RESOLUTION NO. 15/16-3111

BOARD OF EDUCATION

SANTA ANA UNIFIED SCHOOL DISTRICT

ORANGE COUNTY, CALIFORNIA

ADOPTING DISTRICT EDUCATIONAL SPECIFICATIONS

WHEREAS, the Santa Ana Unified School District building inventory consists of over fifty five school sites including Administrative support facilities; and

WHEREAS, the Board of Education is committed to the development of the Santa Ana Unified School District's facilities, quality educational programs and student achievement; and

WHEREAS, the Superintendent's Facility Improvement Advisory Committee was formed in October of 2008; and

WHEREAS, the Superintendent's Facility Improvement Advisory Committee consisted of educators, administrators, and community members that collaboratively worked over a period of sixteen months to determine the essential design elements of school facilities needed to promote the educational programs and goals of the District; and

WHEREAS, the Superintendent's Facility Improvement Advisory Committee expertise was used in conjunction with the California Department of Education's recommendations and the requirements of Title 5, California Code of Regulations Section 14030[a]; and

WHEREAS, the Board of Education approved the 2010 Educational Specifications on January 26, 2010; and

WHEREAS, SAUSD staff updated the 2010 Educational Specifications to include relevant programmatic changes that impact classroom design, such as instructional technology innovations and Science, Technology, Engineering, and Math ("STEM"); and

WHEREAS, school districts that utilize State School Facility Program funding are required to submit Educational Specifications to the California Department of Education as a condition of Final Plan Approval of construction projects; and

WHEREAS, the Santa Ana Unified School District is actively participating in the State School Facilities Program; and

WHEREAS, the Santa Ana Unified School District's Educational Specifications are incorporated into the District's Facilities Master Plan;

NOW, THEREFORE, BE IT RESOLVED THAT THE BOARD OF EDUCATION OF THE SANTA ANA UNIFIED SCHOOL DISTRICT HEREBY ADOPTS AS FOLLOWS:

1. That the Board approve and adopt the Santa Ana Unified School District's Educational Specifications as a part of the Facilities Master Plan;

3. That the Board authorizes staff to create and/or reconvene committees as deemed necessary;

4. That the Board of Education encourages staff to explore and to test pilot new materials, equipment and systems for inclusion into the standards as appropriate to ensure best practices and current materials and methods are adopted and utilized.

The foregoing resolution was considered, passed, and adopted by this Board at its regular meeting of 28th day of June 2016.

Upon motion of Member **Amezcua** and duly seconded, the foregoing Resolution was adopted by the following vote:

AYES: **John Palacio, Rob Richardson, Valerie Amezcua, and Cecilia Iglesias**
NOES:
ABSENT **Jose A. Hernandez**

STATE OF CALIFORNIA)
) ss:
COUNTY OF Orange)

I, John Palacio, President of the Board of Education of the Santa Ana Unified School District of Orange County, California, hereby certify that the above and foregoing Resolution was duly adopted by the said Board at a regular meeting thereof held on the 28th day of June 2016 and passed by a vote of **4-0** of said Board.

President of the Governing Board for the
Santa Ana Unified School District, State of California

I, Valerie Amezcua, Clerk of the Board of Education of the Santa Ana Unified School District of Orange County, California, hereby certify that the above and foregoing Resolution was duly adopted by the said Board at a regular meeting thereof held on the 28th day of June 2016 and passed by a vote of **4-0** of said Board.

Clerk of the Board of Education of the
Santa Ana Unified School District, State of California

The foregoing resolution was considered, passed, and adopted by this Board at its regular meeting of June 28, 2016.

By: _____
John Palacio
President of the Board of Education
Santa Ana Unified School District

Attest:

_____
Valerie Amezcua
Clerk of the Board of Education
Santa Ana Unified School District

STATE OF CALIFORNIA)
)ss
ORANGE COUNTY)

I, Valerie Amezcua, Clerk of the Board of Education of the Santa Ana Unified School District of Orange County, hereby certify that the foregoing is a true and correct copy of Resolution No. 15/16-3118, which was duly adopted by said Board at a regular meeting thereof held on the 28 day of June, 2016, and that it was so adopted by the following vote:

AYES: **John Palacio, Rob Richardson, Valerie Amezcua, and Cecilia Iglesias**
NOES:
ABSENT:
ABSTENTIONS:

By _____
Valerie Amezcua,
Clerk of the Board of Education
Santa Ana Unified School District

2016

Educational Specifications

Santa Ana Unified School District

Adopted by Resolution June 28, 2016

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SANTA ANA UNIFIED SCHOOL DISTRICT
1601 East Chestnut Avenue – Santa Ana, California 92701 – (714) 558-5501

BOARD OF EDUCATION

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SUPERINTENDENT

DAVID HAGLUND, ED.D.
DEPUTY SUPERINTENDENT
EDUCATIONAL SERVICES

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K-12 TEACHING AND LEARNING

ORIN WILLIAMS
ASSISTANT SUPERINTENDENT,
FACILITIES AND GOVERNMENTAL RELATIONS

JESSICA MEARS
SENIOR FACILITIES PLANNER

FAILURE IS UNACCEPTABLE!
SUCCESS IS THE STANDARD...IT'S UP TO US ALL!

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ACRONYMS

CDE	California Department of Education
CHPS	Collaborative for High Performance Schools
DTSC	Department of Toxic Substances Control
DSA	Division of the State Architect
HVAC	Heating, Ventilation, and Air Conditioning
IDEA	Individuals with Disabilities Education Act
LCD	Liquid Crystal Display
LEED	Leadership in Energy and Environmental Design
MPR	Multipurpose Room
OPSC	Office of Public School Construction
PE	Physical Education
RSP	Resource Specialist Program
SAB	State Allocation Board
SDC	Special Day Class
SF	Square Feet
SH	Severe Handicap
TS	Teaching Station

1.0 INTRODUCTION

The Santa Ana Unified School District (District) has a rich history in Southern California. The District was formed in 1888 and has grown over the last 120 years to house over 54,000 students in 60 schools. As the District looks toward educational excellence in the 21st century, school design is essential to this vision. School design must allow for flexible learning environments and foster positive student interactions so students can be motivated to perform to their full potential.

The Educational Specifications is a document that outlines the essential design components of a school facility. In October 2008, the District created the Superintendent's Facility Improvement Advisory Committee (Committee) consisting of educators, administrators, and community members to determine the essential elements of school facilities needed to promote the educational programs and goals of the District. The Committee convened with the goal of creating an Educational Specification that serves as a guide to architects and ensures that future projects promote the educational objectives of the District.

The 2010 Education Specifications was updated by the District Administration in 2016 to include relevant programmatic changes that impact classroom design, such as instructional technology innovations and Science, Technology, Engineering, and Math ("STEM").

This document is intended to address school facility needs across the District and is applicable to new construction, modernization, expansion, and other improvements. The specifications are intended to help provide equality among the schools, which will serve as the basis of the District's educational program.

The District has developed an ambitious building program to meet the needs of aging facilities and overcrowding. While the design principles detailed in this document are a priority of the District, the Committee recognizes that sufficient student housing is the first priority, and the design elements will be adjusted as appropriate for each individual project based on the project's funding sources, cost, site size, and other constraints. The desired facility specifications should be considered guiding principles for the design professionals, and should not be considered facility mandates. The Educational Specifications should be regarded as a living document and should be updated on a regular basis, if needed, to address projected enrollment, construction costs, programs changes, and technological advances.

1.1 REQUIREMENTS

School districts that utilize State School Facility Program funding are required to submit Educational Specifications to the California Department of Education as a condition of Final Plan Approval of construction projects (Title 5, California Code of Regulations Section 14030[a]). The Educational Specifications shall define the following:

- Enrollment of the school and the grade level configuration
- Emphasis in curriculum content or teaching methodology that influences school design
- Type, number, size, function, and special characteristics of each space.
- Spatial relationships of the instructional area that are consistent with the educational program
- Community functions that may affect the school design

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2.0 DISTRICT'S GUIDING STATEMENTS

2.1 MISSION STATEMENT

The Santa Ana Unified School District is dedicated to a world-class education leading to high academic achievement, in a scholarly and supportive environment, ensuring that all students are prepared to succeed in their future careers and accomplish their goals in life. Our primary facilities goal is to assist school site teachers and teacher leaders in the delivery of high-quality learning environments that are supportive of student choice and result in each student being prepared for college and/or career pathway of their choosing. We aim to provide safe institutions that promote a variety of teaching styles and support students' personal and professional goals.

A high-quality learning environment must be one that is highly structured and generously flexible, allowing students to explore and discover, and operates with high standards that challenge students. The ideal environment is one where teachers and students learn together through the open exchange of ideas and information. This collaborative approach allows students to discover the necessary skills to become self-empowered learners. Our District is committed to fostering a supportive school climate that inspires creativity and growth.

