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EDUCATIONAL SPECIFICATIONS

HIGH SCHOOLS

FINAL: February 14, 2023

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February 2023

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INTRODUCTION

The High School Educational Specification is a design guideline for the educational and programmatic needs to support Mt. Diablo Unified School District's (MDUSD) goals for teaching and learning.

Every time a new project is planned, whether it is a renovation or a new building, these design guidelines will be used by the team of architects, engineers and MDUSD stakeholders collaborating on the project planning to both inspire creative design solutions and provide standards to seek parity district-wide. The Educational Specifications will expedite the planning and design process and guide project budgets. Every time a project is planned and built, the Educational Specifications will be tested, therefore, they are a living document that will evolve as pedagogy evolves.

School and classroom design should facilitate 21st century learning that prepares students for college, careers, and community. Student-centered learning focused on projects, experiential learning, and student use of technology should be well supported in the design of Mt. Diablo Unified School District's schools.

In 2018, the voters in the Mt. Diablo Unified School District approved Measure J, a $150 million bond measure called the "School Safety and Classroom Improvement Measure" which will be used to improve student safety and security measures; replace outdated electrical, mechanical, and plumbing systems; and upgrade career tech and science, engineering, and technology classrooms and labs. These funds, together with other capital funds, will provide capital improvements to the schools and other District facilities and includes funding directed at creating safe, innovative learning environments and instructional technology. The Educational Specification will guide these and future investments.

Not all recommendations within the Educational Specification will be realized due to budget, uniqueness of specific site designs, and other constraints. The Educational Specification is intended to serve as a guideline for district programmatic needs and to allow the design professional's flexibility in addressing each site's unique requirements while providing broad standards for parity.

Additionally, square footages and other quantitative measures referenced within this document are a reflection of California Department of Education standards, acknowledging that the median amount of square footage per student being built nationally and regionally over time has increased, and that

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existing facilities may meet prior, but not current requirements. The Title 5 standards by which projects are evaluated by CDE allow variation in program delivery in response to the varies educational needs of Districts throughout the state. For example, a school that serves a student population with extensive needs for intervention and remediation services will have different facility needs than a school without such demands.

School design is in response to the educational program provided by a District and the aim of this Educational Specification is to provide guidelines for the design of schools utilizing the CDE guidelines while acknowledging that existing facilities may meet prior, not current guidelines. In so much as possible, when new facilities are constructed or modernization funds allow, modifications and increases of square footage to provide campus parity, meet CDE guidelines and also align with the campus program needs are recommended.

Additional information may be found on CDE's website:
https://www.cde.ca.gov/

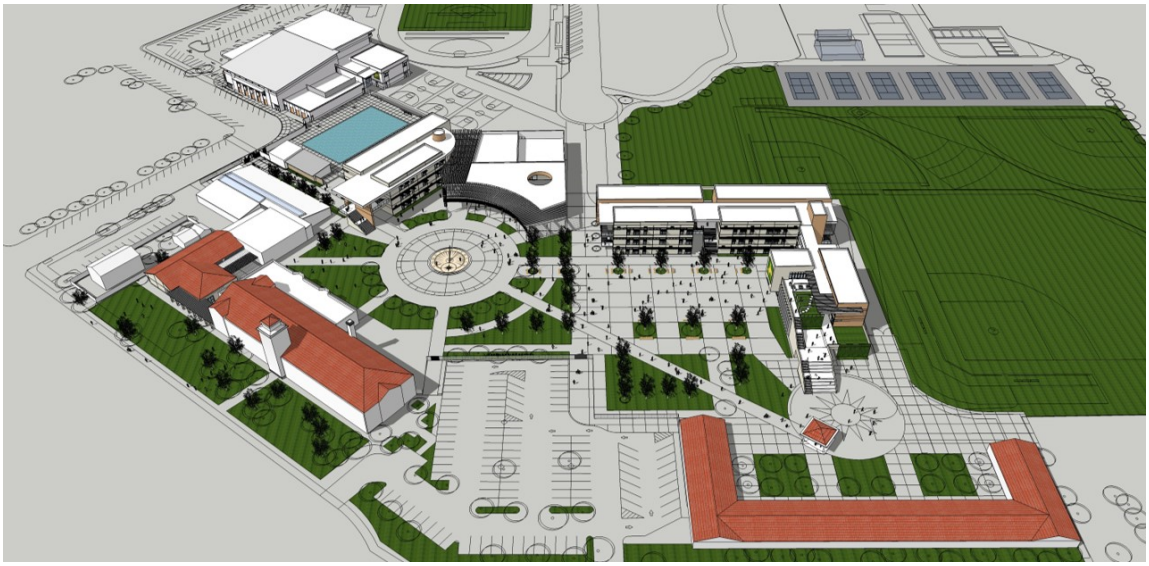

Image 1: Campus Planning Concept

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EDUCATIONAL SPECIFICATION HIGHLIGHTS

The Educational Specification encompasses a broad range of spaces to support learner-centered education in MDUSD. While all areas are important to the delivery of educational services, the following areas are highlighted.

Parity

A major component of the educational specification process and work is to consider parity throughout each campus grade configuration. The 2018 Facility visioning process aimed to provide parity with other district projects and should be validated in future planning. This means that if a specific program space was provided at one campus, it should be provided at all campuses when possible. Parity also includes flexibility for school sizes. For instance, all schools require a multipurpose room, but the size of that room depends on the number of students served, therefore a square foot per student or range of area is recommended in the specification. Parity does not mean that schools will look alike or have exactly the same space, but that each school should be able to serve like functions.

Instructional Technology

In 2021, MDUSD developed the 2021-2031 Strategic Technology Plan as a long-range roadmap for instructional technology. The plan envisions flexible and technology-rich learning environments that reflect the technological world outside the classroom. Instructional Technology outlines a vision for learning and teaching that provides students with meaningful opportunities to engage with real-world technology to support standards mastery and become college and career ready.

This Educational Specification includes a chapter on Instructional Technology that quantifies the number of data drops and wireless access points for each classroom, provides charging station areas, and lays the groundwork for reliable campus-wide Wi-Fi connectivity. Technology is ever changing and will require frequent review, planning, and amendments to the Educational Specification over time.

Sustainability

In 2004, MDUSD's Board approved a mandate that projects adhere to the Collaborative for High Performance Schools (CHPS) design standards under the CHPS Designed™ recognition program to the maximum extent possible based on the unique scope of each site. CHPS standards are designed to 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. CHPS

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standards help make schools energy, water and material efficient, well lit, thermally comfortable, acoustically sound, safe, healthy, and easy to operate.

Community Room

The Educational Specification recommends at least one space allowing for Community Use on each campus. Community spaces foster strong partnerships between teachers, staff, families, administrators, students, and community partners through open dialogue, inclusive spaces, ongoing learning, and shared responsibilities that drive and unify the school community. Family and community engagement is key to a healthy and thriving 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 multipurpose room, library, and specialty spaces — but is centered in the classroom with the classroom teacher. When Learning Spaces are designed or redesigned, an emphasis on flexibility in configuration, teaching and learning with technology, and adaptability will promote student-centered instruction.

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ACKNOWLEDGMENTS

Executive Committee
Dr. Lisa Gonzales, Chief Business Officer
Jennifer Sachs, Chief of Educational Services
Melanie Koslow, Director of Maintenance & Operations
Robert Sidford, Director of Technology and Innovation

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MDUSD MISSION, VISION, PRINCIPLES, AND GOALS

Mt. Diablo Unified School District makes facility and educational specification decisions based on critical state and local guidance documents.

Mission

We graduate students prepared for college, career, and civic responsibility.

Vision

We will raise all of our students' ability to read, write, and think critically through engaging, rigorous, standards-based instruction.

We will improve all of our students' physical health, emotional well-being, and sense of responsibility to self and the community.

We will instill determination in all of our students to persevere in reaching their goals.

Goals from the Local Control Accountability Plan

- Goal 1: All students will receive a high quality education in a safe and welcoming environment with equitable high expectations, access to technology, and instruction in the California State Standards that prepare them for college and career.

- Goal 2: High quality, culturally proficient, and responsive staff will provide engaging instruction respectful of all students' backgrounds to ensure they are college and career ready.

- Goal 3: Parents, family and community will be informed, engaged and empowered as partners with Mt. Diablo Unified to support student learning and academic achievement

- Goal 4: Focus scholars, specifically Black/African American students, Foster Youth, and students experiencing homelessness will experience culturally responsive practices and instruction, high expectations, equal access to educational opportunities, within an educational environment that builds trust and inclusive partnerships between the students, families and staff.

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K-12 MDUSD Graduate Profile

The MDUSD Graduate is a(n):

Effective Communicator: Is proficient in writing, speaking and listening adapted to audience, task, purpose and discipline.

Community Contributor: Uses acquired cultural awareness and sensitivity to work in teams to share ideas and responsibilities, solve problems, and achieve shared goals.

Complex Thinker: Thinks critically and creatively by identifying problems, assessing evidence and solutions and draws on multiple perspectives when approaching complex issues and adapting to challenges. Applies knowledge and skills while investigating, interpreting and analyzing information in order to develop and implement creative solutions to complex problems.

Effective & Ethical User of Technology: Ethically and thoughtfully employs a variety of digital media and technology to communicate, analyze and organize information, and create products and solutions.

Self-Directed Learner: Independently seeks and uses resources including teachers, peers, print and digital references with perseverance and endurance to engage in new learning toward academic, professional and personal goals.

Global Citizen and Responsible Worker: Demonstrates integrity, adaptability, and ethical behaviors by acting responsibly and working effectively in an ever-changing society.

Health & Wellness Advocate: Demonstrates a commitment to physical and mental well-being of self and others to make positive and healthy choices.

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MASTER FACILITIES PLAN INSTRUCTIONAL GOALS

The District engaged in a facilities master visioning process in 2018 and identified the following Educational Program Vision:

MDUSD educators are moving toward a flexible learning environment that supports student choice and wellness.

• Ubiquitous and functional technology supports 21st century learning needs.

• Flexible and agentic furniture supports innovative teaching goals and student choice.

• Dynamic indoor spaces support a variety of classroom grouping arrangements and attend to student wellness.

• Outdoor spaces support a variety of learning and play needs and provide an essential connection to the natural environment.

• Specialized spaces support the unique needs and interests of the student.

• Campus-wide spaces welcome and inspire the learning community and provide healthy choices.

Overarching Themes:

Core learning spaces are places of…

- Communication and Collaboration
- Exploring and Developing
- Experimenting and Creating
- Guiding and Facilitating
- Relating and Understanding

In an environment that offers…

- Ample Space and Movement
- Connection to Nature
- Flexibility and Variety
- Leading Edge Technology
- Safety and Wellness

With a learning experience that unfolds and develops over time…

- Elementary School as a place of exploration and experimentation
- Middle School as a place of engagement and collaborative community
- High School as a place of active dialogue and deeper understanding
- Special Education as a place of support and opportunity

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DESIGN GUIDING PRINCIPLES

The following design guiding principles were developed by the Educational Specifications Executive Committee:

Guiding Principle #1: Learning Environments

- Create 21st century learning environments which:
    - Are flexible
    - Are student-centered
    - 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

Image 2: Flexible Learning Environment

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- 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
    - Flexible deployment of mobile and portable technologies focusing on student use
    - 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:
    - Make designated rooms (library / media center, multipurpose and performing arts) accessible on evenings and weekends for joint use of facilities by the community
    - Make available to serve a wide audience for extended learning concepts

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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
    - Welcome 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)

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EDUCATIONAL PROGRAM

Over the last two decades, California adopted the Common Core State Standards, created a sea change in how schools are funded with the Local Control Accountability formula, adopted Next Generation Science Standards and new English Language Development Standards, and identified ten (10) essential elements of quality schools through the Quality Schooling Frameworks. Each of these initiatives continues to shape MDUSD's educational programming and the capital program supports necessary to deliver high-quality education to all MDUSD students.

MDUSD offers a rich and diverse array of educational program offerings that inform the space types, organization, and spatial characteristics of the Educational Specifications:

Career Integrated Academics

Career Integrated Academics prepare students for careers and college based on their unique interests and abilities and to make sure what is learned each day in school is useful and relevant to their lives and their futures.

