phones, scheduling appointments, computer data and administrative work, preparing reports, maintaining student records, operating copy and other duplicating machines, supervising the waiting area, contacting parents when necessary, maintaining an inventory of office supplies, and completing other duties as assigned.

School counselors meet with students and parents in private offices for purposes of academic or post-secondary planning and guidance, or social and emotional support. The school psychologist maintains a private office. Therapists work from offices near the counselors' offices. All offices and workspaces are equipped with computer workstations that meet District technology standards.

The Career Center provides online and print resources for students researching colleges and careers. It is large enough to accommodate 36 people sitting at chairs and tables, as well as up to 18 individual computer stations. This capacity will allow teachers to bring their entire class to the Career Center for presentations, as well as for post-secondary research and planning. The size of the Career Center will also

allow groups of students to access resources during their lunch hour or before and after school. The career center counselor will maintain an office in the career center.

Orientation and Relationship
The school's Student Services Center is a hub of activity for students and for parents. As such, it should be easily accessible for both. The Student Services building should be located near the front of the school, directly accessible from the visitors' parking lot and direct adjacent to the school office. The Administrative Office and Student Services Center will be combined into one two-story structure with interior hallways. This type of shared office facility would not only provide "one-stop" service for parents, but also would promote increased staff efficiency in serving the needs of students.

The public reception counter should be located near the areas entrance, as should the large conference room. The counselors' offices, therapists' offices, psychologist's office, second conference room, and Career Center should surround a central hub.

The layout of offices within Student Services should allow for easy access. The building should include a restroom, centrally located, a locked file room for student records, and a work area with dedicated space for copy machines. In addition, a waiting area for a minimum of twelve students is to be included in the Student Services Center layout.

Specific Requirements for Designated Areas

Program Area	Educational Specification Requirement
Receptionist/Public Counter	Located at public entrance Reception area for twelve (12) Solid surface counter Project work space VoIP handset Plentiful outlets Area for two (2) student assistant workspaces Work table and chairs Wiring for public access computer with

	networking
Counseling Offices (4)	Open to central work area Desks (stand up option) Two (2) files cabinets One (1) bookcase Space for four to eight (4-8) visitors VoIP handsets Door w/ window covered w/mini-blinds
Counseling Secretary	Located near public counter and counseling offices VoIP super handset Computer, printer workspace with networking Electrical outlets Desk (stand-up option) with two (2) side chairs 6'-8' workspace Two (2) file cabinets Computer-printer table
Therapists (4); one (1) is future	Desk, stand up option Two (2) files cabinets One (1) bookcase Space for four (4) visitors VoIP handsets Door w/ window covered w/mini-

	blinds
Psychologist Office (1)	Desk, stand up option Printer table Two (2) file cabinets One (1) bookcase Four (4) visitors chairs and table VoIP and handset
Data Processing Office	Desk (standup option) Printer table and counter workspace Records file room adjacent One (1) bookcase Four (4) cabinets for attendance VoIP handset
Registrar Office or space	Desk (standup option) Computer-printer table 6'-8' workspace Two (2) file cabinets Electrical and data outlet VoIP handset
AVID Office/Flex Office	Desk, stand up option Two (2) file cabinets One (1) bookcase VoIP and handset

Community Liaison Office	Desk, stand up option Computer printer table 4-person conference table One (1) bookcase Ample electrical outlets VoIP handset
Conference Rooms (2)	1 conference room for 20 1 conference rooms for 12 people Table with seating for 20 persons; table with seating for 12 Counter with sink Matte-finish magnetic whiteboard, interactive short throw projector Electrical outlets on all walls and in back of sink counter Computer outlets Storage Cabinets VoIP Video and teleconference
Career Center	Tables w/seating for minimum of 36 VoIP handset Video conferencing capability Overhead projection screen or Magnetic whiteboard and short throw projector and data wiring Up to eighteen (18) computer stations

	Desk 8-10 file cabinets Ample storage and display space; locking storage
Student Records File Room (2) one confidential, and one students may work within	Adjacent to data processor office One room to accommodate fourteen (14) file cabinets Second room to accommodate twelve (12) file cabinets
Work Room	Shelving Work counters Storage cabinets Minimum (10) electrical outlets Counter w/sink Lockable cabinet for key storage Dedicated wall for a copy w/duplicating and laminating machines
Counter Space for Staff break	Sink, cabinets, and counter space for microwaves, refrigerator, coffee pot, etc.
Restrooms	Located in central location in building

SPACE PROGRAM: STUDENT SERVICES

Student Services	Number	Square Feet	Total
Reception for 10-12, Counter	1	250	250
Central Open Work Area Includes 2 Student Assistants	1	300	300
Counseling Office	4	150	600
Therapist Office	3	150	450
Psychologist Office	1	150	150
Data Processing Office	1	120	120
Registrar Space	1	120	120
Community Liaison Space	1	120	120
Counseling Secretary Space	1	120	120
AVID Office/ Flex	1	120	150
Career Center / Study Area	1	960	960
Large Conference Room for 20	1	600	600
Conference Room for 10-12	1	300	300
Students Records Room	1	150	150
Counter for micro, coffee, sink	1	120	120
Work Room, Storage for Supplies	1	150	150
Restrooms – 2 all gender	2	75	150
Study Area	1	150	150
File Area	1	200	200
Electrical Room	1	75	75
Machine Room	1	75	75
Total			**5,310**

STUDENT COMMONS (CAFETERIA)

Vision
The vision is to move from a cafeteria space limited in its offerings and appeal to a student commons ("Commons") space that provides *all* students with a place to dine, hang out, study, relax, socialize, conduct student government and business, and collaborate with each other and with teachers and staff.

