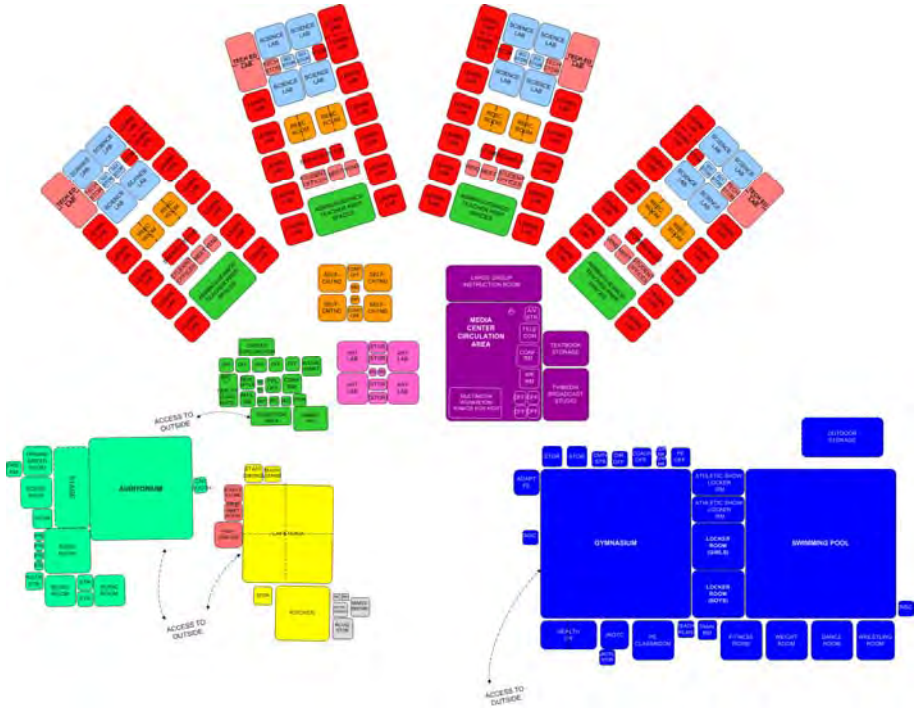
Long Beach Unified School District

High School Educational Specifications

Final – January 2008



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Introduction

This High School Educational Specification is a critical component of the Long Beach Unified School District Facility Master Plan. Developed as a component of that overall process, the Educational Specification is a detailed outline of essential components of each high school facility to be built in Long Beach as part of the Master Plan. It is a City-wide statement, and will apply to all upcoming high school projects, but will be adjusted as appropriate to the needs of each individual school construction project.

The specifications stated here are for: 600; 1,200; 1,800; 2,400; 3,000; and 3,600 students.

An Educational Specification outlines essential educational concepts and detailed facility needs. It includes considerations of community values, current and future instructional strategies, impact of technology on education, and cost constraints.

Document Overview

This High School Educational Specifications document is organized into distinct sections, containing information necessary for the planning, design, and construction of new school facilities. Those sections are as follows:

Executive Summary – The Executive Summary is an overview of the content of the Educational Specification document.

Creating 21st Century Learning Environments – The Educational Specifications process describes the approach used to develop this document.

Visioning –Visioning provides a look at the goals and mission the district is moving toward. Information about how educators see the school of the future is also provided within this section.

21st Century Best Practices -Information pertaining to nationally recognized best practices in education specifically as they relate to program delivery methods is included here.

Technology – A summary of the Long Beach Unified School District's Technology Plan will provide an understanding of how technology will be integrated into the curriculum and the facility.

Safety and Security – This section reflects an overview of the Safety and Security Plan.

Site Issues – Any special circumstances or considerations are important when designing a school. The design, traffic flow, lighting, landscaping, and parking issues are all addressed in this section.

Aesthetics – This section describes the visual appeal of each elementary school.

Community Use – Understanding community needs and integrating those needs into school facilities is an important aspect for all school districts. Various uses and programs are described in this section.

SWS/Cluster Program Areas – A summary of the type, number, and size of each instructional and support space (i.e. Space Requirements) is included with spatial relationship illustrations for each program area.

Executive Summary

The goal of high school education is to provide students with a rigorous and comprehensive academic program which will prepare them in becoming responsible and independent citizens of a global society.

The quality of the transitions that take place as the student moves from the more structured elementary school to the middle school environment and on to the high school is important to the student's emotional, mental, and physical development.

Focus, therefore, is centered on:

- Incorporation of thematic instruction
- Academic achievement
- Providing a variety of activities to explore greater possibilities for independent thinking
- Exposing students to a more global sense of community to include cultural, academic, and interest diversity
- Providing a safe and orderly environment to foster a personal sense of community ownership and responsibility

The design and construction methodology must include a high degree of flexibility to accommodate program changes in the future. Furthermore, a high school building must be organized in a manner which ensures a sense of community and a personalized educational experience for each student. Therefore, large schools should be brought to human scale through the creation of smaller units or schools-within-schools where each student is well known and respected and stable relationships between teachers and students can be cultivated.

With this in mind, DeJONG took the flexible approach when creating an educational specification for high school facilities. The space requirements provide space for a schools-within-a-school concept for a total building capacity from 600 - 3,600 students. The space requirements allow for flexibility in organization.