Career and Technical Education

MDUSD is committed to preparing its students for college and career. CTE programs begin as early as Elementary school and offer students a hands-on exploration of varied career fields. MDUSD also has seven California Partnership Academies and Career Pathways that allow students to work closely with community partners for work-based learning experiences like mentorships, job shadows, and internships

International Baccalaureate (IB) Programme

MDUSD is the only school district in the county to offer this prestigious program. The IB Programme is aimed "to do more than other curricula by developing inquiring, knowledgeable, and caring young people who are motivated to succeed" (www.ibo.org). Ygnacio Valley High School is finishing its 5th year with the IB programme with Oak Grove Middle school, Sequoia Elementary School, and Monte Gardens Elementary School pursuing full approval as an International Baccalaureate World School.

Advancement Via Individual Determination (AVID) Program

MDUSD is implementing AVID on a district-wide level. This nationally-acclaimed program is a college preparatory program which helps students learn the skills to be successful in school and college and close the opportunity gap. Middle and High

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schools within MDUSD offer this program, with implementation spreading to eleven Elementary Schools.

College Now Program

This program launched in the Fall of 2016 and is a two-year program serving 11th and 12th students. Those participating in this program take both college courses at Diablo Valley College and high school classes taught by MDUSD teachers, gaining credits in both.

CARES After School – Extended Learning Programs

CARES is an after school program running through 17 MDUSD school sites and serving over 2,175 students through TK to the 12th grade in historically underserved communities. CARES is a unique collaborative between the Mt. Diablo USD, City of Concord Parks & Recreation, and Bay Area Community Resources, supported by strong community partners and school site administration.

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OVERARCHING TRENDS

Flexible Design

The California Department of Education's "Flexible Learning Environments" 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.

Image 3: Mobile and flexible seating for collaboration and easily adaptable learning environments

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

- Learning spaces with abundant daylight, flexible furniture and space for group projects;
- Open areas, such as atriums and outdoor learning "streets" to encourage social interaction;

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- STEAM spaces / Makers spaces with work tables, and specialized equipment for inventing, creating, and building;
- Multi-use 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.

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 and student ownership of learning as students work in teams on engaging project and problem-based activities.

Engaging Technology

Students must directly engage with technology to acquire future-focused skills. The Instructional Technology chapter highlights the importance of access to robust Wi-Fi throughout the campuses and instructional technology as a tool for student-centered learning. Technology is no longer solely addressed within a computer lab; rather it is integrated into instruction to maximize access and opportunities for students and families, and 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.

Social Spaces

School design has the power to reach the whole learner—cognitive, physical, and emotional. Social spaces where students gather informally should be considered formal and informal learning environments to collaborate, play, talk with their classmates and develop as individuals.

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.

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SUSTAINABILITY AND HEALTHY BUILDINGS

Resource Conservation, Decarbonization and All-Electric

In line with local and global decarbonization initiatives, projects should replace outdated infrastructure with electric vs gas and maximize the renewable energy potential of each project, including providing the infrastructure to allow for future renewables.

Mt. Diablo Unified School District's ongoing commitment to environmental stewardship and resource conservation and management has been a prominent focus of the Measure C approved in 2010, which has provided for a district-wide solar program, and the use of high-efficiency and low-flow fixtures throughout the District.

The District's solar program involved the installation of ground-mounted and/or parking structures at 51 sites, creating one of the largest K-12 district installations in the country.

MDUSD's Site Solar Production website offers a link to the energy dashboard for each installation throughout the district. The cumulative energy generated, along with the utility cost savings, are shown in the lower left of each dashboard page. Each page also details the surface area, number of modules, and power capacity of each location, along with the cumulative energy generated for that individual site and the data equivalent for the reduction of greenhouse gas emissions.

Sustainability

The Mt. Diablo Unified School District is committed to providing healthy, high performance schools that provide a context for learning and that 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 to ensure high performance school design, construction and operation. See Section below on High Performance building characteristics.

Healthy Buildings

The role that buildings can play in human health and well-being has never been more evident or important.[1] Providing educational environments that allow users to thrive is an imperative for all improvement projects. Architectural teams, in addition to the CHPS standards above, should consider

[1] WELL Building Standards: https://v2.wellcertified.com/en/wellv2/overview

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planning principles that enhance connectivity, active design and imbedded educational opportunities.

High Performance Buildings have the following characteristics:[2]

a. Optimal Lighting & Daylighting: Research has repeatedly shown that students learn 20 to 30% faster in classrooms that take full advantage of daylight and optimum electric lighting. Daylight and electric light should be integrated, and glare eliminated. Lighting should be "designed," not simply specified.

b. Healthy Indoor Environment: A healthy indoor environment is essential. According to the Environmental Protection Agency, indoor air is frequently up to five times more polluted than outside air. Children are particularly susceptible to indoor pollutants. The key factors are proper ventilation using outside and filtered air and low-emitting materials such as flooring, ceiling tiles and paint.

c. Comfort: Classroom comfort includes thermal, visual, and acoustic comfort. Thermal comfort ensures that students and staff are neither hot nor cold. Visual comfort means lighting that makes visual tasks easier and visual stimulation and a connection to the out-of-doors using eye level windows. Acoustic comfort means teachers and students can hear one another because ventilation system and outdoor and indoor noise are minimized.

d. Energy Efficiency: Energy efficiency saves money while conserving nonrenewable resources and reducing pollution. Space conditioning systems should use high efficiency equipment, be "right sized" for the estimated demand, and include controls that boost system performance. Lighting systems should be high efficiency, optimize the number of light fixtures, incorporate controls that ensure peak system performance, be equipped with demand response technology, and successfully integrate artificial and natural lighting sources. Building shells should integrate and optimize insulation, glazing, shading, thermal mass, air leakage, and light-colored exterior surfaces.

e. Water Efficiency: Reducing indoor and landscaping water use minimizes the use of this scarce resource and saves money. Indoor strategies include water efficient toilets, high-efficiency urinals and ultra-low flush valves, faucets, showerheads and appliances. Landscaping strategies include drought tolerant plants and water efficient irrigation systems.

[2] From the Los Angeles Unified School District Design Guide

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f. Storm Water Management: Minimizing and cleaning stormwater runoff can further reduce water demand and help clean the Pacific Ocean.

g. Outdoor Surfaces and Spaces: Where practical schools should incorporate cool roofs, landscaping, teaching gardens, and high albedo paving materials in order to minimize heat island effects. Care must be exercised to minimize glare.

h. Environmental Materials: Schools should incorporate materials and products that are durable, nontoxic, grown sustainably, have a high-recycled content, and can easily be recycled. Properly specified materials that can meet these goals include flooring, ceiling tiles, insulation and concrete containing fly ash.

i. Waste Management: Schools should be designed with appropriate spaces for the storage and collection of recyclables. Construction and demolition waste should be recycled to the maximum extent feasible.

j. Easy to Maintain & Operate: Schools should be easy to use and maintain. Surfaces and equipment should be durable. Teachers should have control over classroom temperature and lighting, and, along with Maintenance and Operations staff, be trained in their effective use.

k. Commissioned: Buildings systems Commissioning help ensure that schools operate as intended and designed. Commissioning tests and verification, and necessary activities to fine-tune key building system promote improved performance so that the building and/or systems reach the highest levels of efficiency possible.

l. Schools That Teach: Permanent educational displays that describe the school's high-performance features further enhance learning. Schools can be tools that illustrate a wide spectrum of scientific, mathematic, and social issues. For example, mechanical and lighting systems can illustrate energy use and conservation, and daylighting systems can help students understand the sun's daily and yearly movements.

m. Community Resource: The most successful schools have a high level of parent and community involvement. Involvement can be enhanced by designs that facilitate the school's use for neighborhood meetings and other community needs.

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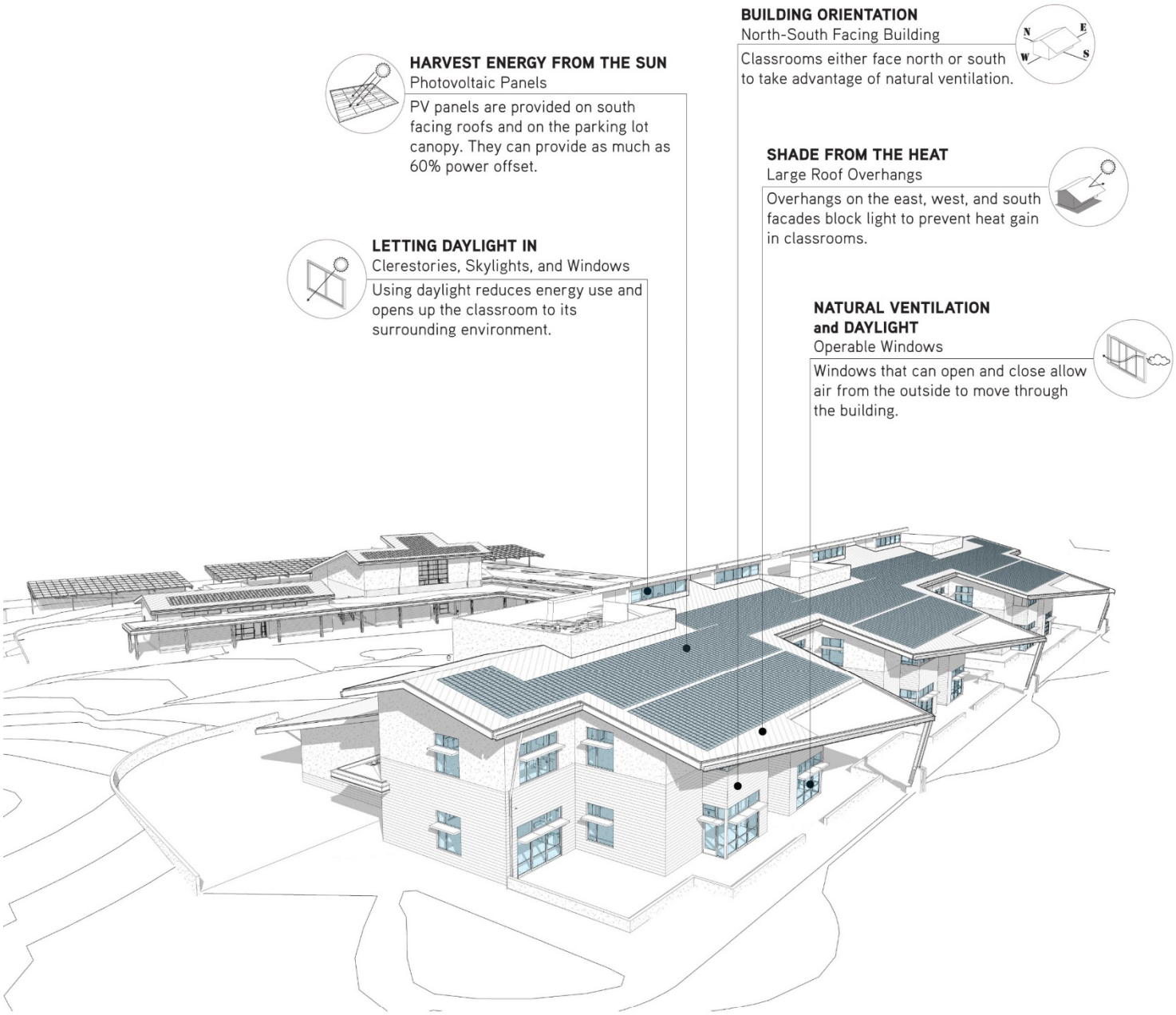

What makes a Building Healthy?

The broad, north-sloping site allows for an ideal building orientation, with teaching spaces facing either north or south. Most of the classrooms within the stepped footprint have two exposures, facilitating cross ventilation. While each classroom will be cooled and heated by its own rooftop package unit, air distribution systems have been designed to provide displacement ventilation thoughout all the teaching spaces. Photovoltaic panels are provided on south facing roofs as well as the parking canopy, and could provide as much as 60% power offset.