Trends
Traditional dining halls with serving lines and large foldup tables are being replaced by more open, interactive environments that have a variety of seating possibilities including table and chair groupings for 4-6 students to dine together, soft furnishings to relax and socialize, and counter height tables and chairs to study and use technology. Students are using Commons as places to relax, socialize, be entertained, work in small groups or alone, and to escape the rigor of their academic lives.

High school Commons with cafeterias are replicating those found on college campuses today, where institutional dining is disappearing and being replaced by café styled spaces where food is made to order and "grab-and-go", and there is ample daylighting, and connection to outdoor eating. Commons are inviting contemporary spaces adorned with student art and providing display areas for campus-wide events and clubs.

Changes in nutrition requirements, as well as students' involvement in making decisions regarding healthy food choices, have an impact on the design and operation of the food services function of the Commons. In order to promote nutritional choices in support of a healthy lifestyle, students should have access to a variety of fresh food choices that meet their nutritional requirements.

Student Voice
The first student voice session was held at SRHS on June 6, 2017. The student leaders indicated the Commons should be for every student and a place to encourage interaction. The students indicated that a student commons should have an area with nice, comfortable chairs (like the one area in the library) and an outside covered patio or balcony for dining. They provided input that the architecture should be appealing and interesting, and suggested the following: charging stations; space for posters for clubs, activities and a community board; large screen monitors; student artwork area; small group areas with white boards, and tables and chairs; space to talk and to study; and, an adjacent gardening area with chickens. They suggested native plants for the landscape area and a "pet relief" program where puppies could be brought into the school during finals.

On October 6, 2017, the ASB class provided the following input on the Commons:

- Include a quad space for students to do their homework

- Would spend time in the Commons if their friends were hanging out there
- Should have high ceilings
- Provide areas for comfortable and nice lounge seating
- Provide large tables for large groups to interact
- Provide a variety of table sizes
- Current cafeteria is loud, too small and crowded. Need to address acoustical issues
- Suggest that floor be large marble circle in the center of the space for dining and carpet around the perimeter for lounge area
- Provide computer workstations and printers
- Provide electrical outlets throughout so students can charge their phones
- Provide a bulletin board for announcements
- Add vending machines
- Provide Wi-Fi
- Suggest rooms for club meetings (28 clubs on campus)
- Provide a dashboard to monitor the amount of solar power being captured and building power use
- Provide a display board

For the exterior of the Commons:

- Provide tables for seating
- Want to see trees in the quad
- Include shaded areas with seating underneath
- Provide shade structure for rain protection so students can be outside on rainy days
- Provide a space for outside rallies
- Benches grouped together so larger groups can interact
- Currently there are not enough benches
- Seniors hang out on the senior steps in front of the main building; this area should remain in use for seniors
- Lined up benches do not allow for large groups to sit together; suggest benches be across from each other
- Like the solar panels and solar parking shade structures
- Recommend the AD building remain as is

Anticipated Use

The Commons and its adjoining areas are used to accommodate a variety of uses, including students' and staff's food preparation and service, dining and Commons seating, assembly and meeting seating, and student government and activities planning. This facility is most heavily used by and for students: for breakfast and lunch service, for student activities, and for large meetings, and even performances. The Commons complex houses the multipurpose area, kitchen, food service areas including receiving, and Associated Student Body (ASB) store.

In addition to site use, community groups outside of school hours may use the Commons often. To maximize student seating for lunches and meetings, and parent and community seating for evening and weekend events, the central Commons room should be approximately 4,500 square feet, and should seat a minimum of 300 students for meals. A covered area designated for outdoor seating, with food service available from portable carts as staffing allows, should augment indoor seating.

The food service program, housed within the Commons complex, serves the nutritional needs of both staff and students. A central kitchen area serves as the hub for food preparation and service. The central kitchen is separately specified by CINI Little International.

Orientation

Due to the large number of activities that take place in the Commons and adjoining areas, this facility is located as an integral part of the rest of the school. The main student entrances to the building open out on to a central quad leading to classrooms, allowing students easy access to and from the Commons structure.

Since this facility is used for a variety of events and activities after hours and on weekends, it is located near parking for school and community use and is located near other major buildings that require access to parking: the school office and student services center. The safety of users should be of paramount concern in planning circulation patterns to and from parking areas.