We are dedicated to providing classrooms with superior standards. Learning best occurs when students are actively involved in diverse activities, have direct experiences with the physical world, and relate these experiences to what they are learning in school. These endeavors deepen students' knowledge and stimulate their curiosity and passion for learning. Our facilities and amenities encourage students to succeed through proper infrastructure and support spaces, including student production areas, teacher preparation zones, and classroom capacity for presentations. Our facilities accommodate the District's educational programs and nurture an environment with high levels of cooperation, teamwork, and collaboration.

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3.0 METHODOLOGY

The Superintendent's Facility Improvement Advisory Committee was formed in October 2010. The member composition was selected to achieve representation in the areas of educators, administrators, parents, and community members. The Committee collaborated regularly for a period of sixteen months to determine the essential design elements of schools needed to promote the educational programs and goals of the District. The committee analyzed other districts' specifications documents and visited existing school sites at the elementary, intermediate, and high school levels to discuss design elements and essential core facilities' needs. The Educational Specifications were developed from committee member input, educational program needs, staff recommendations, and California Department of Education requirements and recommendations. The Committee's efforts have culminated into this Educational Specifications document.

The 2010 Education Specification document was updated by the District Administration in 2016 to include relevant programmatic changes that impact classroom design, such as instructional technology innovations and Science, Technology, Engineering, and Math (STEM).

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The educational philosophy of the Santa Ana Unified School District centers on the Mission Statement. The Superintendent's Facility Improvement Advisory Committee was created for the purpose of identifying the instructional priorities of the District and determining the facility design that would support the educational objectives. The following educational specifications resulted from the Committee's collaboration.

The implementation of facility standards establishes desired conditions for specific school facilities, but does not ignore the flexibility needed to accommodate the specialized programs and unique site conditions of each campus. The following standards should be used to guide design professionals, and should not be considered facility mandates. The District recognizes that some facilities may fall below the indicated standards, and cost considerations, site size, or other circumstances may hinder improvements.

4.1 SITE SELECTION

All school sites shall ensure the safety of the District's students and provide accessibility and compatibility within the surrounding community. School sites should be located within the proposed attendance area to encourage student walking and promote neighborhood schools. Site selection should look for opportunities for joint use of parks, libraries, and other public services. Based on the Title 5 California Code of Regulations, all school sites should not be located within close proximity to high voltage powerlines, hazardous waste or pollutants, railroad tracks, freeways, earthquake faults, or within flooding zones. Site soil conditions should not be susceptible to liquefaction or landslides.

4.2 MAINTENANCE

Maintenance and operations considerations were major guiding principles considered during the development of the Educational Specifications. Easily maintained facilities will allow the District's resources to be focused on the educational programs. All District facilities shall be designed for longevity, ease of cleaning, and convenient repair to ensure safe, quality teaching environments for all students and staff.

4.3 ACCESS COMPLIANCE

Compliance with the American's with Disabilities Act is an essential design principle. All District facilities shall have handicap accessibility and allow people with disabilities to participate fully in school and community life.

4.4 SUSTAINABILITY

School districts are increasingly recognizing the benefits of green schools. Smart design of the District's new construction and modernization projects can not only create comfortable and ideal environments for learning, but will reduce utilities and operating costs for the District. Green schools cost less to operate, freeing up more resources to improve student education. Smart design that utilizes natural daylight improves learning, and clean air design reduces illness and sick days. The District will utilize innovative green design principles consistent with Collaborative for High Performance Schools (CHPS) and Leadership in Energy and Environmental Design (LEED) requirements, where feasible, to strengthen academic learning and give students a head start for a prosperous future. The District will look for opportunities to incorporate green elements and materials into the design of its school facilities, but must consider the upfront costs of green construction in conjunction with the operational savings to ensure a benefit to the District. Green building will be considered on a project by project basis for feasibility and constraints.

4.5 CURRICULUM CONTENT AND TEACHING METHODOLOGY THAT INFLUENCE DESIGN

Santa Ana Unified School District schools offer a comprehensive program of studies embracing the core curricular areas of language arts, social studies, mathematics, and science, as well as instruction in technology and science. The instructional focus of the District is for students to excel in the core content areas of curriculum, personal growth, and moral development in order to graduate high caliber citizens for the community. The District is committed to the 21st century school design models that promote communication, collaboration, and pursuit of creative intensity, but will support and encourage individual school innovations that provide for smaller learning environments where children can excel. Emphasis will be placed on critical thinking skills and curriculum standards in the core content areas. Teachers will be encouraged to deliver the curriculum through a variety of instructional methodologies and resources, including the use of technological devices.

4.5.1 Core Concepts

The District will include technology to improve academic achievement and enhance the core curriculum. Students will acquire benchmark skills, including data collection, ethical use of information, and Internet safety skills, and will ultimately be prepared for lifelong learning and success in our digital society. Technology is embedded through the curriculum and will be available for student use in the classroom, as well as in computer lab settings. All students will be required to meet District requirements for basic computer applications and have access to computer-assisted learning and research opportunities. Classroom infrastructure will be equipped to support one-to-one devices, student charging stations, and one teacher computer station, all which will have internet connections and a projector system. The projectors are intended to enhance student engagement and allow for visual learning strategies. Classrooms will be linked to a central communications system for the transmission of voice and data, and broadcast cabling will provide educational programming. In addition to the classroom features, each school will have wireless internet and at least one computer laboratory for instructional and student use, per the District's Education Technology Plan.

At the high school level, coursework will satisfy University of California and California State University requirements for college entrance, and the school facilities will need to accommodate the rigorous curriculum. The emphasis on core academic studies will be supplemented by career technical education (CTE) for students in grades 9 through 12. The District's high school campuses will provide occupational training and certifications in conjunction with the Regional Occupational Program and the High School Inc. Academies Program. Emphasis will also be placed on co-curricular and extra-curricular opportunities for students. High schools will feature strong programs in a variety of performing arts, visual arts, and athletics.

4.5.2 Technology Integrated Education

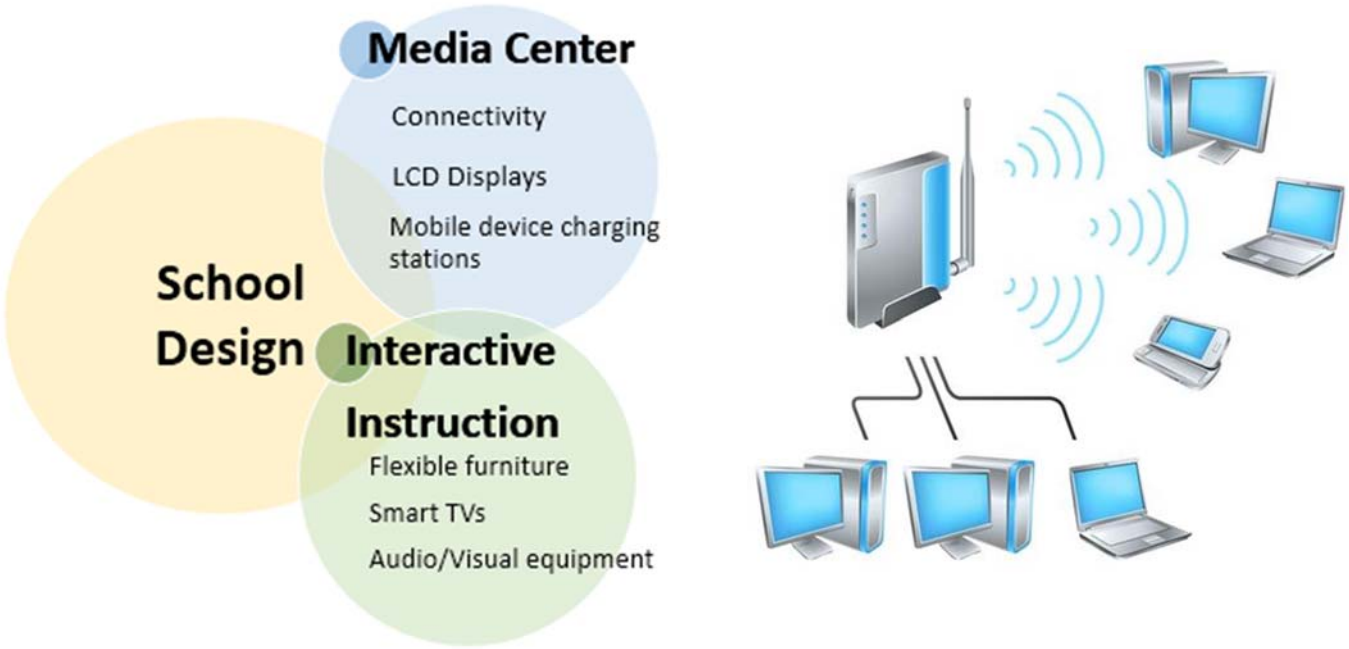
The District believes is not too early to reinforce the importance of technology and career readiness at the elementary and intermediate school level. Without this preparation, by high school, students often lack the academic foundation and confidence in technology and overlook the potential opportunities utilizing technology-related skills. In order to fulfill our mission, it is essential to start at the elementary level engaging students with hands-on, technology-based learning that will inspire students to pursue those opportunities.