Image 4: Sustainable Building Features

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INSTRUCTIONAL TECHNOLOGY

Vision

This instructional technology specification reflects the priorities established in the MDUSD 2021-2031 Strategic Technology Plan:

1. Empower teachers to provide relevant, rigorous, and meaningful instructional opportunities through technology.
2. Provide students with regular, meaningful opportunities to engage with the modern world through technology to become college and career ready.
3. Ensure the District can maintain the necessary technologies and support systems to ensure every student graduates ready to thrive in a technology-rich world.

This Education Specification for Instructional Technology is a compilation of State of California and regional research focused on integrating technology into everyday instructional delivery at MDUSD. 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, California State Frameworks, The Consortium of School Networking (CoSN), ISTE (International Society for Technology in Education), and the District's Local Control Accountability Plan (LCAP). Through this Education Specification, MDUSD intends that increasingly students will control more of their learning including through technology.

Technology enhances student-centered learning by providing students with greater access and rich opportunities through powerful learning and teaching models that support:

- student centered learning that empowers student ownership of their learning,
- self-directed and teacher-directed learning,
- differentiated, accessible instruction in support of curricular goals and student needs,
- student-centered use of technology in locations throughout schools and off campus, and
- flexible and responsive instructional practices.

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Trends

The Consortium of School Networking's (CoSN)'s Driving K-12 Innovation Series, CoSN has noted the 2023 State of the World (context) as follows:

Hurdles (barriers)

- Attracting and Retaining Educators and IT Professionals
- Designing Effective Digital Ecosystems
- Digital Equity

Accelerators (mega-trends)

- Building the Human Capacity of Leaders
- Learner Agency
- Social and Emotional Learning

Tech Enablers (tools)

- Artificial Intelligence
- Untethered Broadband & Connectivity
- Rich Digital Ecosystem

A prior report charted the following long and short term trends, which are still relevant today:

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

- 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.

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In keeping with these principles, learning environments and District Technology Standards shall be developed to the extent possible according to the priorities listed below.

Classrooms and Learning Spaces

Classrooms and other learning spaces, both interior and exterior, will be envisioned to facilitate student-centered learning and the ubiquitous use of technology controlled by students. As 1:1 technology schools, all secondary students and those in most grades in elementary schools will have regular 24/7 access to technology. To support this:

- learning spaces will focus on wireless-first connectivity. Spaces will be retooled as possible to create collaborative and flexible working environments that allow for small and large group teaching and learning;
- all learners and teachers will have mobile devices issued to them for their own use 24/7;
- learning spaces will be equipped with one (1) large interactive panel for teacher and student use. These interactive panels will be cart-mounted (unless this is impossible) to facilitate student and teacher use throughout the learning spaces, and to show and interact with their work in collaborative and flexible working environments;
- students and teachers will have accessible software and cloud-based applications, including a learning management system, that enhance productivity, learning and collaboration;
- counter-level access to multiple outlets will allow for charging of student devices in all indoor learning spaces;
- printers will be deployed to learning spaces as necessary, with the understanding that student and teacher activities will be increasingly digital, and that the vast majority of printing should occur by sending jobs to more efficient copiers in central locations; and
- sufficient District-standard (currently Category 6a) data drops will be installed to support
    - Wireless Access Points (WAPs) sufficient to meet national broadband recommendations for all occupants (currently two (2) drops per WAP),
    - one VoIP handset (currently one (1) drop per handset),
    - one (1) IP-based speaker/clock combo (currently one (1) drop),
    - two locations for a teacher station, each with two (2) drops.

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Offices and Administrative Spaces

Offices and administrative spaces serve unique needs in schools and should be equipped with wireless, similar to the rest of the school, and robust wired networking to allow administrative functions on a variety of technologies. Office and administrative spaces should be equipped with:

- PC desktops for all staff (with optional laptops for administration),
- copiers and printers sufficient to meet the needs of staff,
- Wireless Access Points (WAPs) sufficient to meet national broadband recommendations for all occupants (currently two (2) drops per WAP),
- one VoIP handset per staff member (currently one (1) drop per handset),
- additional drops sufficient for printers and control systems.

Specialized Learning Spaces

Specialized learning spaces, such as those dedicated to CTE programs, will focus on wireless-first connectivity, however each space will be provided with wired connectivity as required to support the program and for adequate use of the space. It is intended that, to the extent practicable, specialized learning spaces will be envisioned to create collaborative and flexible working environments that allow for small and large group teaching and learning. In addition to the criteria for Classrooms and Learning Spaces, specialized learning spaces may be outfitted with

- specialized audio-visual equipment suitable for the program,
- specialized printing equipment suitable for the program, and
- increased wired networking to facilitate specialized equipment and computer equipment suitable to the program.

Media Centers

At upper grade configurations and in Middle Schools and High Schools, libraries will function primarily as media centers. To the extent possible, media centers will be designed and equipped with technologies for student use, display of student work, and collaborative small group areas.

Outside Spaces

Outside spaces, such as courtyards, and areas in proximity to other learning spaces will have wireless connectivity to support learning and teaching to the extent possible to support extending learning beyond the classroom.

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SITE DESIGN AND SAFETY AND SECURITY

The MDUSD Educational Specifications are based on the requirements of the California Department of Education and Title 5 Standards. The most significant of these requirements with regards to site design are summarized below:

Placement of Buildings:

- Locate buildings to optimize the compatibility of the various functions on campus and the patterns of pedestrian flow around and within buildings.
- Ensure that the site layout meets the instructional, security and service needs of the educational programs
- Locate restrooms for convenient access from playground and classrooms, to minimize the need for supervision.
- Locate student entry points from playground to classrooms to facilitate supervision.
- Buildings should be oriented to maximize natural daylighting and passive heating and cooling techniques to reduce the mechanical heating and cooling systems and enhance energy performance.

Campus Safety and Security

Strategically locating the Administrative building at the front of the campus as the clear Main Entry of the school is important to allow school administrators to function as gatekeeper of the campus, ensuring campus security while supervising students within the campus.

MDUSD campuses should be safe yet welcoming. Landscape design, fixed outdoor seating walls and ornamental fencing can contribute to this.

Crime Prevention through Environmental Design, CPTED, strategies should be implemented to reduce crime within the MDUSD community:

- Natural surveillance – adequate lighting and landscaping techniques are important factors in the "see and be seen" approach to prevent crime
- Natural access control – use walkways, fencing, lighting, signage and landscape to direct people and vehicles to and from entries
- Natural territorial reinforcement – clearly define private areas from public areas to deter trespassers
- Maintenance – fix problems within the physical environment as quickly as possible

Security cameras and other means of technology can be used to improve passive security measures.

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Exterior supervision and circulation should be a considerable influence in the design and organization of the campus buildings. For example, shaded project terraces should have a visual connection to the adjacent learning spaces, so that students can be supervised from inside while they are outdoors. At the Elementary School level, outdoor spaces should be designed so students can gather or play outside of learning spaces before class begins.

Transparency makes it easier for staff to recognize outside threats or inappropriate behavior among students, allowing staff to react to the situation faster and engage in emergency procedures if needed.

Sufficient lighting in parking areas and outside circulation zones increases student and faculty safety, especially after hours.

Image 5: Visual Supervision

Drop-off and Parking

Drop off zones and parking lots play a vital role in the function of the school campus. Each MDUSD school campus should include at least one designated student drop off area with a passing lane and provide adequate parking for students, teachers, staff, and visitors. If the site permits, three sides of the campus' perimeter should be directly adjacent to public streets to break-up on-site traffic and provide safer drop off areas. Lanes and student drop off zones should be clearly labeled with appropriate curb striping, pavement markings, and signage.

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Circulation and pedestrian safety is a critical design factor for drop off and parking areas, especially because of the traffic congestion during morning drop off and afternoon pickup times. Pedestrian safety in the drop off area and parking lots can be maintained by using the following design methods:

- Separate parking, drop off, bus loading areas, and parking areas to ensure the safety of students entering and exiting the school[3]
- Provide enough parking spaces for staff and visitors and accessible spaces to meet ADA code.
- Parking distributed throughout the campus can be a good solution to avoid having the front of the school be a large parking lot.
- Reducing pedestrian and vehicular crossing
- Use appropriate barriers
- Clearly mark pedestrian walking zones and vehicular driving zones
- Provide signage at relevant locations for simple way-finding
- Limit visual obstructions in the drop off areas
- Speed bumps are recommended for moderating vehicular speed in drop off and parking areas to further protect pedestrians.

<u>Auto Parking</u>

- Adequate parking for visitors, five (5) spaces.
- 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.
- The District is committed to reduce schools and staff dependency on carbon fuel sources and envisions the use of Electric Vehicles Charging Stations (EVCS) in its facilities parking lots – Refer to CalGreen Requirements and discuss with the District on projects

Visitor parking should be directly adjacent to buildings that have temporary visitors, such as the Administration building, Pre-K, TK, and Kindergarten areas. When possible, Pre-K, TK, and Kindergarten should have their own dedicated drop off zone with visitor parking, so that parents can either supervise their children entering the campus or park and escort them to their learning studios. This separate drop off area should have access to the Pre-K, TK, and Kindergarten play areas that are also adjacent to their respective learning studios.

Adequate shade for cooling of autos and pavement can be achieved by

[3] CDE requirements: Article 4; 14030b https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

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providing trees or PV panels that serve as shade structures.

Parking zones should comply with the local parking requirements for stall and drive aisles dimensions and shading. Parking blocks should be provided for parking stalls facing pedestrian walkways, fencing, walls, building and planting area or other obstructions.

It is recommended that bicycle, scooter, and skateboard storage should be provided for 10% of the student population or more as required by CalGreen[4]. To discourage vandalism and theft, this type of parking should be in a highly visible area and offer racks to lock and secure them.

Pedestrian and vehicular entry points serve as the campus' identifier within the local community – it should be welcoming and inviting. The main entry needs to balance creating an inviting atmosphere as well as separating the public from student areas.

Each point of entry within a campus should create a sense of arrival and strategically frame views based on the school's core values. The main vehicular entry should connect the main road and local community to the campus. The main entry should be clearly defined and guide students, faculty members, and visitors to parking and drop off areas. A signature element should be incorporated into the main entry's design that reflects the school's ethos.

Provide a system of covered walkways between buildings where interior circulation is not provided. The design of pedestrian areas should be more developed in targeted areas, such as drop-off locations and waiting areas where students can gather before class begins. Provide covered walkways between buildings where interior circulation is not provided.

The administration building should be located nearby the main entry and act as a buffer between the public realm and student areas. Adequate signage is required throughout the campus, so new students can easily navigate throughout an unfamiliar campus and visitors can easily access facilities intended to be shared with the community. Landscaping or unique building features should be considered as a way-finding technique.

Service areas are crucial to the functions of the campus. Such areas include:

- Storage Areas
- Parking for MDUSD vehicles
- Parking for maintenance equipment

[4] California Green Building Standards Code: 5.106.4 Bicycle Parking

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- Delivery zones for food service and supplies
- Waste and recycling enclosures
- Compost areas (if a campus has a composting program)

Service areas should be designed for high traffic, heavy equipment, storage and removal of waste and recycling. These areas should be dispersed throughout the school's campus and be adjacent to the buildings they serve. Because deliveries are typically scheduled for early mornings or in the evening, sufficient lighting should be provided to these areas. The Food Service building should have wide access ramps to connect the parking area to the delivery door.

The campus design should plan for maintenance service points. One service point should be located at the front of the campus and other service points throughout the campus should be contained to maintain student safety and promote circulation efficiency. Below is a list of best practice guidelines:

- Provide direct access from the street to delivery/utility vehicles area without crossing over play areas or student gathering areas, the field areas, or the drop-off zone.
- Locate vehicular access to delivery and service areas shall be located to provide vehicular access that does not jeopardize the safety of students and staff. (This space will also require adequate space for large vehicles to maneuver in and out for waste/recycling pick up and food service and supply deliveries.)
- Durable vehicular pavement and/or asphalt concrete pavement should be installed for the entire access way.
- Maintenance service points should include a covered storage area for equipment and machinery that is separated from the campus center.
- Isolate the trash pickup area with fencing or other barriers from foot traffic areas.