Student restrooms and water refilling stations are located within proximity to the main building. Restrooms are large enough to accommodate the number of students who use them during the busy lunch times. Single occupancy restrooms are gender neutral per building code. For purposes of student safety and security, the entrances and exits to the restrooms open to the outside and are clearly visible from the Commons. These student restrooms also serve as public and community restrooms during evening events and during community meetings.

The custodial office may be accessed from an exterior entrance. The office is wired for both telephone and networked computer access to enhance communication with teachers and site and district administration. The custodial storage area is directly accessible from the delivery and receiving area.

The student food services "speed" lines are accessible from both the front and back of the main kitchen to allow for easy staff access to restock food as needed during meal times. Consideration should be given to incorporating a salad bar station into one area of the speed line to promote student access to fresh fruits and vegetables.

As an alternative to speed lines, the District may consider a food court and "grab and go" options for students and staff.

All food service points of sale throughout the complex have wireless access with redundancy through data outlets to allow for the computerized sale of lunches.

Display signs for menu items are to be installed inside the snack bar in full view of patrons.

The student store is located in proximity to the Common's quad to maximize students' access.

Specific Requirements for Designated Areas

Since the Commons will be used frequently for meetings, presentations, and performances, it should have a built-in sound system and a large automatic video screen installed at one end of the room. Large monitors for school news and events are strategically placed throughout the Commons. In addition, its construction should allow for the display of school banners, posters, and student artwork through the inclusion of mountable wall strips placed around the room or tackable surfaces.

The Commons should be an open, interactive environments that has a variety of seating possibilities including tables and chair groupings for 4-6 students to dine together, soft furnishings to relax and socialize, and counter height tables and chairs to study and use technology.

The delivery and receiving area should also be designed in proximity to the custodial office and storage room. This area should be easily accessible from the main public street or from an internal roadway on the campus. Access should be designed not to impede the traffic flow on campus or block parking. In addition, this receiving area should be located to the side or back so that it is not visible from the main school entrance and does not impede traffic flow in and out of the main parking lot.

The ASB student store is located near the central student entrance to the Commons, and its design will allow students to move quickly from a single entrance through a single service line to select and pay for items. Built-in Formica-topped glass front counters will allow both display and storage of merchandise. The area behind these counters will be wide enough to allow a minimum of three student workers (as the program grows) to move freely to assist students with selection and purchase immediately. A sink and counter-top unit of approximately 12 feet will be built-in on the wall immediately behind the work area. Above this counter will be built-in shelves for additional product display. Networked computer jacks will be provided to allow for two computerized cash registers on the main counter, as well as a workstation for the Student Store manager in the adjacent office. Both rooms of the Student Store will have wiring for telephones and a clock/intercom unit.

A separate, locking manager's office will be located adjacent to the sales area. This office will be large enough to accommodate a desk and computer. In addition, the room will be constructed with a minimum of four full height locking storage cabinets for secure storage merchandise. A large glass window will separate the office space from the sales area for purpose of supervision.

Adequate storage should be designed into the Commons to allow for the storage of chairs and tables within close proximity to the central space.

Program Area	Educational Specification Requirement
Commons	To be used for cafeteria-style, large group activity, and small group activities (4-6 person seating) 4,500 square feet (approximately) to accommodate sit- down dining for 300 Acoustical insulation Sound system Mountable wall strips for student displays Portable staging Storage for folding chairs and tables; portable staging Technology charging Stations Large screen monitors (2-4) Portable whiteboards Automatic projection screen VoIP clocks/intercom (2-4) Variety of soft furnishings; tables and chairs; and counter areas with technology access Wiring for exterior doors equipped with back stops or automatic closing
Outdoor Eating Area	Adjoins Commons Covered Large enough to accommodate table

	seating for 75 students Equipped with wiring support installation of beverage vending machines Includes designated space and wiring for food service carts Located to provide line of sight supervision from inside Commons
Student Store	Outside covered access (if possible) Counter space w/display cases Service line flowing through space "In" and "Out" doors Counter w/sink and multiple outlets behind service counter Built-in shelves above back counter Refrigerator (2) Computers/cash registers VoIP handset Electrical outlets (numerous) Space and utilities for self service items Clock/Intercom Separate lockable storage area Shelving for material and supplies (4) Full height locking storage Desk VoIP handset

	Networked computer Filing cabinet Glass window between store
Food Prep Area Central Kitchen	Under separate specification
Custodial Storage	
Custodial Workroom	
Storage	Storage for chairs and tables

SPACE PROGRAM: COMMONS

Commons	Number	Square Feet	Total
Commons	1	4,600	4,600
ASB Student Store/Storage/Office	1	600	600
Electrical	1	75	75
Restrooms – 2	2	125	250
Restroom All Gender	1	75	75
Landing Study Area	1	450	450
Commons Storage	1	450	450
Total			6,500