The proposed Educational Specifications allow for:

- Traditional Department Delivery Model
- SWS/Cluster concept
- Career Tech focus
- Combination of approaches

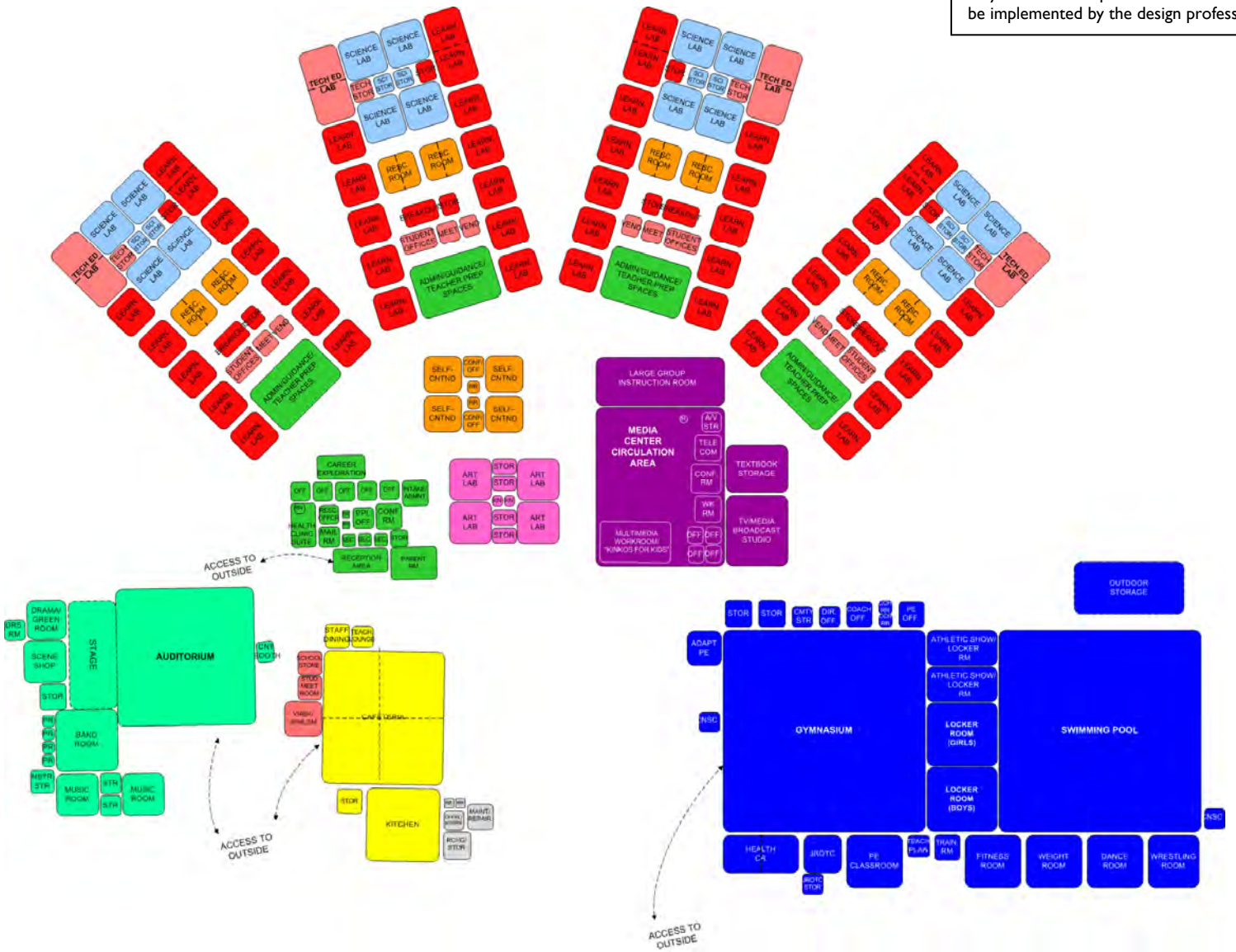
SWS/Cluster Concept Requirements

The space requirements chart below lists the program areas to be included a traditional SWS/cluster concept for 600-3,600 students: schools of 600 students each and/or a career cluster school.

Space	School for 600		School for 1200		School for 1800		School for 2400		School for 3000		School for 3600	
	TS*	Total	TS	Total	TS	Total	TS	Total	TS	Total	TS	Total
School-within-School	19	26,080	38	52,160	57	78,240	76	104,320	95	130,400	114	156,480
Special Needs [Severe]	1	1,310	2	2,270	3	3,430	4	4,540	5	5,500	6	6,660
Media Center	0	5,775	0	10,300	0	12,700	0	15,325	0	18,425	0	18,750
Visual Arts	1	1,700	2	3,300	3	5,000	4	6,600	5	8,200	6	9,900
Music/Perf Arts	2	2,760	3	4,860	3	14,860	4	16,960	5	21,160	5	21,260
Physical Education	4	15,920	5	26,070	9	32,420	11	46,180	13	58,880	13	58,980
Career/Tech Ed	See SWS Spaces Above		See SWS Spaces Above		See SWS Spaces Above		See SWS Spaces Above		See SWS Spaces Above		See SWS Spaces Above	
Welcome Center/Administration		3,450		4,750		5,170		5,290		6,040		6,160
Food Service		9,110		12,810		12,760		14,560		16,360		17,110
Custodial		1,800		2,900		3,700		4,200		4,600		5,000
Sub Total Programmed Areas		**67,905**		**119,420**		**168,280**		**217,975**		**269,565**		**300,300**
Building Services, Circulation, etc	25%	16,976	25%	29,855	25%	42,070	25%	54,494	25%	67,391	25%	75,075
Total	**27**	**84,881**	**50**	**149,275**	**75**	**210,350**	**99**	**272,469**	**123**	**336,956**	**144**	**375,375**
*Teacahing Station												
Capacity [27 Students]		**Capacity**		**Capacity**		**Capacity**		**Capacity**		**Capacity**		**Capacity**
Regular Teaching Stations	24	648	44	1188	66	1782	87	2349	108	2916	126	3402
Special Needs	2	26	4	52	6	78	8	104	10	130	12	156
Special Needs Severe	1	9	2	18	3	27	4	36	5	45	6	54
Total Capacity	**27**	**683**	**50**	**1258**	**75**	**1887**	**99**	**2489**	**123**	**3091**	**144**	**3612**
Sq Ft Per Student Students		**SF per student**		**SF per student**		**SF per student**		**SF per student**		**SF per student**		**SF per student**
683		**124.3**		**118.7**		**111.5**		**109.5**		**109.0**		**103.9**
Capacity [35 Students]		**Capacity**		**Capacity**		**Capacity**		**Capacity**		**Capacity**		**Capacity**
Regular Teaching Stations	24	840	44	1540	66	2310	87	3045	108	3780	126	4410
Special Needs	2	26	4	52	6	78	8	104	10	130	12	156
Special Needs Severe	1	9	2	18	3	27	4	36	5	45	6	54
Total Capacity	**27**	**875**	**50**	**1610**	**75**	**2415**	**99**	**3185**	**123**	**3955**	**144**	**4620**
Sq Ft Per Student Students		**SF per student**		**SF per student**		**SF per student**		**SF per student**		**SF per student**		**SF per student**
875		**97.0**		**92.7**		**87.1**		**85.5**		**85.2**		**81.3**