The District has implemented a curriculum integrating Math, Science, Social Science and Language Arts classes with technology education in a fun and comprehensive way. Different learning theories and practices such as project-based learning, student-centered learning, and differentiated instruction are incorporated into our technology-integrated approach. Wi-Fi, computers, and appropriate bandwidth are highly prioritized in classroom settings to support these educational programs.

By the completion of their elementary school education, students will obtain fluency in computers and learn introductory level computer literacy. Their classes will be supported with problem solving and creative thinking skills. Students will be offered computer programming and technology courses as electives. These will include,

but are not limited to, Computer Literacy, Computer Programming, Digital Art, and Robotics. Our facilities reinforce these courses with necessary infrastructure and supplementary applications.

To keep up with today's rapidly evolving technology, the District is changing the way computers are provided to students. The traditional stand-alone computer lab, while still essential for certain specialty classes, is not the best option for students to receive optimal interaction with technology. For example, a typical elementary school has one computer lab shared by the teachers, while one-to-one devices provides all-day access to digital curriculum. Therefore, the District is shifting from stand-alone computer labs towards providing one-to-one devices for all students. These devices are also utilized at home for homework purposes, and in some cases serves as the family's only computer access. The District is in the process of securing these devices for all students for greater instructional delivery and accessibility. This District-wide transition of advancing to wireless devices and digital curriculum impacts current and future infrastructure and facilities' needs.



4.5.3 Science, Technology, Engineering, and Mathematics (STEM)

As the nation's economy base has shifted from industry to technology, the future will require a highly adaptable and technologically-competent workforce. It is critical that the student population is science and technology literate. An education with a focus in STEM will help students acquire scientific and critical thinking habits. With increasing global competition, a successful, educated person in the 21st century must keep a competitive edge in the STEM disciplines.

Individual and societal decisions increasingly require some understanding of STEM, from comprehending medical diagnoses to managing daily activities with a wide variety of computer-based application. While there has been a rise in the number of STEM learning programs in the United States, the state of STEM learning still requires leaps and bounds before it can reach adequacy. Research suggests that many students are currently not prepared for the demands of the present and future economy. As measured by the National Assessment of Educational Progress, roughly 75 percent of U.S. 8th graders are not proficient in mathematics when they complete 8th grade. Furthermore, there are significant gaps in achievement between the following student population groups: black/white, Hispanic/white, and high-poverty/low-poverty gaps. U.S. students also lag behind the highest

performing nations on international assessments. For example, only 10 percent of U.S. 8th graders met the Trends in International Mathematics and Science Study advanced international benchmark in science, compared with 32 percent in Singapore and 25 percent in China.

Our school district incorporates mobile furniture and flexible learning spaces to support the rigorous STEM curriculum. Students are able to participate in group sessions or individual work for their project-based learning, using flexible fixtures to enhance their learning experience. This provides an opportunity for an enriching student experience in the classroom. Teachers can also maneuver the furniture, including desks, tables, and chairs, to support a student-oriented curriculum; they can adjust the classroom setting to the appropriate corresponding syllabus. Mobile teacher stations, for instance, can provide the accessibility and ease to facilitate multiple student group sessions. Teachers as well as students can customize the space to their educational experience.

4.6 COMMUNITY FUNCTIONS THAT INFLUENCE DESIGN

The District is committed to fostering a partnership with the community and making schools an integral part of the community. The District recognizes that schools are centers of their respective communities, and supports facilities that allow access to and use by community groups. Community groups may be granted use of facilities such as the libraries, fields, and performing arts areas after school hours. Campus design should maximize community use, as feasible, while ensuring safety and security for students and staff.

At the high school level, the District is committed to alternative education and other community-based efforts, and supports campus design that accommodates alternative education and the Regional Occupational Program. High school design should consider the needs of adult students entering the campus, while preserving the safety and security of full-time students and staff.

4.7 GRADE CONFIGURATION

Elementary School	K-5
Intermediate School	6-8
High School	9-12

4.8 SCHOOL SIZE

The following square footages and densities represent the District's and the California Department of Education's (CDE) recommended standards for educational spaces. The District is committed to these standards, but acknowledges that certain circumstances, such as rapid enrollment growth or site size, may prevent standards from being met.

Minimum Building Square Footage Per Student	
School Type	Square Feet Per Student
Elementary School	59
Intermediate School	80
High School	92

CDE recommendation.

Maximum Density

School Type	# of Students per Acre
Elementary School	150
Intermediate School	150
High School	185

CDE recommendation. Multi-story facilities are added to the net usable acreage of the site.

4.9 AMBIENT QUALITIES

Ambient qualities describe the school environment, including lighting, color, texture, sound, temperature, and security. The District's goal is to provide instructional environments that feel safe and comfortable, and are conducive to learning, creativity, and student interaction.

4.9.1 Lighting

- Light design shall provide adequate and comfortable illumination
- Light fixtures do not produce glare, excessive heat, or block line of sight
- Use of windows to maximize natural daylight but do not cause glare
- Light is evenly distributed throughout the instructional space
- Light fixtures are controlled by manual light switches, motion sensors, and energy management systems

4.9.2 Color

- Natural tones emphasized
- Spaces will inspire students
- Will address students with strong spatial intelligence

4.9.3 Texture

- Natural
- Smooth at the lower levels
- Easy to clean

4.9.4 Sound

- Reduction for sound with absorptive wall material and double-pane windows
- Acoustic design is conducive to instruction

4.9.5 Temperature

- HVAC system with temperature control mechanism
- Adequate ventilation and circulation

4.9.6 Security

- Use of site fencing to create a secure and closed campus
- Sites have a single main entrance with a mandatory visitor check-in
- Classrooms equipped with wall-mounted telephone with outside 911 emergency access
- Campus equipped with public address system
- Additional security measures, such as security cameras, as needed

4.10 SPATIAL RELATIONSHIPS

Classrooms shall be located in close proximity to core facilities and restrooms, and be grouped by grade level. To the extent possible, classrooms shall be located away from off-site noise, such as traffic, and on-site noise, such as music rooms. Spaces and furniture arrangement shall be flexible and allow for group instruction and breakout areas for individual instruction, and for a variety of teaching methodologies.

- Glass partitions
- Moveable walls
- Pass throughs

4.11 SPECIFIC CHARACTERISTICS

The following building characteristics are listed by room or building type and are intended to apply to all grade levels. Any additional facility specifications needed for higher education programs are listed as a subsection.

4.11.1 Classrooms

STANDARD CLASSROOM (see below diagrams for classroom layouts)

Standard classrooms will provide a comfortable learning environment for instruction in the core curriculum content areas. Technology and data connections will be incorporated into the classroom design to complement curriculum.

- 960 square feet
- All walls tackable for maximum display space or whiteboard space (floor to ceiling)
- Adequate quantity and placing of electrical outlets on all walls
- Two 12-foot tack boards on adjacent walls at intermediate and high school level
- 6'W X 7'H storage cabinet
- Flooring: carpet with vinyl cushion backing and pre-applied adhesive, walk-off mat at door entrance and sink/wet areas
- Sufficient computer data drops for student and teacher computers and in-classroom technology such as charging stations
- Mounted LCD projector/projector screen or two 70" Smart TVs and speakers

Elementary School Standard Classroom

- Teaching wall with sliding white board and secured storage spaces
- Sink with drinking fountain
- Sufficient quantity of ground-level classrooms to accommodate the K-2 enrollment

KINDERGARTEN CLASSROOM

Kindergarten classrooms will provide a learning environment for the instruction of basic skills. Design should be flexible and allow for both large and small group instruction. Kindergarten classrooms should be located on the first floor adjacent to the kindergarten play area and in close proximity to parent drop-off and bus loading areas.

- 1,350 square feet
- Separated from other grade levels by location and/or fencing

- All walls tackable for maximum display space or whiteboard surface
- Adequate quantity and placing of electrical outlets on all walls and charging stations
- Teaching wall with sliding white board and secured storage spaces
- Toddler-height sink with drinking fountain
- Flooring: carpet with vinyl cushion backing and pre-applied adhesive, walk-off mat at door entrance and sink/wet areas
- Sufficient computer data drops for student and teacher computers and in-classroom technology and wireless access points
- Mounted LCD projector/projector screen or two 70" Smart TVs, and speakers
- In-room girls and boys restroom, or adjacent restroom, with toddler-height amenities
- Outdoor play equipment storage

ART CLASSROOM

Art classrooms will provide instructional space for the visual arts program. Rooms should have sufficient size and arrangement to allow for movement around easels and work tables. The location of art classrooms should be on the ground floor for easy transportation of heavy supplies and projects. Technology and data connections will be incorporated into the classroom design to complement curriculum.