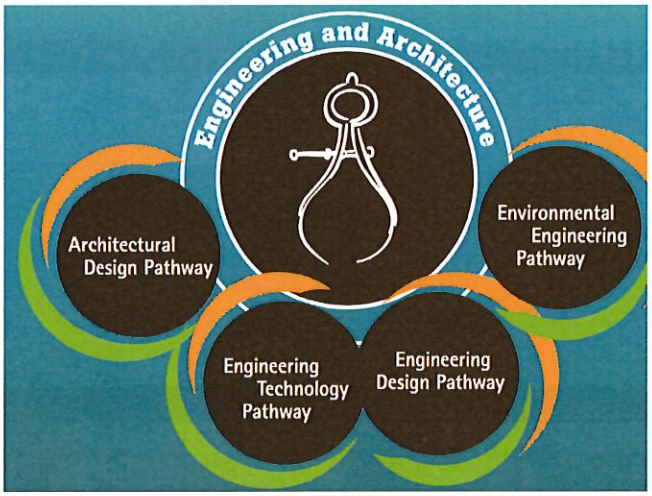
SCIENCE TECHNOLOGY ENGINEERING ART MATH (STEAM)

Vision

The new STEAM building vision is for a student-centered space that enhances CTE offerings and builds STEAM interdisciplinary and project based learning possibilities.

The educational direction is to support the existing Engineering pathway and create flexibility for new college and career paths for SRHS students while linking such sectors to the common core and next generation science standards.

Trends



Engineering and Architecture
"This sector is designed to provide a foundation in engineering and architecture sector pathways and occupations for students in California. Students are engaged in an instructional program that integrates academic and technical preparation and focuses on career awareness, career exploration, and career preparation in pathways that emphasize real-world, occupationally relevant experiences of significant scope and depth."

~California Department of Education (CDE), CTE Model Curriculum

High schools across the state are implementing stand-alone career academies that are based on the California CTE curriculum standards, particularly with the advent of CTE Facilities Program. This program was instituted to enhance CTE educational opportunities to provide students with the skills and knowledge necessary for high-demand technical careers.

Anticipated Use

The space will house two science labs and science teacher prep areas, general purpose classrooms, engineering and fabrication lab, ceramics and photo classrooms and a darkroom.

Educational Process

Curriculum in this area is evolving from teacher-direct instruction of discrete skills to student-centered learning.

Teachers who individualize instruction will use a number of strategies to promote students' mastery of concepts. In addition to providing individual instruction to students, pair students who are working on similar projects, and provide tutorials

for students who need additional instruction. Instruction is delivered in the classroom and lab settings.

Orientation
The STEAM building will be a central campus focus and adjacent to existing science and academic classrooms to provide possibilities for interdisciplinary teaching within the new building and within the entire school.

Curriculum
For the CTE curriculum, each pathway is a sequence of CTE courses that integrate academic and career skills that prepare student for career entry. A program sequence in CTE has three parts: (1) an introductory or foundations course, (2) one or more concentration courses, and (3) a capstone course. Many capstone courses meet the A-G requirements for preparation to enter the University of California or the California State University System.

SRHS will build on the successful engineering academy and will build in the possibility of other academy program supported by the new STEAM building.

Science labs will provide for Next Generation Science Standards and together with the adjacency of flexible classrooms be available for a variety of curriculum, programs, and interdisciplinary instruction.

The Visual and Performing Arts Content Standards for California Public Schools (2001) outlines subject area standards that provide a foundation for instruction, including ceramics and fine art photography. SRHS will review art curriculum integration for STEAM interdisciplinary program delivery.

Academic rigor is a basic characteristic of a comprehensive education in the arts, including the following:

- Learning through active practice, rehearsal, and creation or performance of works in the arts
- Reading about the arts and artists
- Researching, writing, and communicating about the arts
- Reflecting on the arts in thoughtful essay or journal writing on one's observations, feelings, and ideas about the arts
- Participating in arts criticism on the basis of observation, knowledge, and criteria

The major elements of the new National Core Arts Standards include: Philosophical Foundations/Lifelong Goals, Artistic Processes, Anchor Standards, and Performance Standards with the overarching function being nurturing the ultimate goal of artistic literacy.

Fabrication Lab and Engineering Academy Classroom

The fabrication lab is to support the Engineering Academy and also have planned flexibility for other hands-on learning, STEAM and potential future uses. This flexibility includes electrical drops on tracts from the ceiling, concrete flooring, roll up exterior door, and interior and exterior storage areas. Also programmed are properly ventilated and conditioned rooms for metal fabrication, wood fabrication, plastic fabrication, and 3D and laser printers. Laptops will also be used in the lab so ample wireless connectivity is important.

Science Classroom Area Layout

The science classrooms will accommodate individual and group work, lab investigation, and must ensure student safety. Therefore, these classrooms will be larger than the average classroom, with layouts that are flexible, safe, and provide good line-of-site while allowing student movement. There should be plenty of natural light and fresh air. The science classrooms should be a minimum of 1,300 square feet including storage and teacher preparation areas *(CA Title 5).* It will include 8 lab stations on the perimeter for four students each station.