Overall SWS/Cluster Concept Facility Drawing [sample 2,400 student school]

Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.



Program Area Overview

Listed below is an overview of each program area to be included in the high school facilities in Long Beach. Program areas of the school include a administration area, core academics and special needs, a media center, visual arts, music and performing arts, physical education, technology education, student spaces, an cafetorium/multi-purpose/ student dining, and community use alternatives.

Administration/Student Services

Immediately upon entry, visitors will be greeted in the administration "welcome area." The principal and support staff offices and guidance services will be located in a centralized area at the main entrance of the school. The assistant principals as well as some of the itinerant services will be located in each learning community.

Core Academics & Special Needs

The learning community concept accommodates a variety of instructional strategies and student-grouping approaches. This concept also provides a learning environment that is characterized by flexibility, a sense of community for the students and teachers working in a cluster or community, and a safe/well-supervised environment. Teachers will have the option and flexibility within a cluster to create and organize learning environments that work for students and their learning styles.

The basic organizational unit for this school will be the learning community, consisting of general-purpose learning labs or classrooms, teachers' center, small group rooms and tutoring offices, self-contained special needs rooms, resource rooms, and science labs.

The learning communities can be organized based individual grade level (i.e. a 9th, 10th, 11th and 12th grade communities for a three house scenario), grade groupings (i.e. 9th & 10th, 11th & 12th, etc.), departmental grouping, career clusters, or by theme. The learning communities should be located around the media center and away from noisy spaces like the gymnasium and cafeteria/multi-purpose. Special attention will be given to accessibility of all educational and support spaces and an integrated learning program.

Media Center

The media center serves a dual role. Its traditional role is a place to conduct research and for learning. Its new role is to serve as a technological information base. In this new role, the media center houses a transparent voice/video/data network, which runs throughout the entire building. This network enables the transmission of media services to the desktops of teachers and students without them physically entering the media center. This area is changing from a "depository of books" to a "technology information distribution center." It is not projected that the library functions will discontinue; rather digital technology will enhance voice, video, and data communications within the school, among district facilities, and with distance learning resources.

Visual Arts

The art curriculum will be accommodated in teaching spaces designed to provide workspace and storage areas.

Music/Performing Arts

Music and Performing Arts is a dynamic part of any curriculum, providing students with an opportunity to improve their creative skills. Design, flexibility, and acoustics should be especially considered when planning these spaces. Further, since the community will use these spaces, location of the auditorium should be strategically placed within close proximity to the main entrance.

Physical Education

To support the 9-12 school physical education program, a variety of indoor and outdoor areas are required. Outdoor physical education teaching areas will be located near the indoor gymnasium.

Physical education facilities should be designed and constructed with a focus on community use during non-school hours, since there is a high demand for both indoor and outdoor facilities.

Technology Education

Since it seems the rate of change in technology is by the minute, it is necessary to create a teaching space for this curriculum that has maximum flexibility. Within the space, there should be provisions for computer use, investigation of new and emerging technologies, and traditional hands-on work.

It is anticipated that three or more career clusters will be incorporated into the building. The proposed Technical Education spaces are planned to be flexible with the ability to focus on engineering/robotics, communications, health services, graphics, architecture, and/or business.

A Young Professionals program can provide students with opportunities to learn about entrepreneurship, finances, resource management, programming, networking, publication, presentations, and web-design computer skills. These opportunities will allow students to become knowledgeable about the business world and technology.

Student Spaces

Dedicated student spaces allow peer to peer interaction as well as teacher to student interaction key to relationship building. They also help students take pride and ownership in their school. Students can use these spaces to meet with clubs, sports teams, study groups, etc.

Cafeteria/Multi-Purpose Room/Student Dining

This area is planned as a flexible room that can accommodate student dining, performances, assemblies, and community meetings. It is proposed, through creative design, that this area will effectively house multiple functions with seating space for all uses.

Community Use Alternatives

School buildings are often viewed as centers for the community. To facilitate community involvement, a parent volunteer room is provided. Additionally, areas such as the media center, performing art center, and cafeteria/multi-purpose will be utilized by the community.

Special Features

Listed below is an overview of special features to be included in the 9-12 facilities in the Long Beach Unified School District. Special features of the school, such as furniture, equipment, technology, and site are also described.