Trash and recycling enclosures must be covered and include proper drainage. A covered trash bin washing area should be included in the trash enclosures with a curb enclosed drain and hose bib. Trash and recycling bins should have their own lids so that odors do not fill other areas. To encourage student and faculty recycling efforts and to create an easy pick up route for maintenance staff, recycling collection areas should be places at the edges of buildings.

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Outdoor Learning Environments (See Also Dedicated Outdoor Learning)

- Outdoor Learning Environments are an integral part of the MDUSD educational philosophy. These outdoor areas should be designed to promote engagement, exploration, and discovery.
- Locate directly adjacent to classrooms for space to serve as break-out space, with a direct connection to the indoor classroom activities, including art and science projects, reading, and small group discussion
- Provide a mix of permanent concrete seat walls and movable seating throughout the campus and near the lunch kiosks
- Provide shade using adjacent buildings, shade structures, trees, or other design features.
- Provide wireless access points for students to use laptops and tablets outside.
- Mitigate potential noise transfer to adjacent spaces and classrooms through screening and buffer planting
- Provide signature design features such as artwork made by students and local artists
- Create a natural environment throughout the outdoor commons areas with extensive use of landscaping and native plantings

Image 6: Outdoor Gathering / Learning

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Lunch Areas

- The lunch area is an outdoor activity space, that is used mostly for eating and socializing during the mid-day break. The space may also be used for other learning activities, such as project based learning.
- Provide seating near lunch kiosks
- Provide shelters from rain and sun, for optimal year-round use of the space. Coordinate the size of the shelters to accommodate school enrollment per lunch schedules established by the school.
- Locate the shelter adjacent to the Café and/or MPR and playground.
- Coordinate the design of the shelter or building component and accessories with its architectural context
- Provide durable, vandal-resistant tables and seating, appropriate for large groups and compliant with ADA accessibility requirements (round tables are ideal for socializing).
- Provide an adequate quantity of durable and easily serviceable trash and recycling containers adjacent to heavy-use areas, including at exit and entry points, fields and large assembly areas
- Lighting shall be considered as part of the family of site furnishings and relate to the architectural style. Metal poles, if appropriate, or fixtures mounted to canopy structure can be considered. Metal poles with 360degree solar array (ClearWorld or similar) are encouraged with placement to avoid shade. Low bollards are also preferred.
- Provide exterior drinking fountains with bottle fillers.
- Provide WIFI

Image 7: Outdoor Dining and Seating Areas

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Field Areas and Hard Courts

- Field areas shall include space to support the physical education (PE) program, unstructured recreational activities during nutrition breaks, and athletics programs, as described further below:
- Explore joint use of the outdoor facilities with other public agencies
- Provide adequate physical education teaching stations to accommodate course requirements for the planned enrollment
- Provide clear sightlines of the playfields to facilitate supervision
- Provide direct access to hardcourts and playfields from the food service and fitness areas
- Provide a multi-purpose field to accommodate activities such as softball and soccer
- Utilize landscaping to provide areas of shade
- Provide striping of paved hardcourt areas for basketball and volleyball.
- Locate exterior drinking fountains with bottle fillers throughout.
- Locate restroom facilities with exterior access in a visible and easily supervised area.

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DEDICATED OUTDOOR LEARNING SPACES

Program Description

Outdoor Learning Environments are an integral part of the MDUSD educational philosophy.

Orientation and Relationship

These outdoor areas should be designed to promote engagement, exploration, and discovery.

- Locate directly adjacent to classrooms for space to serve as break-out space, with a direct connection to the indoor classroom activities including art and science projects, reading, and small group discussion
- Provide limited seating, including a mix of seat walls and movable seating
- Provide shade using adjacent buildings, shade structures, trees, or other design features.
- Mitigate potential noise transfer to adjacent spaces and classrooms through screening and buffer planting
- Provide design features such as sun-dials, or art-work representing native flora and fauna, to inspire potential connections with areas of study.
- Provide shading

Technology (See Instructional Technology Section, Page 22)

Utilities

- WIFI sufficient to facilitate connectivity for anticipated student capacity
- Lighting
- Sink (if required by Program)
- Electrical (if required by Program)
- Utilities necessary for any optional planting beds

Furniture and Equipment

- A variety of fixed and flexible seating

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HIGH SCHOOL LEARNING SPACES (CLASSROOMS)

Program Description

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 center activities 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 so as to monitor individual student needs, work with various flexible groups, give small group demonstration lessons, conference with students on a one-on-one basis as well as instruct the whole group for certain periods of time.

Orientation and Relationship

The size and characteristics of learning spaces vary to accommodate multiple learning styles simultaneously and should be modeled on higher education environments to prepare students for college and career. These different environments support a range of instructional activities; such as team teaching, one-on-one coaching, and group lectures. The learning studios will be clustered around an indoor commons or shaded outdoor learning space.

Space Requirements

The high school learning space should include the following:

- 960 – 1,200[5] square feet
- Adjacent indoor area for small group instruction
- Second exit to adjacent classroom or exterior
- Operable partition between classrooms for interdisciplinary instruction as budget allows
- Connection to outside for outdoor instruction
- Magnetic whiteboard on teaching wall or magnetic whiteboard at student height with storage below
- Option for teaching wall with magnetic sliding whiteboard and storage behind
- Resilient adhesive floors that meet California Green Standards

[5] CDE requirements: Article 4; 14030.g https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

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Technology (See Instructional Technology Section, Page 22)

Display

- Interactive display panels, on carts wherever possible to promote student and teacher use
- Tackable wall surfaces floor to ceiling

Cabinetry/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 bookcases (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
- Teacher workstation with chairs on casters

Image 8: High School Classroom Environment

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HIGH SCHOOL CAREER INTEGRATED ACADEMICS AND CAREER TECHNICAL EDUCATION (CTE) LEARNING SPACES

Program Description

The vision for MDUSD Career Integrated Academics is to link High School students to their futures, in preparing students for the demands of our global economy by providing high school students with rigorous and relevant educational experiences and opportunities.

Curriculum and Anticipated Use

Career Integrated Academics prepare students for careers and college based on their unique interests and abilities and to make sure what is learned each day in school is useful and relevant to their lives and their futures. Students experience hands-on learning opportunities in exciting and relevant professional pathways that reflect industry driven curriculum designed for the jobs of the future, giving students a better idea of what's out there in the world and the tools to be successful. MDUSD High Schools provide such educational experiences through career academies, career pathways, and career technical education courses, including courses provided by ROP.

Academies, and Career Technical Education Pathways and Courses

- College Park High School
    - BioMed Pathway - includes PLTW Principles of Bio Medical Science
    - Art of Video Productions
    - Citizen Law
    - Photography I - Advanced Photography (in progress)
    - Art Design A/B/3D
    - Sports Medicine

- Concord High School
    - Communications & Human Services Academy
    - Engineering Pathway (PLTW Engineering)
    - Woodworking I and II, and Construction Technology
    - Accounting
    - Photography I - Advanced Photography
    - Robotics Engineering Tech
    - Transportation I - Auto Technology

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- Mt. Diablo High School
    - Architecture, Construction, Manufacturing, Engineering (A.C.M.E.) Academy
    - Digital Safari Academy - includes Multimedia I, II and III
    - ICT Computer Science pathway
    - International Hospitality and Tourism Academy (IHTA)
    - Medical Biotech Academy - includes Biotechnology and Sports Medicine
    - Photography I - Photography II
    - Culinary Arts
    - Food Service and Hospitality
    - Tourism Management

- Northgate High School
    - Design It Pathways:
    - Animation Pathways - includes:
        - Computer Art & Animation
        - Photo I - Photo II - Advanced Photo
        - Introduction to 2D Animation - articulated with Diablo Valley College (DVC)
        - Art 2: Graphic Design - articulated with DVC
        - AP Graphic Design - articulated with DVC
    - Careers in Teaching
    - Sports Medicine
    - Computer Programming
        - Coding and Gaming
        - AP Computer Science
        - AP Computer Science Principles
    - Stagecraft

- Ygnacio Valley High School
    - Careers in Education Academy - includes Careers in Teaching and Careers in Teaching Internships
    - Health Science Pathway
    - Project Lead the Way Engineering Pathway (CCAP)
    - Sports Medicine

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Orientation and Relationship

The physical environment heavily influences the success of CTE programs based on how well it accommodates students' needs and addresses important design considerations like adjacencies and future flexibility. Many factors need to be considered early in design, including location, size, and infrastructure.

"Capitalizing on natural program synergies by locating class types that can work in tandem near each other is one of the most powerful ways to elevate the CTE experience for students. This methodology leverages the proximity of labs and classrooms to engage in meaningful student-centered learning. For example, a student may develop an idea in drafting class, construct it in carpentry, and learn how to market it in yet another class – a technology-enriched collaborative experience that brings their skill set full circle. By locating these labs, classes, and collaboration spaces close together, students benefit from a cohesive and cross-disciplinary learning experience. The relationship of these program elements within the school promotes creativity, collaboration, critical thinking, and communication: the 4C's of 21st century education."[6]

Similarly, separate CTE programs with potential for collaboration can also leverage natural synergies to the benefit of their students. For example, a "farm-to-table" program may capitalize on a partnership between the agricultural and culinary arts programs. Vegetables grown in a school garden could be incorporated in recipes, which could be served to students an staff during lunches. These agriculture and culinary arts classrooms could flank a cafeteria and both open onto an active courtyard. The proximity of these programs and their locations within the school would enhance the learning environment and student engagement.

The location of CTE spaces and hands-on learning labs should be looked at holistically in the greater context of the school and based on the programs' individual requirements. For example, programs such as construction tech and automotive technology are best suited to ground-level spaces, as are those with heavy equipment or regular deliveries of raw materials. These ground-level requirements typically have a substantial impact on site design and should be considered early in the design process.

Space & Utility Requirements

The California State Plan for Career Technical Education, A BRIDGE TO THE FUTURE 2008–2012, approved by the State Board of Education in May 2008, provides guidance for California's CTE programs in California. The State Plan states, "CTE programs are dynamic; curricula need to stay current with rapid changes in the workplace, requiring

[6] K-12 Design: Career and Technical Education Spaces that Improve Student Outcomes: https://www.clarknexsen.com/blog-k-12-design-career-technical-education-spaces-that-improve-student-outcomes/

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ongoing updates and learning on the part of CTE faculty."

Please refer to CDE's Model Curriculum Standards:
https://www.cde.ca.gov/ci/ct/sf/ctemcstandards.asp

Spaces that support career and technical education generally have more stringent spatial requirements than typical classrooms, calling for dedicated areas for teaching and hands-on experimentation. Machinery, equipment, and lab activity influence the volume and floor area necessary.

For example, a structural high bay space is necessary to support an automotive technology program with auto lifts and other large equipment. From a structural perspective, the weight of program equipment should be considered, as heavy equipment could require additional support. Understanding which CTE programs involve noise-producing activities is important, as well. Higher volumes like high bay spaces can also help dissipate excessive noise for louder programs. The appropriate mitigation of sound transfer ensures that other, nearby learning activities in the school can go on undisturbed.

Planning appropriate and flexible infrastructure is also critical when designing CTE spaces. The equipment and materials needed for each program will vary, and the space provided should be specific to the needs of the individual program. Some may require dedicated mechanical or plumbing equipment, for example, while dust collectors are often required for programs that create dust and debris to ensure healthy air quality is maintained.

The technology, mechanical, electrical, and plumbing requirements are demanding for CTE spaces and must provide maximum flexibility for current and future connectivity requirements. In a typical classroom, power and data outlets are often located on a wall closer to the floor, but this may not be appropriate for a computer technology class with various equipment, or a carpentry class where cords could be tripped over. More appropriately, these should be located higher on the wall for easier access, or better yet, power supply through overhead busbar or cord reels can offer even more flexibility to move equipment or establish different work zones. Enabling Wi-Fi is another way to maximize flexibility, connectivity, and reduce tripping hazards. Technology will continue to advance during a school building's lifecycle, and the design of CTE classrooms and labs should be able to adapt to these changes.

Utilities

- To Be Determined based on Program Needs

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STUDENT SUPPORT PROGRAMS AND SERVICES

Program Description

The common thread connecting all the special needs programs is to provide appropriate access for all students to the general curriculum. Such programs should work collaboratively to seamlessly meet student needs rather than in a piecemeal or duplicative way. The space for these programs can be shared and must be flexible.