Each science classroom will have eight lab stations against the perimeter wall with a sink. Mobile furniture will create the lab station for students. Each station should also have electrical outlets data outlets for laptops.

Each science classroom will have a learning wall with tall cabinets at each side of bookshelves and whiteboards in the center with matte finish for short throw projectors. One wall will have all tackable surfaces, base cabinets, sinks, counter space that is chemically resistant, and overhead cabinets. Other walls should have tackable surface and one electrical charging station for devices.

The teacher demonstration area should have space for a demo table with a sink and gas, and ample electrical outlets, and allow for the flexibility of setting up the mobile teacher desk on either side. The demo table should include lockable storage and have a chemically resistant counter.

Student storage will be needed for large projects, display boards, and equipment. There should be one fume hood for the two science labs, a hot water baths

Science Classroom Preparation and Equipment Storage Area

In order to provide students with a program that meets State Standards, it is necessary to provide the science department with a large amount of supplies and equipment. There should be one prep room for every two science rooms. There should be space for staff desks, filing cabinets, phones, computers, duplicating equipment and supplies. It will have a counter with sink, area for a refrigerator, chemical storage cabinet, full height cabinets, and electrical outlets for biotechnical equipment.

Safety of student work areas, teacher prep areas, and storage areas should meet State safety codes. Equipment, such as eyewash stations, should be easily accessible.

All counters should be covered with a heat and acid-resistant covering. Flooring should be non-slip vinyl or a similar product.

The prep rooms should be accessible from the science classrooms with storage for a variety of equipment both large and small.

Ceramics Room

The ceramics room of approximately 1,800 square feet will be located with access an indoor kiln room. Construction should allow for one (1) cone six electric and two (2) cone 10 gas-powered kilns. The ceramics classroom will have a concrete floor with floor drain and clay trap. Natural daylighting of the room is important.

There will be student display areas within the classroom and it will have adequate space for both students' worktables and 20 electric pottery wheels/workstations. There are five computer and printer stations within the room.

In addition, the ceramics room will be equipped with 1,000 lineal feet of deep shelving for approximately 5 feet per student (192 students: 6 sections of 32 students) for storage of art work in progress.

Separate glaze-making and glaze-using area, as well as a humidity controlled wet clay area, are needed. The glaze area shall allow for display of glazes for students to easily see and access. Metal bins for dry mixing glazes with counter space for five gallon buckets is needed. The glazing area shall be ventilated.

One 10-foot clay-wedging table is specified with storage underneath. A clay recycling area is provided. A gas line to the classroom will support a compressor and airbrush. The airbrush station is adjacent to the glazing area and includes appropriate ventilation and counter workspace.

The room will include hot water, trough style sinks with four (4) faucet areas, counters with traps and a large dish and other equipment drying area.

A rollup door is specified for clay and other deliveries. A clay recycling area is provided.

The classroom will include instructional technology per the District standard and roadmap.

Photography Classroom

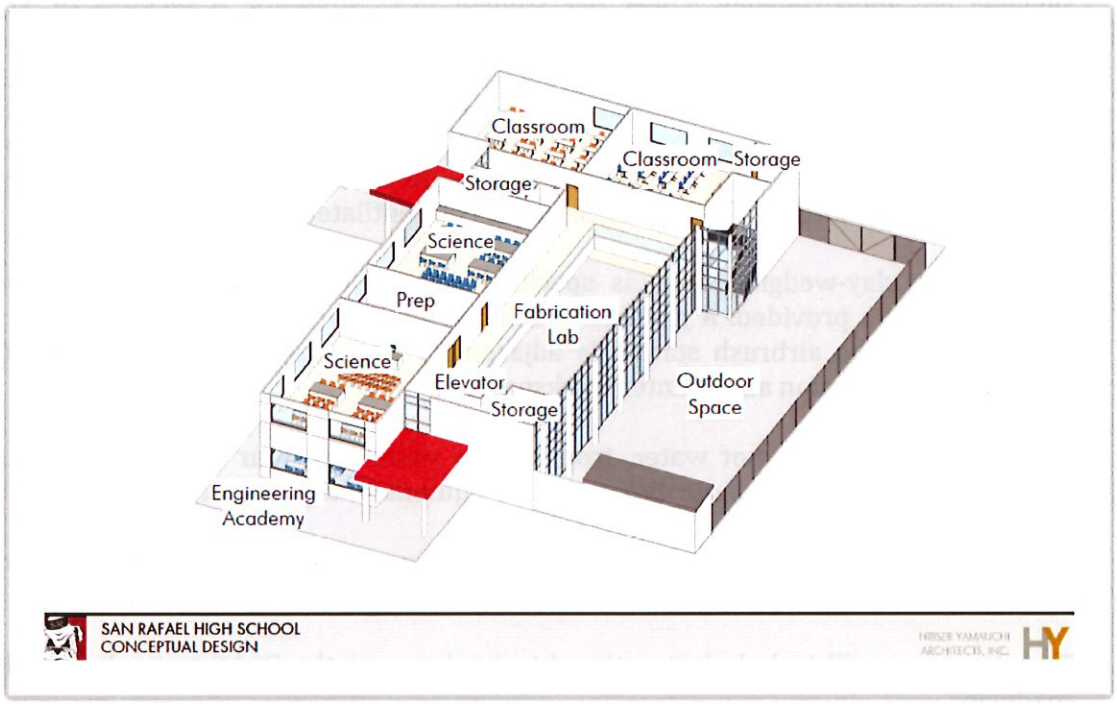
The photography classroom will be minimum of 960 square feet and have tables and chairs for up to 36 students. The room will include hot water, trough style stainless steel sinks with four faucet areas capable of holding 11 by 14 inch trays in the sink. Lockable cage type chemical storage is required together with storage for processing canisters and charging bags to load film. Lockable cabinets for camera storage and a variety of cabinet sizes are needed for photography equipment