Corridors and Commons Spaces

The front entry lobby should be welcoming and inviting for students, staff, and visitors. Extensive display systems should be provided for 2-dimensional and 3-dimensional student work and awards. Finishes should be durable and easy to maintain. The scale of all spaces should be student-friendly. Layout of corridors and common spaces should facilitate positive student behavior and attitudes about school. Colors, artificial lighting, and natural day lighting should be managed artfully to create an environment that communicates that school is a very special place.

Furniture & Equipment

Classrooms vary in shape and size; therefore, the furniture should be flexible to accommodate a variety of classroom formats for both individual and group activities. Teachers and students should have storage space for personal belongings, papers, and books as well as storage for supplies and materials. Work areas exist with direct access to copiers, multi-media equipment, and telephones. Teacher preparation areas should be located in close proximity to classrooms to permit, encourage, and enhance student and teacher interaction.

Technology

The facility will contain the latest in technology and be wired for voice, video and data throughout the building. The program design is intended to bring information to the desk of the student, and computer technology will be distributed in every classroom. It is intended that access to technology will be seamless and pervasive throughout the building. The Media Center will serve as the hub for technology distribution.

Handicapped Accessibility

The entire facility will be accessible for all students, staff, and visitors. This will be accomplished through judicious use of ramping and elevators where necessary, sufficient internal clearances for circulation, convenient bus/van loading and unloading, and nearby handicapped parking spaces. All elements of the Americans with Disabilities Act must be complied with, including way finding and signage, appropriate use of textures, and universal accessibility of all indoor and outdoor school facilities.

Aesthetics & Flexibility of the Learning Environments

Constructing the indoor and outdoor structures and spaces where students go to school today must meet many challenges and expectations. The aesthetics should reflect, first and foremost, the high academic aspirations of the school. It should have community visibility and presence. Creating a community landmark will establish a recognizable identity that will instill pride in its students and community. Areas within the school should be developed to have clear organization and internal identity.

The facility should capture the students, making them feel that the space is special, and therefore infer that each individual is special. Aesthetics that affirm the value of the individual must be emphasized, with spaces for the admiration of the accomplishments of self and others. The school should resemble a place for academic success, high self-esteem, social interaction, and physical safety. The facility layout should be especially easy to comprehend and reflect how classes relate to one another. Spaces should be provided for positive socialization among students and with teachers.

Variety of Instructional/Learning Spaces

Space needs for ongoing student assessments and emerging, more active learning methods results in a greater variety of spaces to support learning. These include teacher prep/offices and larger sized learning labs (classrooms) than historically provided for high schools.

Spaces should be designed to allow for flexibility in educational delivery, size of student grouping, noisy collaborative student activities, and increasingly intensive reliance on computer technology. Spaces should allow students to work independently and collaboratively, give and/or receive tutoring, as well as accept instruction."

Learning lab/classroom spaces in the high schools have been planned for 25 students in general instruction and 10 in low incident Special Education spaces.

Staffing Patterns

The predominant staffing pattern in Long Beach consists of classroom teachers (having most contact with a majority of students) supplemented by specialist teachers and professionals for exploratory learning and focused interventions. The latter are undertaken in separate specialized spaces and, wherever possible, through inclusion in the classrooms. As programs and groupings change, a more differentiated staffing pattern may emerge with lead or master teachers and more specialists and paraprofessional facilitators. The key is to embrace flexibility so that student needs will be met. As the programs and groupings change, a more differentiated staffing pattern may emerge with lead or master teachers and more specialists and paraprofessional facilitators. The key is to embrace flexibility so that student needs will be met.

Facility Change Should Be the Norm

Many school planning configurations of multiple, isolated classrooms make changes and additions cost-prohibitive and, once a building is constructed, often difficult to accomplish. Facilities should be constructed in a manner in which change and flexibility is the norm, not the exception. Building materials and furniture should be selected to support these concepts as well.

The challenge of developing flexible space directly impacts the budget and space requirements. Developing flexible and common areas will impact all program areas and must be weighed for their effectiveness.

In order to realize the full potential of a building's flexibility, staff training needs to occur on how the building might be used to meet the needs of students most effectively.

Indoor and Outdoor Learning Environments

By rethinking all spaces, better use of the facilities and site can occur. One way to accomplish this is to use windows and outside areas to make rooms "feel" larger as well as utilizing outdoor areas for teaching environments.

Common and shared use areas should be considered to provide spaces for positive interaction and orientation within the school. All learning environments should be developed to foster a sense of belonging and pride. The use of the building system/design as an actual teaching model and example of technology and environmentally conscious design should be considered. Creativity and functionality should work hand in hand. Color, building materials, furniture, and landscaping should be selected carefully to develop a pleasing and inviting atmosphere.