Not all services will exist in any one school but, if the need for them arises, they must be provided. Therefore, appropriate facilities must be considered in planning.

Vision

Special support programs work together to deliver services based on student needs rather than program description. The vision for each site is based on the unique needs and priorities of the community that the school supports.

These federal, state, and general fund programs include Special Education, Title I, Title IV, ASES, CPA, CTEIG and UPK grants, and English language development. Ideally, future funding and building resources come through joint use with other agencies such as private industry and county services already serving the local community needs.

Support programs and services include a variety of activities supplemental to, or in lieu of, the general education program. Typically, they are provided to address students' learning rates or styles, which do not respond adequately to the general program. They may also address the needs of students from homes where a language other than English is spoken.

Reflecting changes in society, more and more children require specialized support. In addition to students who are eligible for special education programs and services, there is a growing population of students with a wide range of needs that require support service.

Since the aim of support programs and services is to enable students to succeed in general education, all core subject matter is taught. Also, social and emotional learning and study skills are included. Some services, such as Occupational Therapy, Physical Therapy, and counseling address functional skills or other areas. These student needs must be met before academics can be approached. Modifications in materials, manipulatives, and computers may be necessary to accommodate individual needs.

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A description of support programs and services follows.

Teaching and Learning Activities

In self-contained or pullout settings students may work individually or in small groups. A higher adult-to-student ratio necessitates space for co-occurring multiple activities. The varying skill levels of students served at any given time also calls for space for the adults to move among individuals and groups to aid and monitor independent workers and students coming and going. Provision for noise attenuation and ventilation is included.

With the increasing trend for students to be fully included in general education classrooms, an additional adult may provide services to a single student or a small group of mainstreamed students within a general education classroom.

Orientation and Relationship

An area where spaces can be created to house the necessary support programs and services is essential. Not all programs and services will exist at a specific site.

Support spaces are located near the general education classrooms to provide convenience and ease of supervision as students move between support spaces and classrooms.

The responsibility for monitoring ill students often falls to office staff. The space for ill students has an adjacent restroom and has a lockable cabinet and/or refrigerator for medications. The campus has a restroom for use by students with disabilities requiring toileting assistance and (or) a lift station.

PROGRAMS

Special Education Academic Programs

Children with special needs are provided a full continuum of program options to accommodate individual student's characteristics, needs, abilities, and interests within the least restrictive environment.

Space needs include one-on-one testing and instruction, confidential meeting space, space for small groups, and classroom size facilities. Due to specific learning disabilities of some students, it is necessary to provide acoustic insulation and good lighting, as well as access to telephones, intercoms/radios, and administrators. Toileting may be required. ADA accessible access and full ventilation are particularly needed. Flexible space is needed in schools to provide for changing needs of students and programs.[7]

[7] CDE requirements: Article 4; 14030.h.3 https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

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Special Day Class

Special Education serves students academically through self-contained classrooms (SDCs) for students requiring a more intense (more than 50% of the day) level of service. The classrooms may house students with learning or language deficits who are typically ambulatory and able to move about a campus independently. The self-contained classroom may also house students with severe disabilities requiring a need for adequate space for wheelchairs and gurneys. Close-by and accessible restrooms are essential for such classrooms. A classroom designed for severely disabled typically serves students from several feeder schools. Some classrooms may require special features including an enclosed student restroom, an area for a washer and dryer setup, and a "home" kitchen area for basic student instruction.

Special day classrooms are at least the same size as regular education classrooms and are properly equipped for the students who will occupy the space, for their ages, and for the types of disabling conditions. The square footage allowance in Ed Code 17047(a)[8] is used as a guidance for the design of the classroom space and other space on the campus to support the special education program such as speech, psychologist, counseling, and conference. A conference area is available for the annual Individualized Education Program (IEP) meetings for each student. SDCs are distributed throughout the campus with age appropriate regular education classrooms. A cluster of two SDCs may be considered if support or auxiliary services (example bathroom, feeding, physical, or occupational therapy) are needed to serve the students throughout the day.[9]

Resource Specialist Program (RSP)

Students who can function adequately in a general classroom for more than half of their school day are served through RSP. Students may receive services in a resource room or learning center where they go for special help. The resource specialist or instructional assistant may also go into their classrooms to provide supplemental help there.

Resource Specialist space is provided between 240 and 960 square feet depending on the number of students served.[10]

Special education also includes numerous services, which provide support of various types to students in general education classes and special education programs. These include the following:

[8] General Education Code: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC&sectionNum=17047
[9] CDE requirements: Article 4; 14030.h.3.G https://www.cde.ca.gov/ls/fa/sf/title5regs.asp
[10] CDE requirements: Article 4; 14030.h.3.A https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

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Speech and Language

Language, Speech and Hearing (LSH) services see students individually or in groups of up to about six students. These students frequently have poor auditory processing and comprehension skills. Depending on the student's assessed need, services may be provided either in the classroom or a quiet environment.

Each school will have a Speech and Language space that includes a desk area for the therapist and small group instruction area for four (4) to six (6) students and should be a minimum of 200 square feet.

Psychological and Counseling Services

The school psychologist tests students individually and counsels students individually or, less frequently, in small groups. Conversations with parents in person-to-person meetings and telephone conversations are confidential. A private, quiet space with minimal distractions is essential.

Each school will have a psychologist space that includes a desk area for the psychologist and a small group instruction area for four (4) to six (6) students and should be a minimum of 150 to 200 square feet.[11]

Each site should have two (2) additional counseling offices for intervention programs. These offices include a desk area for the interventionist and small group instruction area for four (4) to six (6) students, and should be a minimum of 150 to 200 square feet.[12]

Health Services

The Health Services staff treats individual children and interviews and counsels parents and teachers. A private space is needed, preferably in the administrative office complex, to house a health station including a cot, small office space, and lockable cabinetry.

Additional Services

Services under this umbrella include adapted physical education, occupational therapy, physical therapy, vision impaired services, specialized nursing, and mental health support. All services may be provided at a school if such services are part of a student's individualized educational program.

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[11] CDE requirements: Article 4; 14030.h.3.C and E https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

[12] CDE requirements: Article 4; 14030.h.3.C and E https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

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They occur in a classroom or shared space. In some cases, they may require privacy. The requirements of these services vary, affecting the amount and type of space needed.

Space Needs (as the Program requires)

- Movable walls and partitions create smaller spaces, some of which should be soundproof
- Ample space and storage are needed for multiple adults that will be sharing the areas
- Restroom facilities and sinks with tempered hot water and electrical outlets are readily accessible when necessary to meet specific program needs
- ADA compliance in spaces to allow maximum accessibility

Technology (See Instructional Technology Section, Page 22)

Cabinetry/Storage

- Flexible, movable, and ample
- Lockable storage, including teacher coat closet, and adjustable open shelving
- Adjustable student cubbies
- Ample storage space is essential due to the multitude of materials and equipment that are used to teach all grade levels with a host of special needs
- Powered for charging

Utilities

- Hot and cold water where necessary to meet specific program needs
- Ample outlets
- Full access telephones and intercom systems
- Sinks with drinking fountains
- Below counter plumbing does not interfere with wheelchair access

Furniture and Equipment

- Movable tables, desks for teachers and students
- VoIP handsets
- Ample outlets
- Moveable room dividers
- Tackable walls, and magnetic whiteboards with sliding bulletin boards that move over the whiteboards when not in use

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- Lockable file cabinets on wheels
- Bookshelves
- Lockable coat closet for staff
- Specific requirements will vary as the special needs vary

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HIGH SCHOOL OFFICE—Reception

Program Description

The High School Administration serves as a welcoming center that supports and monitors main campus activities. Wayfinding should be easy and a clear separation among public, semi-private, and private spaces is fundamental. Community involvement is important to school's success. MDUSD sees their campuses as a of the community, so it is important for the community to feel that the school belongs to them and they should be encouraged make the most of the amenities shared with the public.

General Administration serves as the main reception zone to enter the campus and welcomes visitors, functioning as a security checkpoint and "help desk" to the public. The spatial transition from the street to the facility should create an inviting visual connection between the school and the neighborhood. Navigation information, attendance, historical records, and overall coordination of the school's involvement in the community is managed in this space.

As a community outreach and family health resource support, the school office provides information and resources. The focus on community and school partnerships requires a welcoming atmosphere and space to facilitate cooperative working relationships. Home and school communication is maximized with computer and video capabilities. The office space is flexible for multiple uses and various groupings.[13]

The information disseminated from the office team supports and enhances knowledge of programs available at the school for parents, visitors, students, and staff.

Orientation and Relationship

The High School Administration "Admin" should be located near to community spaces (such as a Performing Arts Center, Multi-Purpose Room or Gym) so that public groups can check in upon arrival. The Admin building should be a welcoming and inviting entry to the school with a "signature" design element that relates to the context of the community and the local environment.

A covered entry with outdoor seating can serve as a sheltered transition space. Often parents come with siblings, strollers and packages and need a place to sit and to interact with other parents. A covered entry also provides the potential for a ceremonial quality to the architecture. Upon entering, the work of students should be showcased to instill a sense of pride in the

[13] CDE requirements: Article 4; 14030.k.2 https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

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students and to make the learning that is occurring at MDUSD explicit for parents to see. The organization of spaces supports easy wayfinding and separation between public, semi-private, and private zones. A separate student entry separates visitor traffic from student circulation. Offices should have natural daylight either from windows or skylights to improve workplace performance and as many as possible should face the street for "eyes on the street".

Technology

- Technology needs in the office require multiple networking
- Copy and digital duplicating machines
- Printers networked and shared
- Other new technology as trends dictate

Display

- Tackable walls for student work displays
- Monitor in the reception area for school news display
- Glass case outside offices to post notices
- Check-in station for visitors/parents (window to the outside when possible)

Cabinets and Storage

- Lockable file cabinets for cumulative student records as well as other confidential information
- A built-in safe which includes lockable drawers
- Lockable storage closet for office supplies
- Adjustable open shelving space
- Fireproof cabinets for permanent records
- Lockable cabinet(s) in Health Clerk station

Utilities

- Sinks with hot and cold water in Health Clerk station
- Voice Over Internet Protocol (VoIP) system for telephone and clock and bell
- One (1) analog phone line for emergencies
- Electrical outlets: multiple wall, floor, and counter

Furniture and Equipment

- Refrigerator, freezer, icemaker in the Health Clerk station and in office area for office staff
- Copier, paper cutter and trimmer
- Room for a cot in the Health Clerk station
- VoIP super handset

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HIGH SCHOOL OFFICE—Administrative Team: Principal and Vice Principal

Program Description

The offices of the principal and vice principal work together as an integral part of the overall school environment. They radiate a friendly, professional atmosphere with flexible spaces for individual and group conferences. Security, privacy, and collaboration potential are important aspects of the office designs.

The administrative team provides leadership and support to teachers. The principal's office is multifunctional to accommodate site-based management, leadership team, technology, and community partnership activities. Management of school security and student safety is addressed in the design.

Teaching and Learning Activities

The principal and vice principal provide instructional leadership, school management, and facilitation for educational reform, and supervision of curricular and student outcomes.

The administrative team works with students, parents, staff, and community members to plan, monitor, and communicate curricular goals. Communication and professional growth opportunities are monitored through conferencing.

Orientation and Relationship

The principal's office is situated for internal observation of the campus for students and school functions. When possible, a conference room able to seat no fewer than eight (8) people is located near the principal's office. Phone, video, and full technological capabilities are provided. This office is accessible to the public and the staff. All interior doors have windows, when possible.

Space Requirements

- Office should be 200 square feet and accommodate an executive or stand-up desk, credenza, filing cabinet, bookcases, computer workstation and printer, and a small table able to comfortably seat four (4) people
- Computer station
- Windows allow a line of sight for supervision of students
- Walls have tackable surfaces
- The Conference Room accommodates up to eight (8) people. It provides collaborative space for parents, teachers, and administrators. It has a monitor/projector, matte whiteboard, computer and video capabilities, and phone.