- Two wall-mounted tackboards or two wall-mounted white boards on adjacent walls
- Adequate quantity and placing of electrical outlets on all walls
- Sufficient computer data drops for student and teacher computers and in-classroom technology and wireless access points
- LCD projector/projector screen or two 70" Smart TVs and speakers
- Resilient flooring
- Counters with sinks at perimeter walls
- Storage units for student projects, including flat files
- Adequate space for projects to dry

MUSIC CLASSROOM

Music classrooms will provide instructional space for the musical arts program. Rooms should have sufficient size and height to allow for movement of students and equipment, and shall be designed for acoustical quality. Music classrooms should be located within convenient proximity to the auditorium, and should be located away from classrooms and libraries, as feasible.

- Sufficient and secure storage for instruments and equipment
- Soundproof with acoustic, tackable wall surfaces
- Adequate quantity and placing of electrical outlets on all walls
- Sink with drinking fountain
- Sufficient computer data drops for student and teacher computers and in-classroom technology and wireless access points
- Two wall-mounted white boards, 1 with staff lines
- Flooring: carpet with vinyl cushion backing and pre-applied adhesive, walk-off mat at door entrance and sink/wet areas

High School Music

- Individual practice rooms
- Sound recording studio

COMPUTER LAB

Computer labs will supplement the computer-assisted instruction within the core curriculum classrooms, and will provide opportunities for pull-out programs and student research. Computer labs should be located on the ground floor for easy transportation of equipment, and the computer station configuration should allow for maximum supervision from the teacher workstation. Classroom lighting should minimize screen glare and eye strain.

- Data drops for 40 computer stations, or a sufficient quantity to meet the program needs
- Adequate quantity and placing of electrical outlets on all walls
- Ceiling-mounted LCD projector, wall-mounted projector screen, and ceiling-mounted speakers
- Proper ventilation
- Flooring: carpet with vinyl cushion backing and pre-applied adhesive, walk-off mat at door entrance
- Room provides security of the technology equipment

High School Computer Lab

- Data drops for 50 computer stations, or a sufficient quantity to meet the program needs

SPECIAL EDUCATION CLASSROOMS

Special education classrooms will provide for instruction space for core curriculum and basic skills, and will have flexibility for both large group and individual instruction. Special education classrooms will be distributed throughout campus with age-appropriate regular-education classrooms, but may be clustered if support services are needed to serve the students throughout the day (bathroom assistance, feeding, occupational therapy). Technology and data connections will be incorporated into the classroom design to complement curriculum.

Special Day Classroom (SDC):

- 960 square feet
- Two wall-mounted tackboards or two wall-mounted white boards on adjacent walls
- Adequate quantity and placing of electrical outlets on all walls
- Teaching wall with sliding white board and secured storage spaces
- Sink with drinking fountain
- Doorway connection to adjacent classroom
- Flooring: carpet with vinyl cushion backing and pre-applied adhesive, walk-off mat at door entrance and sink/wet areas
- Sufficient computer data drops for student and teacher computers and in-classroom technology and wireless access points and charging stations
- LCD projector/projector screen or two 70" Smart TVs and speakers
- Located on the first floor

Severe Handicap Classroom (SH):

- 1,060 square feet minimum
- Located on the first floor to ensure handicap accessibility during emergency events when the elevator is inoperable
- Two wall-mounted tackboards or two wall-mounted white boards on adjacent walls

- Lockable storage units
- Adequate quantity and placing of electrical outlets on all walls
- Sufficient computer data drops for student and teacher computers and in-classroom technology and wireless access point and charging stations
- LCD projector/projector screen or two 70" Smart TVs and speakers
- Flooring: carpet with vinyl cushion backing and pre-applied adhesive, walk-off mat at door entrance and sink/wet areas
- Bathroom with handicap-accessible toilet lift, sink with hot/cold water, changing table, and storage cabinets
- Shower room with hand held nozzle, one per site

High School Severe Handicap Classroom

- Kitchenette area with counters, sink with hot and cold water, cabinets above and below, refrigerator, oven, and microwave

Resource Specialist Program (RSP):

- 240 square feet
- Two wall-mounted tackboards or two wall-mounted white boards on adjacent walls
- Lockable storage units
- Adequate quantity and placing of electrical outlets on all walls and wireless access points and charging stations
- Two computer data drops for the instructor
- Sufficient student computer data drops to suit the needs of the educational program
- Flooring: carpet with vinyl cushion backing and pre-applied adhesive, walk-off mat at door entrance

SCIENCE LAB (Intermediate and High Schools)

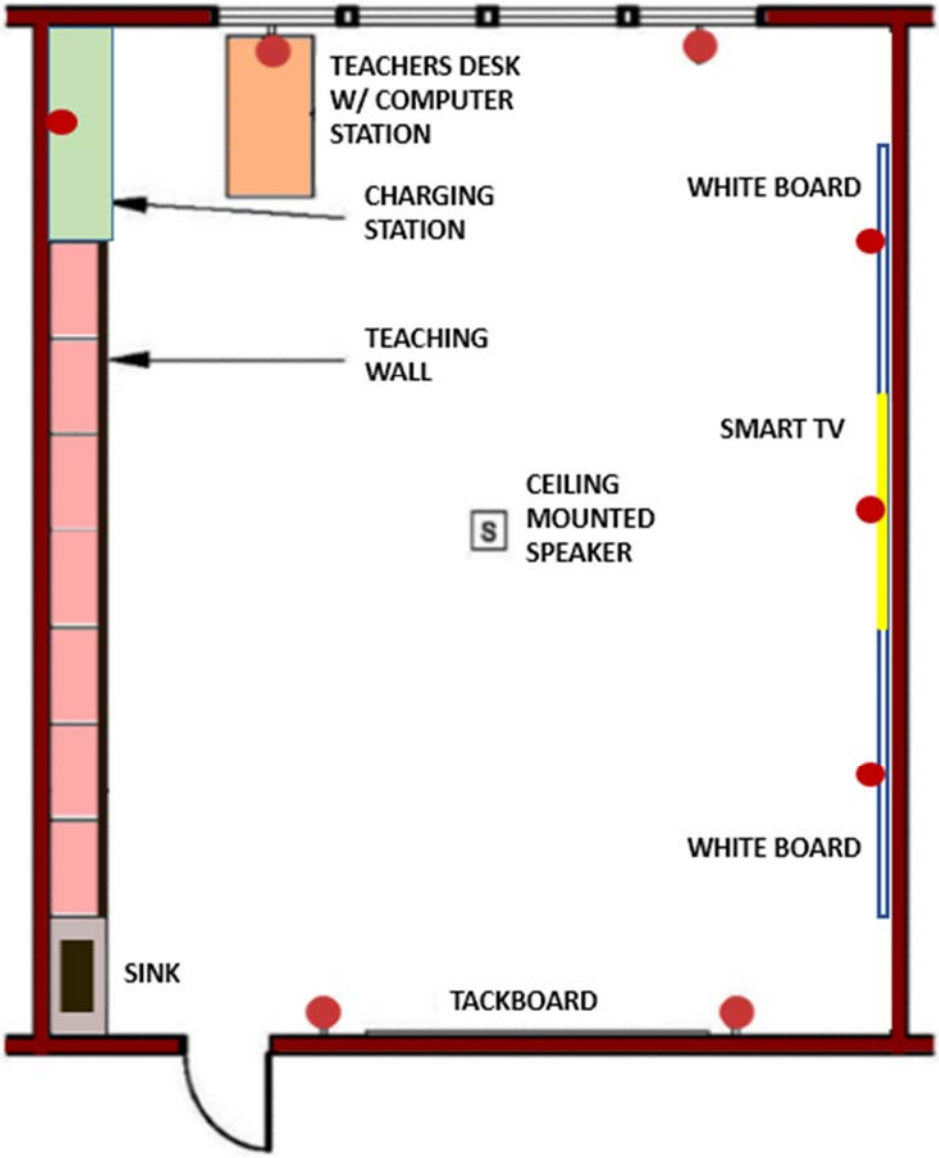
Science laboratories will provide an educational environment for the instruction of biology, chemistry, and physics. Students can participate in experiments, analyze data, and make scientific conclusions. Laboratories should be located on the ground floor for easy transportation of heavy supplies and projects. Technology and data connections will be incorporated into the classroom design to complement curriculum.