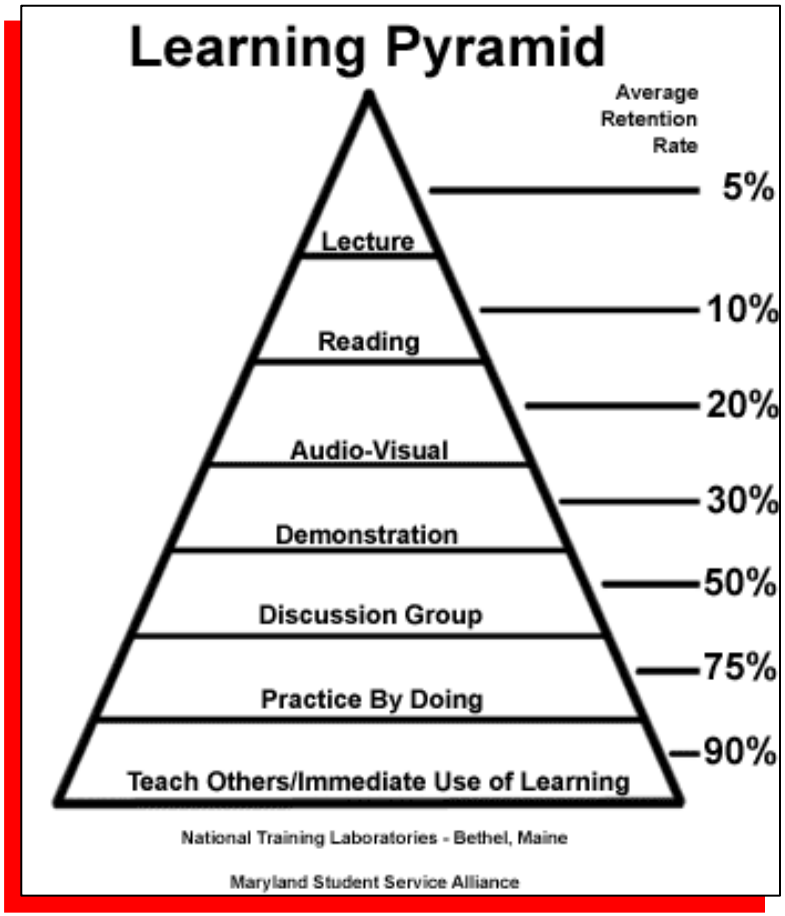
The learning environment should be student-centered and designed for "hands-on learning," promoting student autonomy and independence. Space for active participation should be incorporated, with classrooms providing opportunities for integrating disciplines and easy access to tools of exploration. The outdoor site should serve as a pro-active learning environment as well.

Overview of 21st Century Best Practices

A series of educational "best practices" intended to provide high school students with the greatest opportunity for success have been developed. These best practices include the following suggestions for creating a 21st century learning environment:

- Curriculum: Offer Essential Knowledge, Integrate It, and Make Connections to Real Life
- Organizational Models: Provide Student-Centered House Approach
- Technology: Create Pervasive and Integrated System
- Administration: Increase Student Contact and Flexibility
- Community Use: Instill a Sense of Participation, Ownership, and Pride
- Student Groupings
  - Schools should organize facilities into houses, pods, or clusters.
  - School Services
  - Schools should continually evaluate the services they provide in order to meet the changing needs of their students.

While these "best practices" are not intended to be solutions to all of the issues confronting schools, it is shown that School Districts that choose to provide students with new educational opportunities have experienced marked improvement in student achievement.



21st Century Best Practices

The purpose in developing new high school facilities is not just to fix the poor physical conditions of the existing High School, but to serve as a catalyst for major reform and improvement of high school education in the Long Beach Unified School District.

Public education is at a unique point in history. We have transitioned from the industrial age to the information age, and as most organizations have already done school districts across the country are considering changing the way they do business. School districts are investigating curricula, organizational models, current and emerging technologies, the role of administration, and their local communities to determine the effect each of these has on student performance.

These investigations have resulted in a series of educational "best practices" intended to provide students with the greatest opportunity for success. Implementing educational "best practices" can have a significant impact on facilities. The following describes a few educational "best practices", cites examples where they have been implemented, and expresses the impact each has on facilities.

Summary: As a result of the transition to the information age as well as the aging of facilities, school districts are investigating curricula, organizational models, current and emerging technologies, the role of administration, and their local communities to determine the effect each of these has on student performance.

These "best practices" suggest the following:

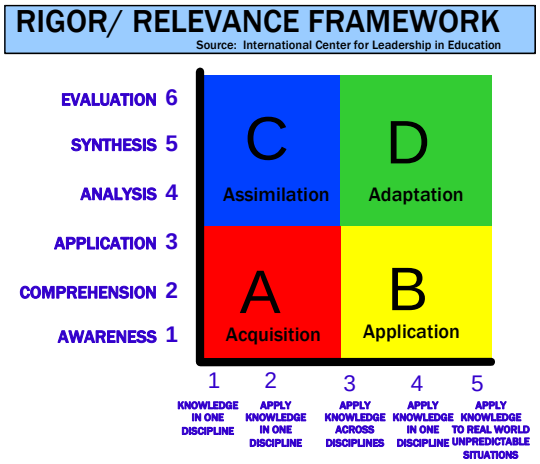
- Curriculum
  - Offer Essential Knowledge, Integrate It, and Make Connections to Real Life
- Organizational Models
  - Provide Student-Centered House Approach
- Technology
  - Create Pervasive and Integrated System
- Administration
  - Increase Student Contact and Flexibility
- Community Use
  - Instill a Sense of Participation, Ownership, and Pride

These "best practices" are not intended to be solutions to all of the issues confronting schools. However, schools that choose to implement these "best practices" will experience an improvement in student achievement because these practices provide students with the best opportunity for success.

Curriculum

Offer Essential Knowledge, Integrate It, and Make Connections to Real Life

- Based on federal and state content standards
- Require content areas to be linked to one another
- Accommodate multiple-intelligences and learning styles
- Demand critical thinking and problem-solving
- Incorporate pervasive technology
- Utilize multiple performance assessments



Best Practice: "Best practices" suggest that the core of the high school curriculum must offer both the substance and the practicality to prepare students for an uncertain future. The curriculum should strive to meet individual needs without compromising larger goals. Dr. Willard Daggett, President of the International Center for Leadership in Education and a national expert on education, claims that schools should "make education rigorous and relevant for all students." Daggett uses a Rigor and Relevance Matrix to categorize curricula into one of four quadrants. Daggett defines rigor as the level of Bloom's Taxonomy achieved in any given lesson. He defines relevance as a continuum ranging from "knowledge in one discipline" to "applications to real-world unpredictable situations."