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Technology

- Each staff member will have access to mobile computer.
- Wireless access point and network drops

Cabinets/Storage

- A lockable closet/cabinet
- Bookshelves, drawers and file storage

Utilities

- Plentiful electrical outlets on all walls and the counter are necessary.
- Voice Over Internet Protocol (VoIP) system for telephone and clock and bell
- One (1) analog phone line for emergencies

Furniture and Equipment

- Include all necessary furniture and equipment to meet the professional standards of the administrative complex. Consider the most efficient, space saving, and flexible furniture to best utilize space.
- Space for table and four (4) chairs in principal's office
- VoIP super handset

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HIGH SCHOOL OFFICE—Staff Collaborative Space (Workroom)

Program Description

The staff workroom provides areas that focus on a variety of activities of professional preparation including research, planning—both independently and collaboratively—preparing materials, and reflective and interactive activities. Both parents and staff members utilize the staff workroom.

The staff workroom facilitates the preparation of materials by both parents and staff using the latest technological tools. Trends indicate that the workroom will also be used for staff research, professional development and training.

Activities

The activities in the staff workroom include a variety of interactions that require the need for quiet areas as well as areas for machine use.

Orientation and Relationships

The staff workroom should be adjacent to the school office providing easy access by office staff and near the staff lounge. Floor space is large enough to accommodate several small tables at which to work and sit in comfort.

Space Requirements

- 400 to 500 square feet
- Counter space to accommodate a variety of small office machines
- Racks for accommodating butcher paper

Technology

- WIFI

Cabinetry/Storage

- Counters are of comfortable height for staff to prepare materials and use machinery
- Counters with laminated surfaces and storage cabinets underneath are built-in
- Upper casework is deep enough to store paper and other supplies
- Counter space has open and closed cabinets beneath
- Wall space accommodates the large equipment and cabinets
- Bookshelves are open and closed

Utilities

- Ample electrical outlets with appropriate voltage are placed every

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three (3) feet around the counters and walls to supply the many pieces of electrical equipment.
- Dedicated circuits are provided for copy and digital duplicating machines There is a small sink with hot and cold running water and a small counter area for a coffeepot

Furniture and Equipment

- Station for up to three (3) laptop connections
- Bookcases are available for professional development materials
- Equipment includes copy machine(s), digital duplicating machines, a freestanding laminator, paper cutters, die cutter, book binding machines, computers, printers, scanners, phones, and electric staplers
- VoIP handset

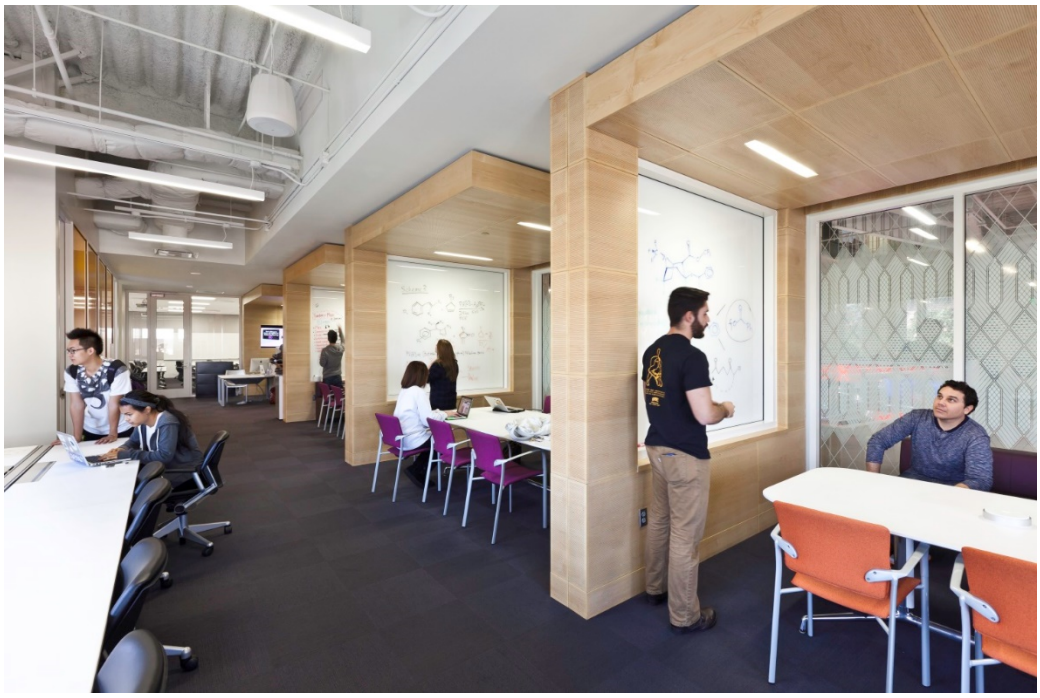

Image 9: Collaborative Workspaces

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HIGH SCHOOL OFFICE—Staff Lounge

Program Description

The staff lounge is an important area that provides a space for teachers and other staff members to collaborate, relax, eat, discuss professional topics, hold formal and informal meetings, and prepare for interaction with students. In addition, the staff lounge is often the focal point for viewing and sharing information on professional development, district, and school news. This room is also utilized as a meeting area for the whole staff.

Staff rooms adjacent to or nearby the private outdoor patio areas are becoming prevalent. Some schools are experimenting with student-created lunches such as salads or sandwiches for sale to staff members. Some schools are also exploring physical fitness programs and equipment for staff members.

Activities

Activities, which occur in the staff lounge, include:

- Relaxation on break and lunch period
- Preparation and storage of staff meals
- Eating
- Viewing of areas (such as bulletin boards) to provide updates on district postings, staff development opportunities, and school news

Orientation and Relationship

Since the staff lounge often serves as the "hub" of all staff members, it is important that it is in an area of campus readily accessible to all members. The teacher workroom is connected to or located near the staff lounge. Staff mail and message boxes are in or near the staff lounge to allow members to quickly and frequently check for mail and messages. Also, staff restrooms are located near the staff lounge. The staff lounge is adjacent to the office complex.

Space Requirements

- 450 to 550 square feet
- There is adequate space for dining
- The staff room should provide table seating for no less than 15 to 20 adults. Additional seating on couches and easy chairs is also provided

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Technology

- WIFI

Cabinetry/Storage

- Adequate storage exists for food preparation materials and utensils, as well as for other items needed for serving food such as coffee pots, bowls, plates, silverware, and tablecloths
- Storage space should also be provided for educational materials used by all staff members

Utilities

- The double kitchen sink provides both hot and cold water as well as a garbage disposal
- Electrical outlets should be located at convenient intervals along the walls, particularly in the food preparation area
- Additional voltage is provided to accommodate all appliances
- Water lines are for a drinking fountain
- Phone access is also available

Furniture and Equipment

- Refrigerator and freezer
- Microwave
- Double sink with garbage disposal
- Dishwasher
- Oven
- Coffee maker
- Tables and chairs to accommodate 15 to 20 adults while eating
- Soft furnishings
- Bulletin board

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LIBRARY / MEDIA CENTER

Program Description

A Library/Media Center is a comfortable, open space where students can create and interact with printed or electronic media and discuss it with instructors and peers. Such a space will usually include bright lighting, unobstructed sightlines, and a comfortable environment. This kind of setup allows students to personalize how they interact with the information and resources, leading to better learning outcomes. This space can also be used in the traditional function- for community interaction and outreach. The library/media center is frequently one of the largest open spaces in the school and is often used for PTA/PFC meetings, after school classes, school site council, awards ceremonies, science or art fairs and other activities beyond the school day. Flexibility is key to getting the maximum value out of these spaces.

The Library/Media Center has ample open space where information is disseminated and absorbed and that also incorporates technology and different presentations of information. Current pedagogical practices demand that learning spaces reflect the atmospheres of modern workplaces and contain similar technology. This requires flexibility and places where students are empowered to engage with each other.

Image 10: Library Environment

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The Library/Media Center should be an engaging space and multi-functional. These spaces may contain:

- 'Pods' - for individual focus or working 1:1 with a peer or instructor
- Active/Flexible Seating – furniture should be reconfigurable so that students can collaborate, break into small groups or individual work, then reassemble to discuss. The furniture- desks, tables, chairs- should be easy to move and reconfigure on the spot.
- Technology – WIFI and data drops as required throughout the space. Computers and large monitors should enhance the workspace.
- Digital Displays – Digital displays should be available throughout the space for student use and collaboration
- Specialized Technologies - for media creating

Teaching and Learning Activities

Library/Media Centers will be focused on student collaboration and engagement, and will be designed to foster activities such as:

- individual and small group projects
- large group instruction, gatherings, and presentations,
- creation and display of student-created work, art, video, and multimedia,
- whole-class instruction,
- research and application of library and reference skills,
- academic and recreational reading and use of multimedia materials.

Orientation and Relationships

The Library/Media Center should be centrally located on the school campus. Ease of access by students from the playgrounds and classroom spaces during recess/break times should be considered. Nearby areas include restrooms. The library's location should be easily accessible by the public for after-hours programs. The workroom, including a multimedia production center and AV storage areas, are adjacent to circulation desk and computer workstations.

Space Needs

High school Library/Media Centers should include a central area for seating and large group activities accommodates at least 36 students seated at tables[14]. Individual study areas on the perimeter are available for eight (8) or more students. Librarian's workroom includes storage, work surfaces, data communications, and a glass wall or large window facing into the library if separate. The storage area is sufficient to house equipment for school-wide use and is secured in a windowless, locked room or cabinetry. Large window space in the main area adds to the appeal and comfort of the library as a reading and

[14] CDE requirements: Article 4; 14030.k.3 https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

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meeting room; however, provisions are made to darken the room partially or entirely when projection equipment is in use.

Technology

- PC-based computers with barcode scanners and printer for library management system at the circulation desk
- Appropriate software for circulation and catalog functions
- Catalog stations for student use
- Reference computers with internet access for on-line reference and other telecommunication activities
- Clock, intercom, and telephone
- Video equipment for production, recording, and dubbing
- WIFI located throughout the room
- Power, phone, and computer cables in raceways are protected and do not interfere with counter activities
- Charging

Cabinetry/Storage

- Sturdy, adjustable non-pressboard shelving
- Perimeter shelving with a maximum height of 5' and a minimum overall length of 750 linear feet in 3' to 4' sections
- Space for some portable shelving is also provided, with a minimum of 250 linear feet divided into sectional units that can be placed appropriately throughout the reading area
- Shelf space next to circulation counter for books in process
- Locking storage cabinets for supplies and other valuables

Utilities

- Wall outlets throughout for power
- Adequate lighting with maximum adjustability
- Thermostat for control of central heat and air
- Sink and running water in librarian's workroom
- Power available for staplers, bulk erasers, laminators and other machinery

Furniture and Equipment

- Adjustable tables and stackable chairs for 40 students
- Magazine rack and newspaper holders
- Large 8-foot pull-down screen with matte finish mounted on ceiling near main seating area to be used for overhead projector, video, and other visual presentations
- Library circulation counter with drawers, shelves, working surfaces,

built-in book return slot and rolling box. The counter has space for a computer and scanning systems for library circulation, including built-in electrical. At least six (6) feet of counter is at 28-inch height to accommodate checkout by small children. Other counter space is comfortable working height for adults.

- Work table and desk for staff
- Movable study carrels or tables for independent work
- Carpeting
- Comfortable places for reading
- Drafting type angled-top table for laying out large books, maps
- Built-in shelving that is an appropriate height for students
- Interior shelving is half-height to provide for appropriate supervision.
- Display space for viewing special projects, books, school awards, etc.

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HIGH SCHOOL COMMUNITY ROOM

Program Description

Each high school site will have a Community Center | Wellness Room for the campus community and the community as a whole. Educators agree that student wellness and academic achievement share a critical relationship – as evidenced by research findings published recently by Collaborative for Academic, Social, and Emotional Learning (CASEL). According to CASEL's recent post of industry trends, 90% of secondary and elementary teachers agree that promoting Social Emotional Learning would improve their students' outcomes.[15]

The Community Room | Wellness Room's mission is to two-fold: 1) To foster strong partnerships between teachers, families, administrators, students, and community partners through open dialogue, inclusive spaces, ongoing learning, and shared responsibilities that drive and unify the school community, providing a place to gather, seek resources and collaborate and 2) To provide students and staff with opportunities to focus on self-care and developing healthy coping strategies while reducing stress and anxiety.