- 1,300 square feet
- 40 student capacity - 10 lab stations with 4 students each
- Teaching wall with sliding white board and secured storage spaces
- Instructor lab station with gas, hot and cold water, electricity, compressed air, and overhead mirror
- Chemical-resistant surface lab tables
- Adequate quantity and placing of electrical outlets on all walls
- Resilient flooring
- Counters with sinks at perimeter walls
- Sufficient computer data drops for student and teacher computers and in-classroom technology and wireless access points and charging stations
- LCD projector/projector screen or two 70" Smart TVs and speakers
- Consistent with the requirements for proper hazardous material management

High School Science Lab

- Lab stations with utilities appropriate to the subject matter, which may include data, electricity, hot and cold water, gas, and/or compressed air
- Emergency gas shutoff at the instructor's lab station
- Eye wash station and deluge shower
- Exhaust fume hood for chemistry labs

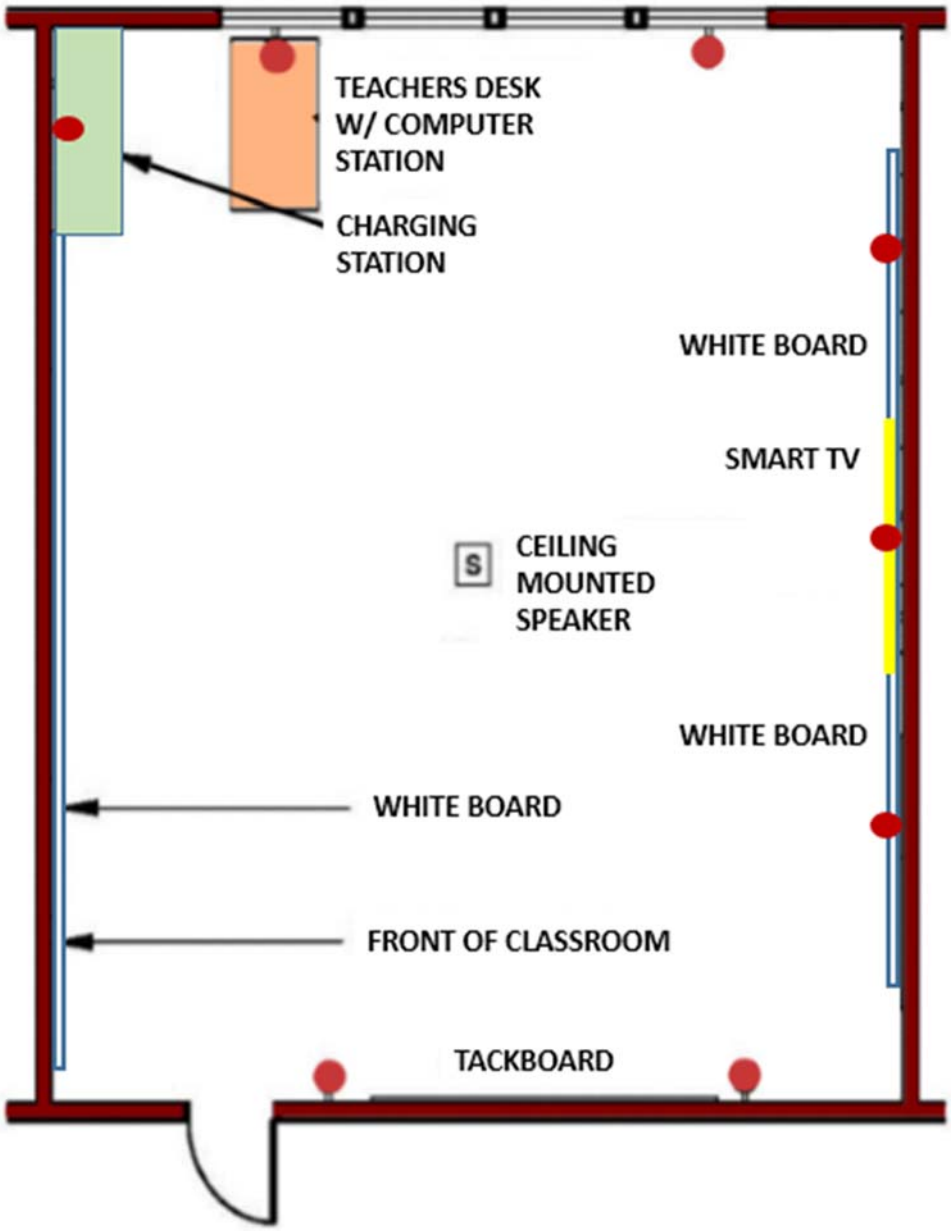
Classroom Layout: Elementary School Level



KEY

Power Outlet

Classroom Layout: Intermediate/High School Level



KEY
Power Outlet

STEM Classroom Layout

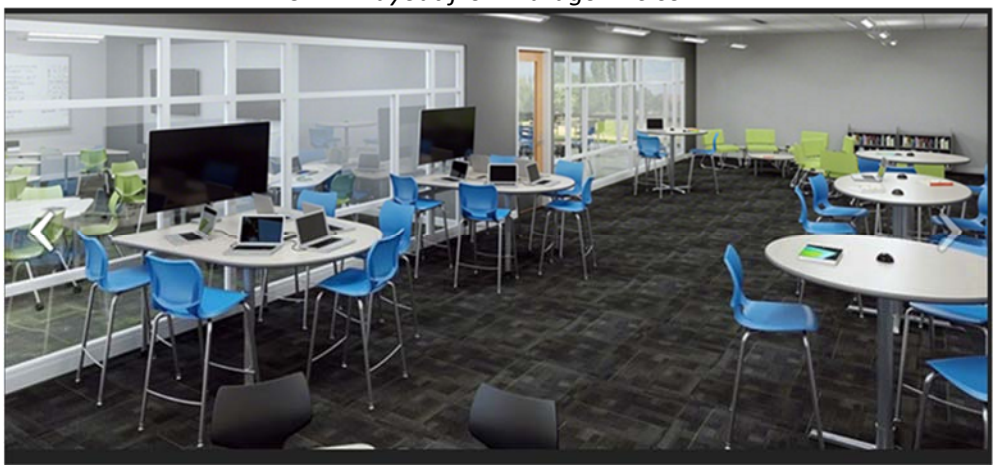
KEY

Floor and wall power outlets

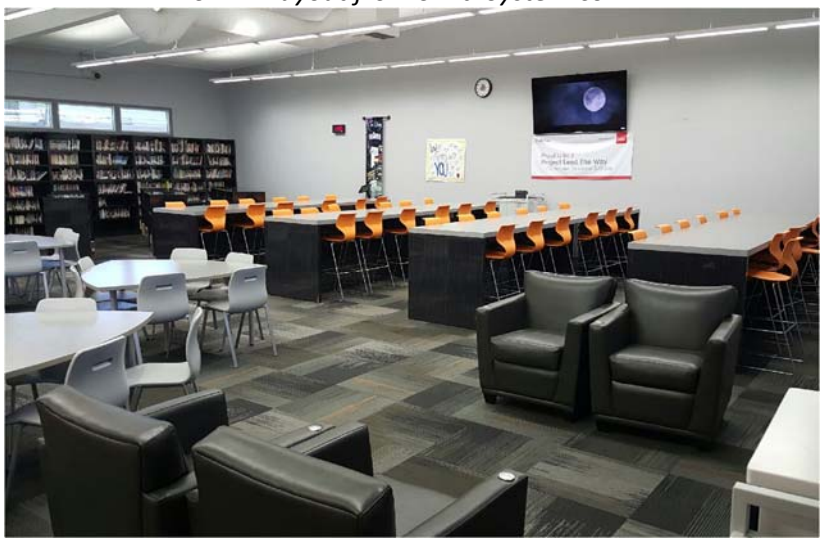
Mounted speakers

Samples of STEM Classroom Layout

STEM Layout from Paragoninc.com



STEM Layout from SmithSystem.com



Carr Intermediate School, Santa Ana

4.11.2 Ancillary Facilities

LIBRARY/MEDIA CENTER

The library will serve as a quiet space for students to study and read between classes, and for small groups of students to work on group assignments. Large work tables will allow students to spread out their books and papers, and to be fully engaged in their studying. The library will also house the school's collection of books and will serve as the school's research center. The library should be proportional to the maximum planned school enrollment, and may be combined with the media center and/or multipurpose room, if needed, through the use of mobile furniture. Arrangement of the checkout counter/librarian desk should be positioned to maximize visual supervision of the study areas and stack space.

- Sufficient shelving for electronic and print media
- Tackable wall surfaces for maximum display space
- Flooring: carpet with vinyl cushion backing and pre-applied adhesive, walk-off mat at door entrance and wet areas
- Adequate quantity and placing of electrical outlets on all walls and charging stations
- Checkout counter/Librarian work station with computer and Xerox machine
- Drinking fountain
- Textbook storage room
- Equipment storage room
- Quiet rooms
- Provides security for technology and media equipment
- Video conferencing equipment
- Ceiling-mounted LCD projector, retractable projector screen, LCD TVs, and ceiling-mounted speakers
- Cabling infrastructure for future multi-media applications

High School Library/Media Center

- Computer stations or adjacent computer lab

MULTIPURPOSE ROOM (Elementary and Intermediate Schools)

The multipurpose room will serve as a space for various activities, including physical education, assemblies, extracurricular activities, and student lunch during inclement weather, and should be designed with the flexibility to accommodate such uses. Typically, the multipurpose room will be used for large group activities and should be of sufficient size to accommodate the maximum planned enrollment of the school. The design should include a stage to allow for school performances, and a projector system for presentations and instructional purposes. The location of the multipurpose room should provide convenient public access and parking, and should consider the security of the campus. The multipurpose room may be combined with the media center and/or library, if needed, through the use of mobile furniture.