Example: In an effort to make curriculum rigorous and relevant, all sophomores at Oxford Hills Comprehensive High School, located in South Paris, Maine, take a class called the Human Experience (HumEx), which combines the study of math, biology, English and social studies. At the core of the integrated HumEx class is a problem-based approach to the curriculum. Instead of students simply studying content, they are expected to study, understand and then apply the content to a specific, "real" problem. During the school year '02 - '03, the students were charged with creating and maintaining their own model community. To solve the problem, the students studied ecology, philosophy, genetics, literature, economy, geometry, algebra, statistics, government, and poetry.

Facilities Impact: Adopting curricula that offer essential knowledge, integrated approaches, and connections to real life can have a significant impact on facilities. Facilities may require student production spaces for the creation of

projects, small group rooms for collaboration, and large group presentation spaces for students to show their work.

Organizational Models:

Provide Student-Centered House Approach

Best Practice: Student-centered approaches provide students with a variety of opportunities to learn and develop skills and competencies based on their individual needs. Organizational models such as grade-level teaming, schools-with-in-a-school, and thematic approaches often characterize these student-centered approaches.

"Best practices" might suggest that facilities be organized into houses, instructional units comprised of classroom spaces, student production spaces, and teacher preparation areas. "Best practices might also suggest that double-loaded corridor designs cannot provide the flexibility necessary to accommodate multiple organizational models nor can they foster the same level of cooperation, teaming, and sharing of professional resources as house designs.

Examples

- *Grade-Level Teaming:* Grade-level teaming is based on organizing the building into separate grade-level units. Grade-level teams typically utilize an interdisciplinary approach. Medina High School, located in Medina, Ohio, is organized into six 600-student grade-level houses. Each house contains learning centers, regular classrooms, for each of the core academic content areas [i.e. mathematics, science, English, social studies, foreign language, and business]. Students in each respective grade-level take their core academics in their house leaving only for specialty areas such as physical education, visual and performing arts, and technology education. The goal of the grade-level teaming model For Medina High School is to create an environment, which facilitates personalized education and accommodates both departmentalized and interdisciplinary instructional approaches.

- *SWS/Cluster Concept:* SWS/Clusters are based upon multiple units of grades 9-12 housed in the same facility, but having separate governing bodies. Thus, a large school can be divided into smaller, more personalized units.

Alhambra High School, located in Phoenix, Arizona, is based on a SWS/Cluster organizational model. Houses in Alhambra High Schools are comprised of regular classrooms, small group rooms, science, project lab, and teacher workroom. In addition, decentralized administrative spaces such as an assistant principal's office and an itinerant office are included in each house. The SWS/Cluster model provides an opportunity for more interaction between students and administrators and between administrators and staff. The SWS/Cluster model also provides for the flexibility to operate as independent schools under the same roof.

- *Thematic Teaming:* Thematic teaming is based on delivering curriculum within the context of a specific theme. Themes may include Science and Math, Fine and Performing Arts, or Foreign Language and Literature.

Metro-Tech High School, a comprehensive academic and vocational high school located in Phoenix, Arizona, was renovated to incorporate a thematic organizational model. Each house includes regular classrooms, science lab, a student production area, and a teacher workroom. Each house is specialized for one of five themes: Public Service, Construction, Manufacturing, Transportation, Business, and Marketing.

Facilities Impact: Implementing these organizational models, specifically the house concept, offers significant advantages to the delivery of curriculum and observation of students. While the impact implementing the house concept has on facilities is continually being evaluated in terms of major systems, it typically should not outweigh the educational advantages.

Technology

Create Pervasive and Integrated Systems

- Access to voice, video, data, and electrical outlets provided in every instructional space
- Proficiencies incorporated into other content areas
- Utilize distance-learning opportunities
- Staff development

Best Practice: Technology continues to evolve and influence education. Technology has traditionally been perceived as a stand-alone content area with its own dedicated spaces. "Best practices," however, might suggest that technology should be incorporated into every learning space and into all curricula. Incorporating technology can accomplish two basic goals of education: linking traditionally isolated content areas and providing teachers with tools to explore more of Howard Gardner's multiple intelligences in their lessons.

Howard Gardner has indicated in "Frames of Mind" that there are several different types of intelligences (linguistic, mathematical, musical, kinesthetic, spatial, intrapersonal, interpersonal, and natural intelligence). Each person has strengths in some intelligences and weaknesses in others. Experts have indicated that students retain more information when several intelligences are involved in the learning process. For example, The NTL Institute for Behavior Science reports that students retain only 10% of what they read, but retain 90% of what they read, see, hear, experience, and teach.

Facilities Impact: Incorporating technology into all learning spaces and into all curricula can have a significant impact on facilities. First, all learning spaces would require access to voice, video, data ports, and electrical outlets. Second, infrastructure must be designed in such a way to allow access for maintenance and upgrades as technology continues to evolve.

Administration

Increase Student Contact and Flexibility

Best Practice: As a result of recent violent crimes occurring in school facilities, school districts across the country are searching for both active and passive means of security. While not the only reason, "best practices" suggest

that decentralizing administration serves this purpose. The decentralization of administrative services also provides the flexibility and opportunity for increased student contact, decreased student anonymity, and opportunities for passive supervision.

In addition, assistant principals, deans, and counselors form teams, are closer to the student and teacher, and can more efficiently use their time, expertise, and resources because their offices are located in the academic clusters. Communication between administrators is no longer an issue as access to instructional information and student records and maintaining a positive and secure school environment can be achieved through the effective use of technology.

Facilities Impact: Decentralizing administration affects facilities only by the necessity to relocate offices and support spaces within each learning community and/or other areas.