including backdrops, lights, and tripods. A light table is required. Deep counter space for paper cutters and dry mounting equipment are needed. Flat file drawers for matte paper and film are specified together with bookshelves. Area is needed for drying film.

There shall be space for recycling chemicals and accessing 55 gallon barrels. Daylighting is also important in this room.

Dark Room

The 500 square foot darkroom will have black walls and ceiling, ample counter space, running water, and a dark lighting system. Entry into the darkroom will occur through a "light-tight", air lock double door. A completely black film loading room is needed. The ventilation system will be designed to avoid a concentration of chemical odors. Counter space for 10-12 enlargers with storage space below is provided. In addition counter space for paper, paper cutters and dark room tools is required.



Conceptual Design for STEAM Building, HY Architects

Specific Requirements for Designated Areas

Program Area	Educational Specification Requirements
Fabrication Lab	Instruction technology per standard VoIP handsets Electrical drops from ceiling on tracks Concrete floor Roll-up door Separate and appropriately ventilated and conditioned rooms for metal, wood and plastic fabrication Separate and appropriately conditioned rooms for 3-D printing and laser printing Storage areas for materials, tools (tool crib) and student work Connection to outdoor space and additional fenced storage areas
Science Labs (2)	8 lab stations for 34-36 students Open areas in the enter of classroom for mobile student furniture Student lab stations equipped with: Sink Chemical resistant counter tops Electrical outlets All safety equipment required by code including eye wash and deluge shower Moveable work stations Student display areas Teaching wall

Science Prep Area	Counters with sink Refrigerator space Chemical storage cabinet Full height cabinets Storage cabinet for flammable and acid chemicals Electrical and data outlets above all counter space VoIP handset
Classrooms (4) including Engineering	Instructional Technology per standard See General Classroom Section for requirements
Ceramics	Instructional Technology per standard In studio kiln are for one (1) electric and two (2) gas kilns. Outdoor or other space for two future kilns for growth 1,000 lineal fit of shelving for work in progress Gas for compressor Concrete floor with counter sunk drains Area and electrical for 20 pottery wheel workstations Separate glaze-making booth and glaze using area (could be separated by half wall or other room dividing structure) Clay wedging area with one (1) 10 foot wedging table with storage underneath A "hot box" – heated drying cabinet with shelving

	HEPA filter Built-in dry shelving Separate work in progress cabinet space for up to 30 advanced art students Clay damp room area with humidity controls and storage for supplies Hot water sinks trough style with four (4) faucets and clay traps Electrical outlets on all walls for heat dryers and counter space Counter with dish drying area Lockable teacher storage
Photography Room	Tables and chairs for 36 students Four (4) stainless steel tough sinks Lockable chemical storage Photography equipment and supply storage Light table and deep counter space for paper cutters and mounting equipment Flat file drawers Bookshelves Area for drying film
Dark Room	Black walls and ceilings Ample counter space for 10-12 enlargers with storage underneath Counter space for paper, paper cutters and dark room tools

	Running water and stainless steel free standing sink (existing) Dark lighting system Print drying rack Entry into the darkroom will occur through a "light-tight", air lock double door The ventilation system will be designed to avoid a concentration of chemical odors Completely black loading room

SPACE PROGRAM: STEAM BUILDING

STEAM Building	Number	Square Feet	Total
Central Fabrication Lab	1	1,870	1,870
Materials Storage	1	100	100
Science Labs	2	1,260	2,520
Science Prep	1	360	360
Ceramics	1	1,800	1,800
Kiln Area	1	100	100
Ceramics Storage	1	300	300
Photography	1	1,000	1,000
Dark Room	1	500	500
Classrooms	5	960	4,800
Classroom Storage	1	450	450
Toilets	2	120	240
Total			14,040

PHYSICAL EDUCATION (Modernization)

Vision
Physical Education for the twenty-first century moves beyond the traditional competitive "games and sports" approach. The principal focus of the physical education curriculum is that all students— regardless of ethnicity, gender, native language, race, religion or ability – be given opportunities to succeed in physical education and develop a lifelong commitment to physical activity for both health and pleasure. Additionally, the physical education curriculum emphasizes a variety of cognitive, affective, and psychomotor teaching and learning strategies.