- Room darkening capability for performances and projector use
- Ceiling-mounted LCD projector, retractable projector screen, and ceiling-mounted speakers
- Stage with sound and lighting system, curtain, and projection screen
- Wheel chair lift to stage
- Stage storage room
- Chair and table storage to match room capacity

- Resilient flooring, or an alternative athletic flooring material that can be easily cleaned and maintained
- Adequate quantity and placing of electrical outlets on all walls
- All walls tackable for maximum display space
- Infrastructure for video conference capability

PHYSICAL EDUCATION (PE) AND ATHLETICS

The District considers physical education an essential part of the school curriculum that will produce healthy and confident students who will develop into high caliber citizens for the community. Physical education spaces should be of sufficient size and quantity to accommodate course requirements for the school enrollment. A variety of physical education amenities should be included in the campus design in order to provide a comprehensive physical education program, and should include hardcourts, turf fields, and indoor spaces. The school's multipurpose room or gymnasium may serve as the indoor space for physical education activities. The layout of the physical education spaces should allow for optimum supervision and should not be obstructed by buildings that impair surveillance.

- Outdoor basketball courts; quantity proportional to the school enrollment
- Play field(s) to accommodate baseball and soccer; quantity and size proportional to the school enrollment

Intermediate School Physical Education

- Locker rooms, including restrooms and drinking fountain, that are of sufficient size to allow students to dress each period

High School Physical Education and Athletics

- Locker rooms with restrooms, drinking fountain, and coaches offices; sufficient size to allow students to dress each period
- Separate locker rooms with restrooms, drinking fountain, showers, and coaches offices for the athletics program
- Restrooms available for the public in facilities intended for shared community use other than in locker room areas
- Baseball, softball, and soccer fields for the various competitive levels (i.e. JV, Varsity)
- Football field and track
- Weight room in close proximity to the gymnasium
- Cardio lab with treadmills, stationary bikes and ellipticals
- Aerobics room in close proximity to the gymnasium, or aerobics classes may be held in the stage area of the auditorium
- Pool

GYMNASIUM (High Schools)

The gymnasium (gym) will serve as a space for various activities, including physical education, assemblies, pep rallies, athletic competitions, extracurricular activities, and student lunch during inclement weather, and should be designed with the flexibility to accommodate such uses. Typically, the gym will be used for large group activities and should be of sufficient size to accommodate the maximum planned enrollment of the school. The design should include a sound system and score board to make the space functional for assemblies and athletic competitions. The location of the gym should provide convenient public access and parking, and should consider the security of the campus.

- Sound system with ceiling-mounted speakers
- Wall-mounted scoreboard with operation controls
- Athletic storage room
- Chair and table storage to match room capacity
- Adequate quantity and placing of electrical outlets on all walls
- Athletic flooring material that can be easily cleaned and maintained
- Retractable bleachers on at least one side of the gym
- Retractable basketball hoops
- Consider weight room and aerobic room to be located within or in close proximity to the gymnasium building
- Display cabinets to display student and school awards and trophies
- Infrastructure for video conference capability

THEATER/AUDITORIUM (High Schools)

The theater will serve as a space for various activities, including performances, assemblies, and community meetings. The theater will provide essential practice and performance space for the performing arts program, and should contain adequate seating capacity that reflects the needs of the program. The location of the theater should provide convenient public access and parking, and should consider the security of the campus.

- Seating is ramped for visibility
- Room darkening capability
- Adjustable lighting and sound systems
- Stage with curtain
- Stage area can double as dance or aerobics room
- Doors that open and shut quietly and provide sound-proofing
- Sound/operation booth with independent exterior access
- Walls provide sound-proofing and acoustical quality
- Adequate stage size and electrical service to accommodate necessary and innovative stage lighting and set design
- Ceiling-mounted LCD projector, wall-mounted projector screen, and ceiling-mounted speakers
- Stage flooring: hardwood or similar flooring
- Theater flooring: carpet with vinyl cushion backing and pre-applied adhesive, walk-off mat at door entrance
- Wheel chair lift to stage
- Stage storage room

4.11.3 Support Facilities

ADMINISTRATION AND SUPPORT

The administration office will serve as the main entrance for the school and must provide a welcoming first impression to students and visitors. The administration entrance will also serve a campus security function and will have a mandatory check-in counter for visitors. The building design should allow for the efficient conduct of the administrative functions.

- Sufficient square footage and office spaces to accommodate the number of staff needed for the maximum enrollment
- Lobby area with seating for 6-12 and counter tops at age-appropriate height and wheelchair level
- Reception counter with 2 work stations
- Conference room with video conference capability
- Adequate quantity and placing of electrical outlets on all walls
- Health office with restroom, sink, cot, secure medicine cabinet, lockable mini refrigerator, and a window with visibility to the lobby
- Psychologist/Counseling office that allows for confidentiality; can be shared with other support programs such as speech and occupational therapy
- Phone and data drop at each office and work station
- Supply storage room
- Secure records storage room with fire-proof and lockable files
- Flooring: carpet with vinyl cushion backing and pre-applied adhesive, walk-off mat at door entrance and sink/wet areas

<u>High School Guidance</u>

- Higher Education/Career Resource Center with sufficient computer data drops and projector system

<u>STAFF SUPPORT/LOUNGE</u>

Staff support areas will provide space for necessary staff operations, including document reproduction and internal mail circulation. The staff support area will also provide a staff lounge where staff can take their breaks in a comfortable and stress-free environment.

- Square footage proportionate to the student enrollment
- Staff lounge with lunch dining area and kitchen alcove with sink, microwave, and refrigerator
- Work room area with built-in counters with storage above and below, staff mail boxes, copier, and other supplies
- Staff restroom(s)
- Adequate quantity and placing of electrical outlets on all walls
- Flooring: carpet with vinyl cushion backing and pre-applied adhesive, walk-off mat at door entrance and sink/wet areas; resilient flooring in the kitchen area

<u>SPEECH</u>

Speech rooms will provide a comfortable learning environment for instruction in language and speech modification. Speech rooms should be located in close proximity to classrooms for pull-out programs and should have flexible space and furniture arrangement that allows for small group and individual instruction.

- 200 square feet
- Phone and computer drop at the teacher's work station
- Sufficient student computer data drops to suit the needs of the educational program
- Wall-mounted white board
- Space can be shared with other support programs such as occupational therapy
- Adequate quantity and placing of electrical outlets on all walls

- Flooring: carpet with vinyl cushion backing and pre-applied adhesive, walk-off mat at door entrance

FOOD SERVICE

Food service areas will provide the necessary space for the District's nutritional program that will nourish the students and promote healthy bodies and minds.

- Location allows for efficient delivery truck access
- Area for the cafeteria line is designed for the flow of traffic for each lunch period
- Computer terminals at serving windows and mobile food carts
- Sufficient computer data drops to suit the needs of the food service program
- Adequate space for refrigeration and preparation of foods to accommodate maximum number of students planned for the school
- Adequate quantity and placing of electrical outlets on all walls
- Secure storage room
- Resilient flooring
- Lunch shelter near cafeteria with mesh vinyl-coated metal lunch tables
- Complies with local health department requirements

INFRASTRUCTURE

In addition to the main buildings, the school campus needs the following amenities to ensure the efficient operation of the school.

- Staff and student restrooms
- Custodial supply storage room
- Covered circulation walkways
- Staff and visitor parking proportional to the school enrollment
- Bus drop-off and parent drop-off
- All facilities comply with the American's with Disabilities Act
- Externally mounted wireless antennae sufficient to cover campus grounds

PARENT CENTERS

Parent participation is an important element in the District's educational philosophy and is consistent with the District's goals and objectives. Students whose parents are involved in their education generally have higher grades, better attendance, higher homework submission rates, higher graduation rates and a better chance of continuing with their education after graduation. This is especially true for predominantly minority and/or lower income communities. The District's Local Control and Accountability Plan (LCAP) places parents' participation in high priority and aims to engage the community in the students' learning experiences. Facilities are available for parents, staff, and faculty to hold appropriate school meetings and/or parent educational programs after school hours.