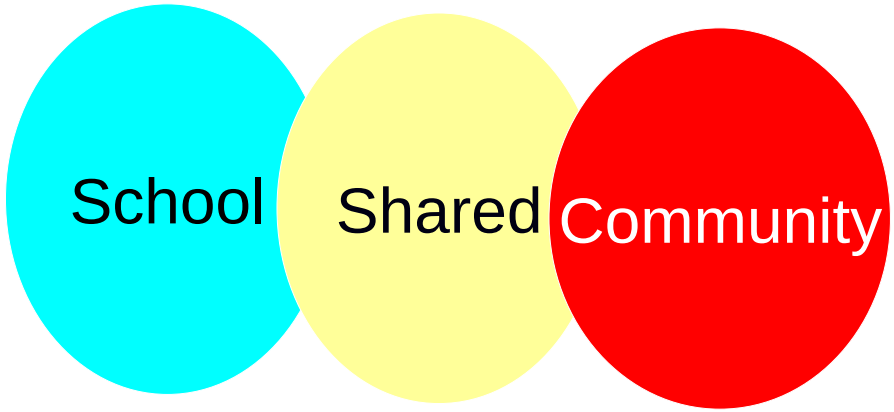
Community Use

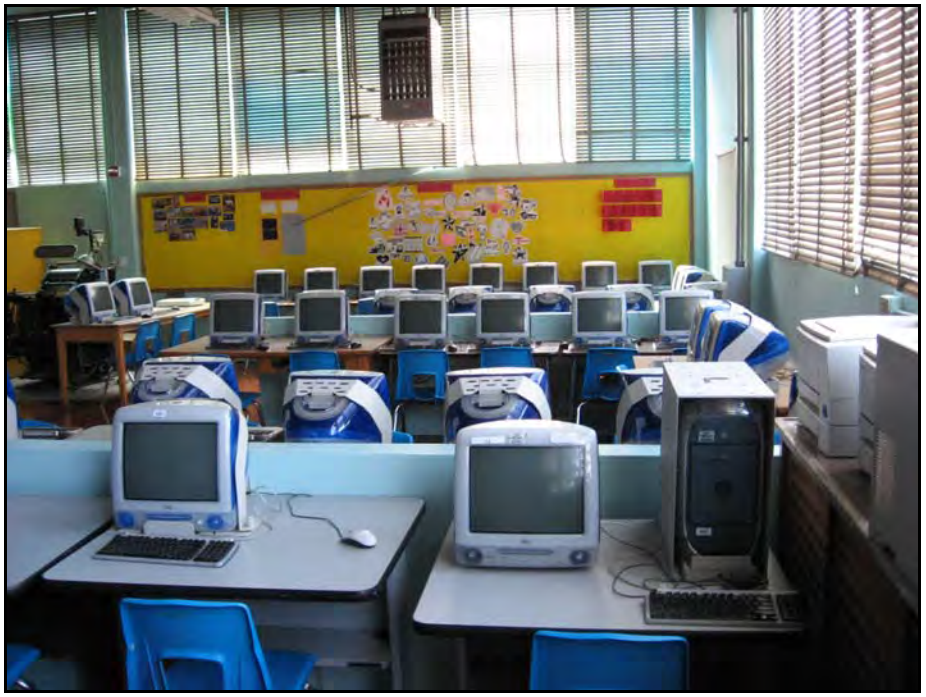
Instill a Sense of Participation, Ownership, and Pride

- Cooperative Alliances
- Youth Services
- Shared Decision-Making
- Community Service Volunteers
- Parent Involvement
- School/College Partnerships

Best Practice: "Best practices" suggest that facilities should serve not only as an instructional centers for students, but also as user-friendly centers of the communities. Facilities should provide programs and access to resources for adults, businesses, and other community organizations. Community/school partnerships are playing an increasing role in high school facilities. These partnerships provide students with expanded learning opportunities, professional development opportunities for staff, and a venue for community activities.

Facilities Impact: Providing access to and forming partnerships with the community can have a significant impact on facilities. Additional spaces such as parent or community volunteer rooms, community locker rooms, and storage spaces may be necessary. In addition, for security purposes, community access may require careful attention to the organization of the facility. Community accessible portions of the facility may need to be located in areas that permit the remainder of the facility to be secure before, during, and after school hours.





Technology

Today, technology is used extensively to help students learn basic and critical thinking skills. In the future, the applications and capabilities of educational and information management technology will increase dramatically. Today, the majority of jobs require at least some technology proficiency and as such, it is expected that students will leave school with the ability to work with and use technology.

The implementation of both wired and wireless voice, video, and data throughout school facilities is becoming a standard in schools across the country. Appropriate and strategically designed and installed technology will greatly enhance the teaching and learning of basic skills and position a school to take advantage of technological developments in the future.