The design of these spaces allows students and staff to experience a quiet atmosphere and have a chance to "reset". This space should provide relaxing and inclusive spaces for staff and students alike. Similarly, providing Community and Family resources and opportunities for engagement is key to a healthy and thriving school and community.

Curriculum and Anticipated Use

The Community Room provides an area for students, staff and families to gather, gain resources, connect with staff, and become involved contributors of the school community.

Orientation and Relationship

The Community Room is easily accessible for students, staff and parents to the front of the school near administration so that parents and students can easily access.

Space Requirements

- 500 to 960 square feet depending on school size
- Ample space and storage are needed for multiple staff, students and adults that will be sharing the areas
- Semi-private and private spaces in addition to a larger communal space

[15] STS Education: https://stsed.com/wellness-rooms/

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- Lighting that supports reduces stress – avoid linear evenly spread lighting and seek ambient lighting that creates place
- Minimal visual stimulation through the use of muted colors
- Tackable walls for displays
- Carpeting

Technology

- Full access to technological devices and outlets for adequate electrical service, including telephones, electrical outlets, alarm system, HVAC, and network drops
- WIFI

Cabinetry/Storage

- Flexible, movable and ample
- Lockable storage, including coat closet, and adjustable open shelving

Utilities

- A sink and counter space for coffee pot, small refrigerator
- Plentiful electrical outlets

Furniture and Equipment

- Movable partitions to create smaller spaces
- Soft furnishings
- Multiple seating options (surface, height, configuration) to allow those that use the room to feel ownership of the space. The furniture should support a posture and orientation of comfort and relaxation
- Movable tables and chairs
- Movable computer tables
- Bookshelves
- Desks for one (1) or two (2) staff
- VoIP handsets

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STUDENT COMMONS

Program Description

A Student Commons is a comfortable, open space that provides *all* students with a place to dine, study, relax, socialize, 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 spaces providing display areas, including digital displays, for campus-wide events and clubs. This environment includes WIFI sufficient to serve devices for the room's capacity and adequate charging stations for student devices including personal devices such as cell phones.

The Commons and its adjoining areas are used to accommodate a variety of uses, including students' and staffs' 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.

Image 11: Student Commons Area

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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.[16]

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.

Orientation and Relationships

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.

[16] CDE requirements: Article 4; 14030.k.1 https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

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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.

Program Area

- Commons

  To be used for café-style, large group activity and small group activities (4-8 person seating)

  4,500 square feet (approximately) to accommodate sit down dining for 300

  Acoustical ceiling (high perforated metal decking)

  Sound system

  Portable staging

  Storage for folding chairs and tables

  Technology charging stations

  Large screen monitors (2-4)

  Portable whiteboards

  Variety of furnishings, heights and sizes, soft furnishings, tables and chairs, counter areas and technology access

  Abundant, high quality natural daylighting

  Connection to adjacent outdoor area with operable partitions

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- Outdoor Dining
  - Adjoins Commons
  - Covered
  - Located to provide line of sight passive supervision from the inside of the Commons
- Food Prep
  - Under separate specification
- Student Store
  - Outside covered access (in or near cafeteria)
  - Counter space with display areas
  - Service line
  - "In" and "Out" doors
  - Counter with sink and multiple outlets behind service counter
  - Built-in shelves above back counter
  - Built-in lockable storage counters
  - (2) Computers / cash registers
  - Electrical outlets dispersed
  - Space and utilities for self-service items
  - Separate lockable storage
  - Shelving for material and supplies
  - (4) Full-height locking storage
  - Desk
  - Filing Cabinet
  - Networked computer
  - Glass window between office and store

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- Custodian Storage
- Custodial Workroom
- Storage for chairs and tables

Space Needs— Commons

o Commons	4,600 sq ft
o ASB Store/Storage/Office	600 sq ft
o Electrical	75 sq ft
o Restrooms each (a total of 2)	125 sq ft
o Restroom (gender neutral)	75 sq ft
o Study Area	450 sq ft
o Commons Storage	450 sq ft

Space Needs - Kitchen

Kitchen size is determined by the student population and should comply with the following:

Population	Minimum Kitchen Space
Up to 500 students	425 sq. ft.
500 to 750 students	725 sq. ft.
750 to 1,300 students	1,000 sq. ft.

- o Comply with all local Health Department requirements
- o Flooring should be non-skid and meet health department requirements
- o All kitchen walls must have a Fiberglass Reinforced Plastic (FRP) covering. The wall behind the three-compartment sink to have stainless steel covering (only on back wall from the top of the sink station to the underside of the overhead cabinets).
- o The rear kitchen door must be solid, 48" wide, with fly fan, buzzer, and peephole
- o Doorways between the kitchen and adjacent spaces must be wide enough to accommodate relevant mobile equipment that is 48 inches wide
- o A three-compartment sink should be provided for hand washing trays.
- o A "booster" for hot water must be provided, if necessary. Hot water must reach 120 degrees in 15 seconds or less.
- o A hand-washing sink must be provided, preferably located on the wall near the rear door, with easy access for the food service workers. Foot-control pedals are preferred. A "booster" for hot

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water must be provided, if necessary. Hot water must reach 120 degrees in 15 seconds or less.
- Wall-mounted dispensers must be provided. A minimum wall space between the top of the 3-compartment sink and the overhead cabinets is 20" to provide room for the proper installation of the chemical dispensers.
- All lower casework must be at least 6" off the floor
- All drawers and cabinets are for food service use only and must be lockable, and all locks should be keyed to the same number

Technology

- Computer terminal in the kitchen and near the serving area with network access
- VoIP at the lead worker's desk and one data line

Storage/Cabinetry

- A dry storage room must be provided and should be at least 8' wide and 10' long
- Undercounter storage to accommodate specific small equipment and supplies

Utilities

- Electrical outlets to accommodate kitchen equipment
- Adequate ventilation in the kitchen (heating and air conditioning), exhaust fans for ovens
- There should be numerous electrical outlets in the kitchen for existing and future equipment needs
- At least two (2) electrical outlets must be provided at the lead worker's desk area

Furniture and Equipment

- Cash safe
- Chemical dispenser two (2), chemical (Ecolab)
- Preparation table (stainless steel 30" wide by 60" long by 36" high, four (4) locking castors, two (2) undercounter drawers with locks)
- Counter space (built-in)
- Office equipment (desk, chair, file cabinet)
- Shelving, various units (dry storage; walk-in)
- Storage locker
- Wall clock

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PHYSICAL EDUCATION

Program Description

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.

Orientation and Relationship

The High School Physical Education Program is clustered with other spaces that are shared with the public since MDUSD's schools are to serve as a center of the community.

The spaces needed to support the High School Physical Education Program and Athletic Program consist of both indoor and outdoor spaces to support multiple athletic activities simultaneously both during school hours and after hours for athletics and classes offered to the public.

The outdoor spaces should provide ample space for the different sports-related P.E. exercises and athletics programs each school offers. Proper orientation of courts and play fields and shaded bleachers is essential to protect students and spectators from the sun. Courts should be multipurpose (i.e. basketball/volleyball court), finished in low albedo colors if budget allows or covered with shade structures. Bathrooms and drinking fountains should be easily accessible to students and community using the outdoor courts and fields. P.E. teachers and Athletics coaches will have keys to the bathrooms and keep them locked except for during class time or after school events.

The Gym Lobby should showcase school pride by housing athletic awards and the Gym should be a beacon for the community. The Gym serves as a fitness center should be flexible and open, supporting several indoor athletic programs. It should have high ceilings, natural daylight and the capacity for natural ventilation instead of purely relying on mechanical systems. Since gyms are often used for school and community gatherings, gyms should allow for darkening for films or presentations. To increase flexibility, it should be equipped with movable walls to allow the gym to expand and contract as needed to accommodate multiple classes.

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Additional indoor spaces include:
Athletic Weight Room, Wrestling Room, and a P.E. Fitness Room which can be used for classes such as aerobics.

Space planning details essential for the indoor spaces include:

1) Doorways wide enough to allow large equipment to pass through and
2) lockable closets along one wall to store yoga mats, weights, jump-ropes, and other small equipment

Orientation and Relationship

The Multipurpose Room is used for physical education during inclement weather. Asphalt (permeable as required) areas are between grass fields and school classrooms. Supervision of play fields is not obstructed by buildings or objects that impair observation.

Space Requirements[17]

The main Gymnasium spaces should be sized for competition basketball and volleyball courts with bleachers as space allows. Since it is the one space on campus that can hold the entire student population, audio reinforcement for presentations is necessary.

Seating for one half of the student population should be provided for assembly use.

Adjacent locker rooms should have adequate lockers to hold uniforms and backpacks. Locker rooms should be laid out to provide adequate supervision of the locker room. The PE programs do not require showers. In future renovations the district must provide fully accessible locker rooms, a changing area, and restrooms. Accessible lockers are also required, which must have a lock that does not "require pinching, grasping, or twisting" motions.

A Physical Education Classroom space should also be provided, ideally adjacent to the Gym, fields and/or playground. This classroom could allow for group instructions, test taking, CPR training and other complementary programs. Sports facilities should be co-located and should include a teaching classroom as well as fitness or therapy rooms.

[17] CDE requirements: Article 4; 14030.j https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

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HIGH SCHOOL SCIENCE

Program Description

The vision of the Next Generation Science Standard (NGSS) and adopted California Science Frameworks (2016) as well as the Mt. Diablo Unified School District is to prepare students to be future citizens and versed in the domains of science, technology and art, allowing them to develop a coherent and scientifically-based view of the world around them.

Instruction in the science classroom will integrate whole-group direct instruction with small group differentiated instruction and collaborative activities such as lab exercises. As a result, the size of the classroom must be large enough to allow for laboratory stations to accommodate a minimum of 32 students, with a demonstration table at the front of the room for the teacher's use.

Teachers will utilize a variety of technologies to deliver instruction. The classrooms will be equipped per the Instruction Technology specification provided earlier in this document with any additional needs to be reviewed as technology evolves over time.

Orientation and Relationship

For STEAM program possibilities, the science area will benefit by being close to math and art classrooms. Additionally, the science classrooms have flexibility without a built-in student lab area to accommodate other disciplines, if desired.

Space Requirements

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[18] square feet including storage and teacher preparation areas. It will include 8 lab stations on the perimeter for five 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.

[18] CDE requirements: Article 4; 14030.i.1 https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

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Each science classroom will have cabinets, bookshelves and whiteboards. One wall will have all tackable surfaces, base cabinets, sinks, counter space that is chemically resistant, arid 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, access to projectors and screens, 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.

Space Requirements – Science Labs

- 1,300 square feet including prep and storage[19]
- Four (4) lab stations for 37 students around perimeter of room centered on four (4) sinks
- Open areas in the center of the classroom for mobile student furniture Student lab stations equipped with:
  - Sink
  - Chemical resistant countertops
  - Electrical outlets
- All safety equipment required by code including eye wash and deluge shower
- Moveable workstations
- Student display areas
- Teaching wall

[19] CDE requirements: Article 4; 14030.i.1 https://www.cde.ca.gov/ls/fa/sf/title5regs.asp

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Space Requirements – Central Science Preparation Rooms

- 200 square feet each
- One (1) shared by two (2) science classrooms
- One (1) dishwasher per floor or wing in single prep room
- One (1) refrigerator per floor or wing in single prep room
- Ample counter space
- Plentiful electrical outlets
- Lockable storage cabinets
- Designated areas for use of hazardous materials
- Floor and ceiling ventilation at chemical storage Space for copier

Instructional Technology (See Instructional Technology Section, Page 22)

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HIGH SCHOOL 2D / 3D ART

Program Description

At each school level, art instruction should provide avenues in which each student can work at a personalized pace to learn and develop self-expression and self- confidence and engage in arts integration, creativity and design-thinking.

The *Visual and Performing Arts Content Standard for California Public School (2001)* outlines subject area standards that provide the foundation for instruction.

A significant trend is the inclusion of the multifaceted role of media and electronic technology in the arts. California is an international leader in the technology and entertainment industries; providing our students with an education in the arts supports our state's future and our economy.