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5.0 APPENDIX

Title 5 Standards for Development of Plans

Facilities Planning Agencies

Facilities Regulations and Codes

Title 5, California Code of Regulations

Section 14030 - Standards for Development of Plans for the Design and Construction of School Facilities

The following standards for new schools are for the use of all school districts for the purposes of educational appropriateness and promotion of school safety:

a. **Educational Specifications.** Prior to submitting preliminary plans for the design and construction of school facilities, and as a condition of final plan approval by CDE, school board-approved educational specifications for school design shall be prepared and submitted to the California Department of Education based on the school district's goals, objectives, policies and community input that determine the educational program and define the following:

1. Enrollment of the school and the grade level configuration.
2. Emphasis in curriculum content or teaching methodology that influences school design.
3. Type, number, size, function, special characteristics of each space, and spatial relationships of the instructional area that are consistent with the educational program.
4. Community functions that may affect the school design.

b. **Site Layout.** Parent drop off, bus loading areas, and parking shall be separated to allow students to enter and exit the school grounds safely unless these features are unavailable due to limited acreage in urban areas or restrictive locations, specifically:

1. Buses do not pass through parking areas to enter or exit school site unless a barrier is provided that prevents vehicles from backing directly into the bus loading area.
2. Parent drop off area is adjacent to school entrance and separate from bus area and parking.
3. 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 foot path to school entrance.
4. 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/unloading areas.
5. To provide equal access to insure the purposes of the least restrictive environment, bus drop off for handicapped students is in the same location as for regular education students.

c. **Playground and Field Areas.** Adequate physical education teaching stations shall be available to accommodate course requirements for the planned enrollment, specifically:

1. A variety of physical education teaching stations are available to provide a comprehensive physical education program in accordance with the district's adopted course of study (including hardcourt, field area and indoor spaces).
2. The physical education teaching stations are adequate for the planned student enrollment to complete the minimum instruction and course work defined in *Education Code* sections 51210(g), 51220(d) and 51225.3(a)(1)(F).
3. Supervision of playfields is not obstructed by buildings or objects that impair observation.
4. Joint use for educational purposes with other public agencies is explored. Joint use layout with parks is not duplicative and fulfills both agencies' needs.

d. **Delivery and Utility Areas.** Delivery and service areas shall be located to provide vehicular access that does not jeopardize the safety of students and staff:

1. Delivery/utility vehicles have direct access from the street to the delivery area without crossing over playground or field areas or interfering with bus or parent loading unless a fence or other barrier protects students from large vehicle traffic on playgrounds.
2. Trash pickup is fenced or otherwise isolated and away from foot traffic areas.

e. **Future Expansion.** Site layouts shall have capability for expansion without substantial alterations to existing structures or playgrounds:
   1. Site layout designates area(s) for future permanent or temporary additions that are compatible with the existing site plans for playground layout and supervision.
   2. Utilities to the expansion area are included in the plans and have the capacity to accommodate anticipated growth.
   3. Exits, corridors, stairs, and elevators are located to accommodate capacity of additions, particularly in such buildings added as the multi-purpose/cafeteria, administration, gymnasium/or auditorium.

f. **Placement of Buildings.** Building placement shall consider compatibility of the various functions on campus and provide optimum patterns of foot traffic flow around and within buildings. Site layout of buildings, parking, driveways, and physical education areas shall be adequate to meet the instructional, security and service needs of the educational programs:
   1. Building placement is compatible with other functions on campus; e.g., band room is not next to library.
   2. Physical relationship of classrooms, auxiliary, and support areas allows unobstructed movement of staff and students around the campus.
   3. Building placement has favorable orientation to wind, sun, rain, and natural light.
   4. Restrooms are conveniently located, require minimum supervision, and, to the extent possible, are easily accessible from playground and classrooms.
   5. Parking spaces are sufficient for staff, visitors, and students (where applicable).
   6. The campus is secured by fencing and electronic devises such as code entries, electronic monitoring or motion sensors when needed.

g. **Classrooms.** Classrooms at new school sites shall have adequate space to perform the curriculum functions for the planned enrollment as described in the school district's facility master plan, specifically:
   1. Classroom size standards:
      A. General classrooms, grades one through twelve are not less than 960 square feet. Classrooms proposed of less than 960 square feet require written justification to be submitted to and approved by the State Superintendent of Public Instruction. Adjacent instructional space shall be included in the calculation of square feet for purposes of approving classroom design.
      B. Proposed classrooms of less than 960 square feet have written justification consistent with the educational program and curriculum indicating that the district's education program can be delivered in the proposed size classrooms.
   2. Total classroom space meets or exceeds the capacity planned for the school using the district's classroom loading standards in accordance with State Allocation Board policy.
   3. Consideration is given to some classrooms which are easily alterable in size and shape at a reasonable cost.
   4. Conduit/cabling and outlets are available for technology in each classroom to provide network and stand alone equipment related to the planned and future potential educational functions.

h. **Specialized Classrooms and Areas.** Specialized classrooms shall be designed to reflect the function planned for that portion of the educational program. If any of the following classrooms are needed, these standards apply:

1. Small-Group Areas.
    A. Small-group instruction areas are not included in the computation of classroom size unless the area is an integral part of the classroom and can be visibly supervised by a teacher form the classroom.
    B. Small-group instruction areas are designed to allow for collaborative learning opportunities where appropriate to support the regular education program and are located in the vicinity of classrooms.
2. Kindergarten Classrooms.
    A. Kindergarten classroom size for permanent structures is not less than 1350 square feet, including restrooms, storage, teacher preparation, wet and dry areas.
    B. Kindergarten classrooms are designed to allow supervision of play yards (unless prevented by site shape or size) and all areas of the classroom.
    C. Play yard design provides a variety of activities for development of large motor skills.
    D. Classrooms are located close to parent drop-off and bus loading areas.
    E. Storage, casework, and learning stations are functionally designed for use in free play and structured activities; e.g., shelves are deep and open for frequent use of manipulative materials.
    F. Windows, marking boards, sinks, drinking fountains, and furniture are appropriate heights for kindergarten-age students.
    G. Restrooms are self-contained within the classroom or within the kindergarten complex.
3. Special Education Classrooms and Areas.
    A. A new school designates at least 240 square feet for the resource specialist program and provides additional space in accordance with the allocations in *Education Code* Section 17747(a) as larger enrollments are being planned.
    B. A new school designates at least 200 square feet for the speech and language program which is close to classrooms when an individualized instruction program is necessary.
    C. A new school designates office area for the psychologist/counseling program which provides for confidentiality and may be shared with other support service programs.
    D. Special day classrooms are at least the same size as regular education classrooms at that site and are properly equipped for the students who will occupy the space, for their age and type of disabling condition.
    E. The square footage allowance in *Education Code* Section 17747(a) for special day class programs is used for the design of classroom space and other space on the campus to support the special education program. The support space includes but is not limited to speech specialist area, psychologist, counseling offices and conference area.
    F. Special day classrooms are distributed throughout the campus with age appropriate regular education classrooms.
    G. A cluster of two special day classrooms may be considered if support or auxiliary services (e.g., bathrooming, feeding, physical or occupational therapy) are needed to serve the students throughout the school day.

H. A conference area is available to conduct annual individualized education program meetings for each special education student.

I. Medical therapy units, if planned for the site, are close to visitor parking areas and accessible after school hours.

i. **Laboratories shall be designed in accordance with the planned curriculum.**

1. Science laboratory:

A. Size is at least 1300 square feet including storage and teacher preparation area.

B. Science laboratory design is consistent with the requirements for proper hazardous materials management specified in both the "Science Facilities Design for California Public Schools," published by the California Department of Education, 1993, and the "Science Safety Handbook for California Public Schools," published by the California State Department of Education, 1999.

C. Accommodations are made for necessary safety equipment and storage of supplies; e.g., fire extinguisher, first aid kit, master disconnect valve for gas.

D. Secured storage areas are provided for volatile, flammable, and corrosive chemicals and cleaning agents.

E. Properly designated areas are provided with appropriate ventilation for hazardous materials that emit noxious fumes, including a high volume purge system in the event of accidental release of toxic substances which may become airborne.

F. Exhaust fume hoods, eye washes, deluge showers are provided.

G. Floor and ceiling ventilation is provided in areas where chemicals are stored.

H. Room is provided for movement of students around fixed-learning stations.

I. There is the capability for technology which complements the curriculum.

J. Classrooms are flexibly designed to insure full student access to laboratory stations and lecture areas.

2. Consumer Home Economics laboratory:

A. There is room for movement of students around fixed learning stations.

B. Cooking equipment reflects current home food preparation practices and/or commercial food preparation simulation.

C. There is the capability for technology which complements portions of the curriculum, such as fashion design, consumer economics, and nutritional analysis of foods.

D. There is space for industrial or home sewing equipment consistent with the planned curriculum.

E. There is storage for student projects and supplies.

F. Space for work tables is provided for such activities as cutting fabric or completing interior design projects.

G. Lecture area is provided.

H. At least 1300 square feet is allocated for each laboratory.

I. If part of the planned program, space for a child care area or for laboratory to teach child growth and development is provided.