Trends
In addition to traditional physical education equipment, textbooks, workbooks, and more conventional printed materials, resources in physical education include large screen projections of televised or videotaped images. Physical education teachers are encouraged to incorporate a variety of instructional media and appropriate instructional technology into their teaching. As instruction moves from team centered sports and competition to individual fitness, educational equipment must reflect this changing focus. For example, heart monitors can provide students with feedback on their heart rates while they perform cardiovascular exercise. Journals can be utilized to develop goals setting for both short-term goals in a specific class and long-term goals for lifetime fitness.

Anticipated Use
San Rafael High School's stadium is the first phase of modernization to the campus from Measure B. In subsequent phases of the program, addressing deficiencies in the physical education complex is desired, including: the locker room expansion to meet increased enrollments and physical education requirements; addition of a multi-purpose fitness room; added storage; and, improvements to the visitor's team room.

Specific Requirements for Designated Areas

Program Area	Educational Specification Requirements
Locker Rooms	An additional 175 lockers for each boys and girls and remodel existing locker rooms for better functionality Arrange such that lockers can be assigned per 7 periods and not have students accessing same row Remodel of PE offices

	Instruction technology per standard VoIP handsets
Multipurpose Room	60 by 60 square feet Roll-up door to the outside at least 8 by 10 foot wide for mat and weight equipment movement Full wrestling mat space Amplified sound system Electrical and data outlets 12-15 foot ceilings Sports flooring 8 by 10 entry into gym for mat and equipment movement HVAC
Visitors Team Room	Benches Sport cubbies
Storage	400 square feet of storage

SPACE PROGRAM: PHYSICAL EDUCATION

PHYSICAL EDUCATION	Number	Square Feet	Total
Locker Room Addition	1	500	500
Multipurpose Room Addition	1	2,400	2,400
Storage	1	400	400
Total			3,200

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
    - o any field activities;
    - o any vehicular traffic on campus;
    - o the visual ingress and egress of students, staff or visitors accessing the school site;
    - o 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 encircles 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

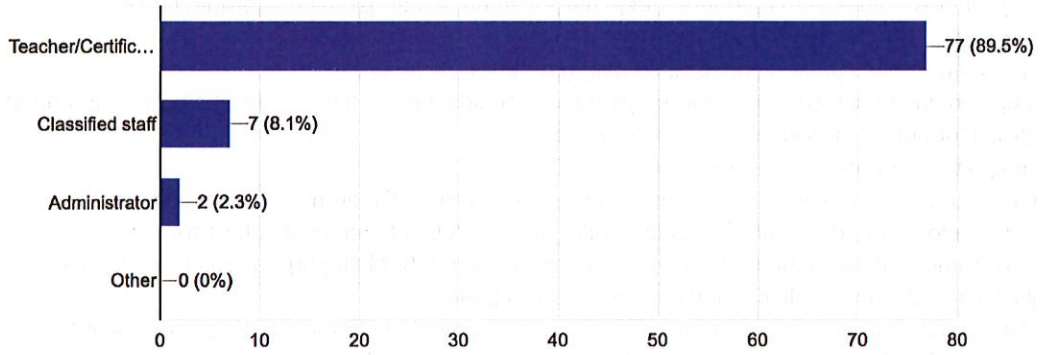
- Buses do not pass through staff parking areas to enter or exit school site unless a barrier is provided that prevents vehicles from backing directly into the bus loading area.
- Parent drop off area is adjacent to school entrance and separate from bus area and staff parking.
- Vehicle traffic pattern 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



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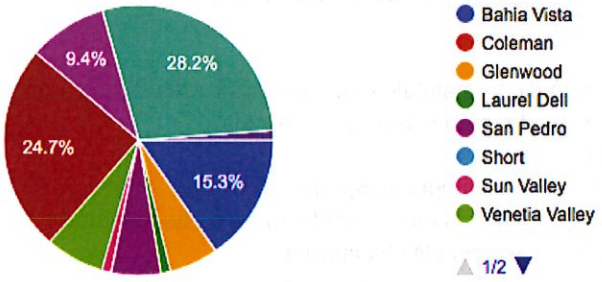
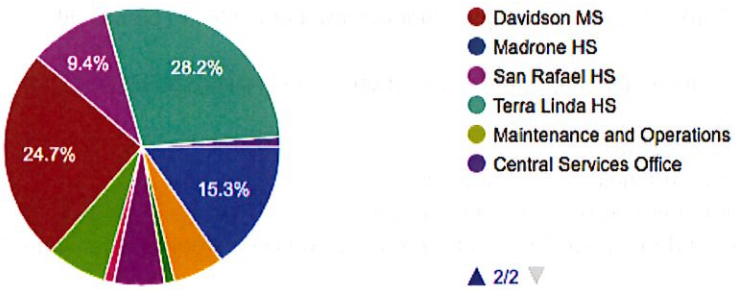