The curriculum for visual arts education in the high school program encompasses components of 2D and 3D design. This includes drawing, painting, ceramic, sculpture, photography, videography and multi-media. Technology is used throughout all of these disciplines. It is important to incorporate the ability to display projects to the school community and to have as versatile a space as possible.

Instruction in the arts utilizes numerous strategies including teacher-directed instruction and student-centered learning. Grouping strategies allow students to collaborate and to experience the arts as performers, creators, and patrons. The classrooms will be equipped per the Instruction Technology specification provided earlier in this document with any additional needs to be reviewed as technology evolves over time.

Orientation and Relationship

For STEAM program possibilities, the art area will benefit by being close to the science area. Additionally, the art classroom should have an orientation to outdoor instruction space and an art courtyard that can be shared with STEAM programs.

Space Requirements

Classroom Area Layout

Instruction in the art classroom will integrate whole-group direct instruction with small-group differentiated instruction and hands-on collaborative activities. As a result, the size of the classroom must be large enough to allow

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for art space to accommodate a minimum of 37 students.

The art classroom will have a learning wall with tall cabinets at each side of bookshelves and whiteboards in the center with a matte finish for short-throw projectors and stylus writing. One wall will have all tackable surfaces, base cabinets, four (4) deep art sinks, counter space, and overhead cabinets. Other walls should have tackable surfaces and at least one electrical charging station for devices.

The art classroom will be equipped with Instruction Technology per the district specification.

Space Requirements – Art Classroom

- 1,500 square feet
- Lab spaces/darkrooms that have student workstations
- Wet side of lab with sinks and chemical storage
- Four (4) accessible, deep art sinks
- Kiln with racks
- 7 feet open shelving
- Utility connections throughout

Space Requirements – Outdoors STEAM Courtyard and Classroom

- Wi-Fi connectivity
- Outdoor activity space for multiple classes
- Wall for projection screen
- Create focal point at perimeter for presenter

Instructional Technology (See Instructional Technology Section, Page 22)

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HIGH SCHOOL MUSIC AND PERFORMING ARTS

Program Description

A Theater space is required for performances, instruction or large group gatherings that serve both the campus community and the larger community. The Theater should have durable, low maintenance and comfortable finishes, a stage area, and appropriate acoustics and lighting. The Theater should also include an easy to connect and use AV system. The Theater should be adaptable to serve as a performance venue and for educational use and presentation and include assembly seating for approximately 300 students. The seating could be flexible and telescoping to allow for a variety of uses of this space when performance or assembly is not occurring.

Flexibility in Theater design also encourages this space to be used for learning and other multiple uses. Support spaces for set design, technical production, a smaller assembly space, drama, music, dance and choir and other dedicated spaces shall be considered as appropriate to support synergistic use of the space. Sufficient storage should be provided to support this space and the technical and musical equipment needs.

The *Visual and Performing Arts Content Standard for California Public School (2019)* outlines subject area standards that provide the foundation for instruction.

Educational technology has had a great impact on arts education. In both instrumental and vocal music, students compose and arrange music using digital and electronic technology when appropriate. As stated in the Visual and Performing Arts Content Standards for California Public Schools, "technology is recognized as an essential tool that enhances learning and expression in all the arts disciplines and provides for expanded forms of expression in digital and electronic media."

Another goal for arts education is to promote academic rigor through active practice, reading, researching, and writing about the arts, and participating in arts criticism.

In addition, guiding students to make connections between all areas of the arts, and across subject areas, is a key focus of the standards.

The curriculum taught in each discipline of arts education is guided by the state content standards. Standards in each subject area are grouped into five strands: artistic perception, creative perception, historical and cultural context, aesthetic valuing, and connections, relationships and applications.

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The Visual and Performing Arts Content Standards for California Public Schools identities three modes of instruction for a comprehensive arts education program:

- Subject-centered arts instruction in dance, music, theatre, and the visual arts
- Instruction connecting the arts disciplines
- Instruction connecting the arts and other core subjects

Instruction in the arts utilizes a number of strategies, which balance teacher- directed instruction with student-centered learning. Grouping strategies allow students to collaborate and to experience the arts as performers, creators, and patrons.

The focus of instruction in all areas of arts education is to develop students' foundation skills in the disciplines(s) studied. Though the content standards identify what students should know and be able to do at each grade level, the Framework makes it clear that decisions about how best to teach the standards should be left to teachers and district staff.

Space Considerations

A state-of-the-art Performing Arts Complex is clustered with spaces the community will use. It supports the Music, Drama, and Dance Programs and some of the Pathway Programs that fall under the Arts, Media and Entertainment Industry Sector. The theater will accommodate all school gatherings such as assemblies and will serve as a beacon for the community with dedicated space and stage with seating for concerts and performances. The theater is surrounded by studios and support spaces needed for these programs including a black box theater with a stage.

For new construction, evaluation of existing site grades and utility infrastructure to ensure the most cost-effective placement of a performing arts center. Establish clearly delineated public zones and back-of-house spaces and entries. Spaces should be flexible and multi-functional to increase the utilization ratio. Music spaces will need more robust acoustical treatments and details for soundproofing rooms in which professional recordings will take place.

The entry to the theaters serves as a transition from the street to serve as a public gathering space before and after performances and is adjacent to public parking and the front of the campus. An external courtyard can serve as an extension of lobby. The theater should have a primary entrance off the Main Lobby to utilize the common support spaces such as concessions, public restrooms and the ticket booth. This would allow for a

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small performance to occur at the same time as the Theater is being used.

Key planning principles for the Lobby to the theaters include:

- Lobby restrooms should only be accessible during performances to reduce supervision issues.
- Gallery space for 2D/3D display of student work from arts programs will instill school provide and make the learning at MDUSD explicit to the community. This display can be done in many ways: (can be digital screens, in display cases or hung on walls)
- Digital displays to broadcast live performances from both theaters to the lobby as well as other parts of the campus.

The Music Program is located near the main theater and its back-of-house services. Purpose designed space is needed for the Dance Studios and for each discipline of Music (Digital, Instrumental, Ensemble and Choral). This allows the theaters to be available for scheduling large events during and after school hours. The theaters and all music spaces for rehearsals and performances should be fitted out to give students the ability and record.

Key planning principles for the theater support spaces include:

- Student restrooms: Locate in the back-of-house area. Back-of-house restrooms should be located to double as additional dressing rooms, if multiple performances are scheduled.
- Costume Storage: requires high ceilings for stacked hanging storage.
- Ticket Booth: Provide adequate internal and/or external access for cueing and coordinate exterior cueing with weather protection area.
- Acoustical engineering specific to the space

Theater Stage:

- Proscenium opening approximately 50 ft. wide x 22 ft. tall (ability to reduce to 40'-0" wide)
- Main stage floor space 50 ft. wide by 30 ft. deep from upstage to back wall
- Wing space minimum 20 ft. wide by 40 ft. deep
- Area to store Orchestra Shell

Theater Forestage/Apron:

- Forestage removable - 5' below stage
- Orchestra Pit
- Receiving area near Scene Shop and Instrumental Music Room:
- Full loading dock

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Scene Shop:

- Storage for variety of large materials for set construction along the perimeter room
- High ceilings
- Exterior covered receiving area

Black Box Theater:

- Provide secondary entries for performers from back-of-house circulation and dressing room/green room functions
- High ceiling with lighting grid
- Raised control room with accessible lift
- Flexible platforms to allow for various staging and seating configurations

Band, Choir, Dance, Music Rooms Orientation and Relationship

Orientation of the music rooms to performance space such as the multipurpose room and outdoor performance areas is optimal.

Band, Choir, Dance and Music Room - Space Requirements

- 1,350 square feet minimum
- Sound proof, and properly attenuated for music
- Room for 40 students
- Carpeted or sprung wood for Dance
- Floor space divided into three (3) tiers (can use portable risers)
- Tiers should be wide enough for chair and music stand for orchestra set-up
- Three (3) sound proof practice rooms for Music
- Large and small instrument storage Room for grand piano
- Tackable walls or mirrored walls with barres for dance room
- Magnetic whiteboards and music cleft whiteboards
- Built-in sound system that will allow for recording
- Multiple electrical outlets on walls
- Large, operable, tinted, and covered windows
- Storage space for sheet music (cabinets)
- Teacher workstation with one (1) computer, telephone, and cable drop per Instructional Technology Specification and General Classroom Specification

Instructional Technology (See Instructional Technology Section, Page 22)

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DISTRICT STANDARD GUIDELINES

GENERAL

- 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
    - FRP
  - Hardware
    - Locksets – Schlage numbered/lettered cylinders and/or Everest cylinders
    - Panic hardware – Von Duprin
    - Columbine-style locking
  - Door Closers - LCN
  - Interior doors have kick plates
- Casework shall conform to the Architectural Woodwork Standards adopted by the Woodwork Institute (WI). 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.
  - Olympus locks
- Multi-Purpose (MP) Room storage areas should have a 4-foot high FRP wainscoting.
- 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.
- "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 at all campuses at exterior doors that shall have crash bars and Columbine locks.
- Interior lighting should be provided with Occupancy sensors
- Window coverings for solar control and visual privacy from the outside and visibility to the outside from inside.

Flooring

- Carpet only in the office, library, and some areas as noted in specification.

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- 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 door height.
- 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.
- Waterless urinals
- Electric hand dryers
- Sloan (or equal) electric flushometers.
- Two (2) center floor drains with cleanouts.
- Glass with stainless steel frame mirrors.
- Wall hung water closets.
- Individual porcelain wall hung sinks.
- Delta metered faucets (potential for motion activated in the future)
- Toilet paper dispenser – jumbo roll
- Soap dispensers, bulk fill.
- Cold water only is 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 or durable alternate material that is low maintenance and graffiti-resistant/treated.
- 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 Marques that are digital and hard-wired.
- Building exterior finish materials adjacent to playgrounds must be of a durable construction to withstand balls.

Locks (See above door specification)

- All classrooms, multi-purpose rooms, and library rooms shall have

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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 Schlage

Roofs

- Roof access should be from the interior of the building (custodial closets) – new buildings only.
- Flashing should be galvanized sheet metal, 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.
- Exterior lighting to include only vandal resistant covers.
- All exterior lighting shall be controlled via photo-cell sensors and/or lighting control system.

Technology (see Instructional Technology Section page 22)

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.

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- 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.
- WIFI

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 is 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.

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OPERATIONS—GROUNDS, SECURITY AND TRANSPORTATION

GROUNDS

Landscaping

- Fully automatic Rainbird irrigation system installed to service all turf and planter areas over entire site.
- All planter areas near walkways or in quad are raised.
- Grade level planters are next to lawn areas.
- All landscape shrubs and trees are selected from common nursery stock that is easily replaceable.
- Type of grass is determined after soil analysis and is drought resistant.
- All trees and shrubs submitted on landscape plans are free of thorns, do not bear any fruit or berries, and do not attract bees or other insects.
- Trees and shrubs do not interfere with any field activities, any vehicular traffic on campus, the visual ingress and egress of students, staff or visitors accessing the school site and 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.
- 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.
- All facilities are District Security monitored.

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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 to the fields and hard court areas.
- Panic bars are required on street exit gates.

Windows

- To optimize both daylighting and energy conservation, use monolithic 1/4 -inch glass with a Visible Light Transmittance (VLT) of approximately 65% and a Solar Heat Gain Coefficient (SHGC) of approximately 0.50. Other glazing combinations may be considered by the District if they can be justified with life-cycle cost and energy savings.

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 climbing.
- Garland roofing products per District Standard

HVAC

- VRF - Mitsubishi
- Gas-fired rooftop - Carrier

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TRANSPORTATION

Walkers Travel Path

- Student pedestrians have a safe, direct path to travel.
- 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 prevents students from traveling through the auto or bus parking areas.
- Enough racks appropriate to site size (ask Principal) for bicycles are installed and bolted in place.
- Entire bicycle rack area is surfaced with asphalt.
- Bicycle rack area is encircled with a six (6) foot-high anti-climb fence (as appropriate to site size) with a double gate of 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.

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

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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 off for disabled students is in the same location as for regular education students.