3. Industrial and Technology/Education Laboratory:

A. Room is provided for movement of students around fixed learning stations.

B. Flexible stations with sufficient outlets and power source for industrial type equipment is provided.
C. Space is provided for various simulations of job-related experiences and laboratory work stations.
D. There is capability to utilize technology which complements the curriculum, such as computer-aided graphics, electronics and specialized tools.
E. There is lecture area within each laboratory or near the laboratory area where appropriate.
F. There are accommodations for necessary health and safety equipment, such as fire extinguisher and first aid kit.
G. Secured storage areas for volatile, flammable and corrosive chemicals and cleaning agents are provided where appropriate.
H. There are properly designated areas with appropriate ventilation for the use of hazardous material that emit noxious fumes or excessive dust particles.
I. Proper storage and removal access for hazardous waste materials is provided in each laboratory using such materials.

4. Computer Instructional Support Area:
    A. If a standard classroom is being designated as a computer laboratory, size is at least 960 square feet.
    B. Room is provided for movement of students around learning stations.
    C. Sufficient outlets, power sources, and network links for the amount of equipment are provided.
    D. Proper ventilation is provided.
    E. Room provides for security of equipment.
    F. Lighting minimizes screen glare and eye strain.
5. Art Studios:
    A. Sufficient square feet per student should be allotted for movement and work around easels and project tables.
    B. Location on the ground floor should be considered for easy movement of heavy supplies and projects.
    C. Appropriate display space should be provided.
    D. Adequate electrical outlets should be provided.
    E. Adequate ventilation for dust and fumes should be provided.
    F. Room should be able to be darkened for projectable imagery.
    G. Sinks should be provided with traps for grease and clay.
    H. Floor and all surfaces should be easily cleanable.
    I. Sufficient and secure storage for supplies and projects should be provided.
    J. Devices and spaces should be provided for drying projects.
    K. Kiln should be located in a safe, properly wired and ventilated area.
6. Music Rooms:

A. Size and height of instrumental and choral rehearsal rooms should be sufficient to allow for movement of students and instruments, various presentation arrangements, and acoustical quality.
B. Running water should be provided for instrument maintenance and clean up.
C. Rooms should be acoustically isolated from the rest of the school.
D. Sufficient, secure storage space should be provided for instruments, equipment, and instructional materials.
E. Music rooms should have convenient access to auditorium.
F. Small ensemble rehearsal rooms of 350 square feet should be considered.
G. Several practice rooms of at least 50 square feet should be considered.

7. Dance Studios:
   A. Dance studios should be free from distractions and uninvited spectators.
   B. Dance studios should be convenient to school auditorium.
   C. Adequate temperature and ventilation should be provided.
   D. Sprung wooden floors should be considered.
   E. Dance studio should have mirrors, ballet bars, and electrical outlets.
   F. Storage area and locker rooms should be provided.
   G. A minimum of 2000 square feet (or 3,500 square feet if performance space is needed) should be considered.
8. Theater/Auditorium:
   A. General design should have adequate seating capacity reflecting the needs of the instructional program.
   B. Seating portion should be ramped for comfortable sight lines.
   C. Doors should be able to open and shut quietly.
   D. Adequate space and electrical service should be provided to accommodate necessary and innovative stage lighting and set design.
   E. Adequate space should be allowed between front row seats and stage to accommodate an orchestra area.
   F. Location should provide convenient public access and parking while considering the security of the rest of the school campus.

j. **Gymnasium, Shower/Locker shall be designed to accommodate multiple use activities in accordance with the planned enrollment:**
   1. The gymnasium is secured from other parts of the campus for evening and weekend events or for public use purposes.
   2. The shower/locker area is of sufficient size to allow students enrolled in the physical education program to shower and dress each period.
   3. Toilets are available for the public in facilities intended for shared community use other than in shower/locker areas.
   4. Office space is provided for physical education teachers.
   5. Space is available for specialized age-appropriate physical education activities such as weight lifting, exercise equipment usage, aerobics.

k. **Auxiliary Areas.**

1. Multipurpose/cafeteria area (indoor or outdoor) shall be adequately sized and flexibly designed to protect students from the elements and to allow all students adequate eating time during each lunch period and to accommodate such uses as physical education activities, assemblies, and extracurricular activities:
    A. Tables and benches or seats are designed to maximize space and allow flexibility in the use of the space.
    B. The location is easily accessible for student and community use, but is close to street for delivery truck access.
    C. Stage/platform may have a dividing wall to be used for instructional purposes but is not intended as a classroom.
    D. Area for the cafeteria line is designed for the flow of traffic for each lunch period.
    E. Design of kitchen reflects its planned function; e.g., whether for food preparation or warming only.
    F. Space is available for refrigeration and preparation of foods to accommodate maximum number of students planned for the school.
    G. Office, changing, and restroom area for food preparation staff is available and shall comply with local department of health requirements.
    H. Ceiling height allows for clearance of light fixtures for physical education activities.
2. Administrative Office. The administrative office shall have sufficient square footage to accommodate the number of staff for the maximum enrollment school district and shall be designed to efficiently conduct the administrative functions, specifically:
    A. Students have direct confidential access to pupil personnel area.
    B. Counter tops are accessible for an age-appropriate population both at a standing and wheelchair level.
    C. Clerical staff have a clear view of nurse's office.
    D. The nurse's office has a bathroom separate from staff bathroom(s)in administration area.
    E. Space for private conference and waiting area is available.
    F. Capability for such computer networking functions as attendance accounting and communicating to each classroom is considered.
    G. A faculty workroom is available for a staff size proportionate to the student population.
3. Library/Media Center and Technology. Library space shall be proportional to the maximum planned school enrollment. The size shall be no less than 960 square feet. However, to allow adaptation for changing technology and communication systems, the following is recommended:
-two square feet per unit of ada for middle or junior high (grades 6-8);
-four square feet per unit of ada for high school. In addition:
    A. Provide security for technology and media equipment.
    B. Space and capability for computer terminals is considered for student use, research and report writing.
    C. Visual supervision from circulation desk is available to study areas, stack space, and student work centers.
    D. Design for open and closed-circuit television, dedicated phone line, electrical outlets for stand-alone computers, and conduit connecting all instructional areas is considered.

l. **Lighting.** Light design shall generate an illumination level that provides comfortable and adequate visual conditions in each educational space, specifically:

1. Ceilings and walls are white or light colored for high reflectance unless function of space dictates otherwise.
2. Lights do not produce glare or block the line of sight.
3. Window treatment allows entrance of daylight but does not cause excessive glare or heat gain.
4. Fixtures provide an even light distribution throughout the learning area.
5. Light design follows the *California Electrical Code* found in Part 3 of Title 24 of the *California Code of Regulations*.

m. **Acoustical.** Hearing conditions shall complement the educational function by good sound control in school buildings, specifically:
   1. The sound-conditioning in a given space is acoustically comfortable to permit instructional activities to take place in this classroom.
   2. Sound is transmitted without interfering with adjoining instructional spaces; e.g., room partitions are acoustically designed to minimize noise.
   3. The ventilation system does not transmit an inordinate sound level to the instructional program.

n. **Plumbing.** Restroom stalls shall be sufficient to accommodate the maximum planned enrollment and shall be located on campus to allow for supervision.
   1. Refer to Part 5, Title 24, of the *California Code of Regulations*.
   2. Outdoor restrooms having direct outside access are located in areas that are visible from playground and are easily supervised.

o. **Year-Round Education.** If a school is being planned for multitrack year-round operation, additional space shall be provided for associated needs:
   1. Additional space is available for storage of records for staff for all tracks. Additional storage space for the supplies and projects of off-track students is considered.
   2. Storage and planning space is available for off-track teachers or teachers not assigned to a classroom.

p. **American Disabilities Act.** Schools shall comply with standards established by the American Disabilities Act (Public Law 101-336, Title II).

q. **Child Care Programs.** Schools shall comply with the requirements set forth in *Education Code* Section 39113.5 regarding plans and specifications for new schools being designed to provide appropriate space to accommodate before-school and after-school child care programs.

r. **Exemptions.** At the request of the governing board of a school district, the State Superintendent of Public Instruction may grant exemptions to any of the standards in this section if the district can demonstrate that the educational appropriateness and safety of a school design would not be compromised by an alternative to that standard.

FACILITIES PLANNING AGENCIES

Agencies with influence over school construction design:

- California Department of Education (CDE)
- City and County Public Works Departments
- County Health Department
- Department of Toxic Substances Control (DTSC)
- Division of State Architect (DSA)
- Local Fire Department

- Office of Public School Construction (OPSC)
- State Allocation Board (SAB)
- State Fire Marshall
- Utilities Entities

FACILITIES REGULATIONS AND CODES

Relevant regulations and codes that may impact school design:

- Americans with Disabilities Act (ADA)
- Civic Center Act
- Education Code
- Individuals with Disabilities Education Act (IDEA)
- Title 5, California Code of Regulations, Sections 14001-14036
- Title 24, California Building Code