3. What 2-5 features of the physical learning environment ARE MOST IMPORTANT to student learning?

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, assess 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

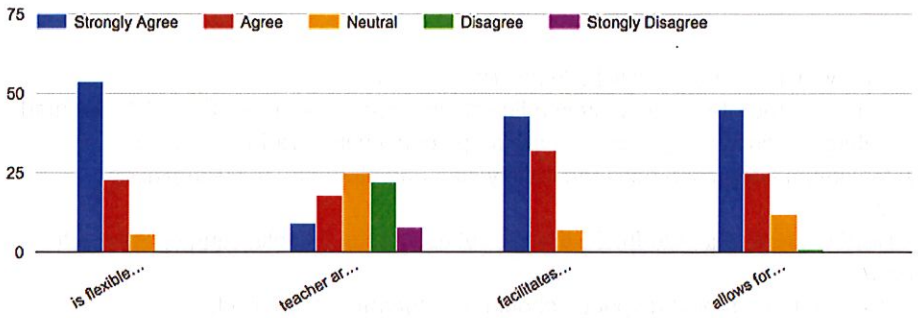
6. What 2-5 features of the physical learning environment IMPROVE STAFF'S overall senses of physical comfort?

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

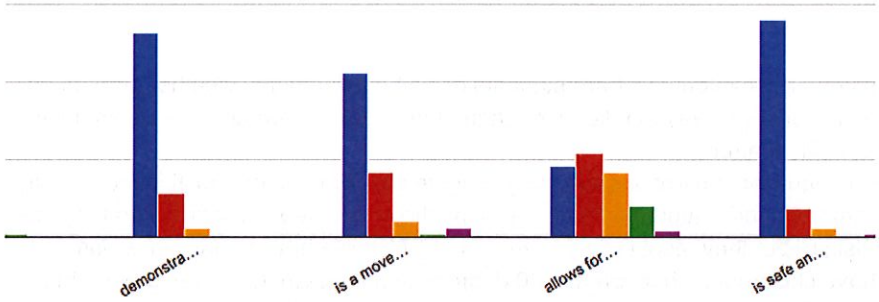
cooling and heat that work. no overcrowding of desks
Modern classrooms Modern Bathrooms
Dependable access to technology; teaching space for all; clean non-descript space that can be used by any teacher
AC and equal pay
Smartboard or large interactive projector, quick staff room, copy room and bathroom 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

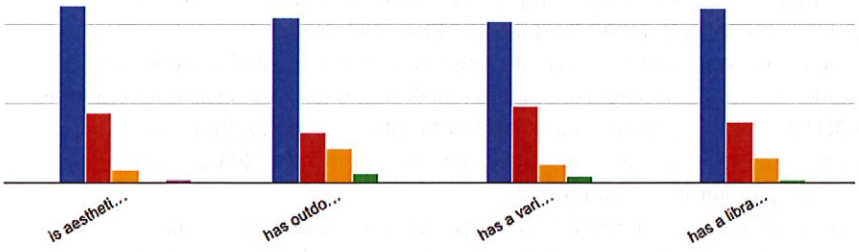
7. What type of school facilities should SRCS consider as it plans and implements the bond program initiatives? A facility that:



-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!

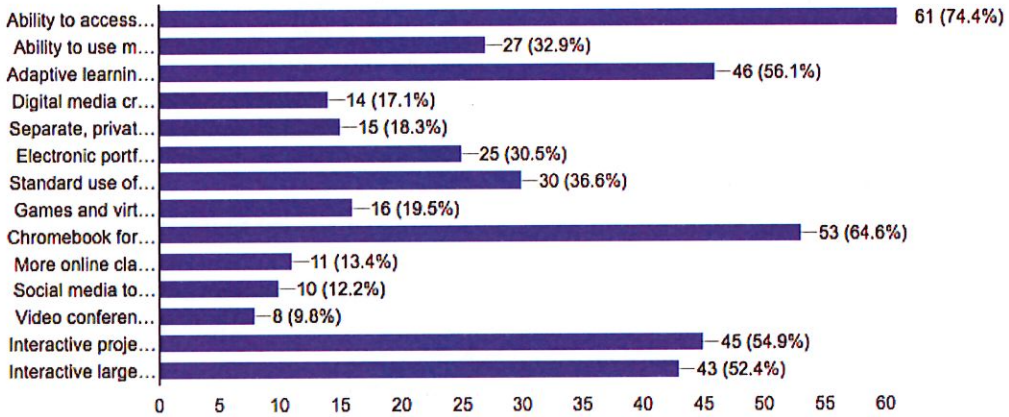
Beautiful school; awful design!

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-wied--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: Reiminge 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**
• 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	• 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	• 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	• 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/)