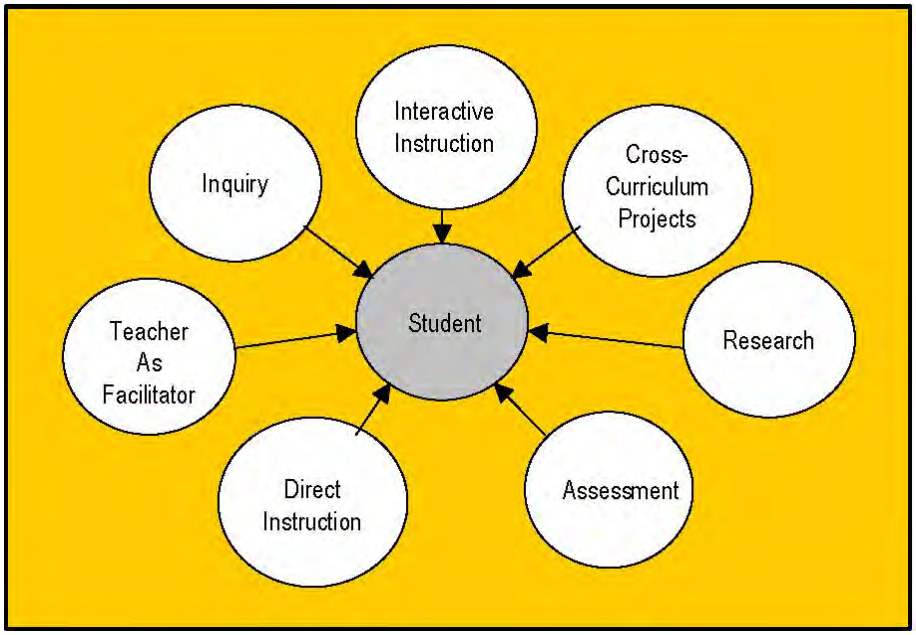
To take advantage of technology, schools will need comprehensive staff development programs and training; student access to technology applications; updated hardware and software in computer labs, classrooms, and media centers; updated school wiring and internet access; integration of technology into the academic content standards; home to school access; technical support personnel at the school level; and a security system that encourages use and protects the investment.

It is also important for schools to hire new teachers who already possess the required technology skills expected of teachers in the school department. Teachers and administration should also attend periodical technology in-services to make sure they know how to use the latest technologies.

All classrooms should be multi-use/multi-purpose with invisible technological support. There should be a seamless web of technology to support the classroom management between administration, teachers, students, and the home.

Projections indicate that we are within a decade of each student having their own personal computing device. The idea of computer labs are likely to disappear at the same time the ability to accommodate each individuals personal computing device is likely to become the norm.

Research suggests that multi-sensory teaching is most effective in mastery of basic skills. Technology supports visual, auditory and experiential learning; therefore, it is recommended that all instructional spaces have voice, video, and data accessibility. This access enhances the flexibility of the learning environment to respond positively to alterations in the use of space. The wiring and other infrastructure components should be the first priority since terminal devices can be added later; however, wireless networks can also be added as the need arises. The facility should have surplus electrical power capacity and network wiring/bandwidth to permit expansion of technology.



Technology Components

Voice: Telephone and voice communications in every classroom and workspace to support internal and external communications

Consideration should be given to all staff having wireless cell phones

Video: Video distribution in every classroom and throughout the building with interactive video capabilities to support whole and small group instruction, distance learning, and providing access to a wide range of internal and external resources

Data: Data retrieval capabilities in every classroom and throughout the building as well as network capabilities City-wide and to other external resources (i.e. Internet) Today's schools are being wired and equipped to support management and instructional applications. Current voice, data and video systems can provide leadership, instruction, data management, internet access, and student services which go far beyond the systems in schools that were constructed as recently as the late 1980's. Technology is becoming increasingly useful and appropriate to the student and the educator. As home and business worlds move into higher levels of technological applications, it is critical for schools to be equipped and play a leadership role in the integration of technology into the teaching, learning, and communication processes.

Voice video and data are all merging into the same digital platform.

Applications of Technology

Technology has four primary applications within the school environment. These applications have the potential to have a positive impact on every aspect of the educational processes found in school. The following table illustrates the four primary applications that interface with each other and some examples of educational applications in each area.

Communication/ Productivity: E-Mail, Word Processing, Database, Spreadsheets, Phone, Internet	**Student Services:** Schedules, Grades, Attendance, Counseling, Transportation, Food Services
Educational Technology: Media Center, Computer Applications, A/V Applications, Distance Learning, Internet	**Business Systems:** Accounting, Payroll, Inventory

Technology & The Learning Environment

Technology greatly enhances the learning environment. Technology, in the typical classroom, can support multiple instructional designs.

Whole Group Instruction [20-30 students] --This includes the use of overheads, DVD players, 36-inch computer/TV monitors, PVP video/computer projectors, LCD flat panels and various forms of computer display techniques.

Small Group Instruction [6-8 students] This includes areas in the classroom and in shared common spaces, which a teacher or another resource person can work with groups of 6-8 students. The technology is essentially the same as whole group instruction technology, the only difference being the size of the groups.

Individualized Instruction [1-2 students] This is primarily a computer-based instruction design where students interact with a computer workstation. As all forms of technology become more and more digitized, it is envisioned that these will become multi-media workstations that integrate voice, video, and data formats as well as having high speed internet access.

The diagram that follows represents typical technology applications found in schools today.

Classroom

It is recommended that all classrooms have voice, data, internet, and video accessibility. This will enhance the flexibility of the learning environment to respond positively to alterations in the use of space. The wiring and other infrastructure components should be the first priority since terminal devices can be added later with the exception of wireless networking which can be added as the need arises. The facility should have surplus electrical power and cooling capacity to permit expansion of technology. Infrastructure, systems and cabling are typically funded as capital projects.

The following components should be included in each classroom:

- One teacher workstation with voice, data, and video
- CAT 7 data drops with LAN, WAN, and Internet with 6 fiber for future expansion
- Electric power availability [one quad per drop] and/or raceway wiring system to support 4-6 student computers
- Added cooling systems to offset the heat generated by the computers
- One video drop with mounted video monitor
- One voice drop with telephone
- Possibly, preparation for future [25-30 data drops]
- Face plate switches
- Audio classroom enhancements
- Student computer work stations
- DVD port
- Wireless

Careful attention should be given to furnishings, i.e., student desks, specialized or customized cabinetry, location of data ports, white boards, and monitors.

Electronic Media Studio

The electronic media studio equipment includes all of the devices to operate or control the video and media center system. Equipment will be able to be "checked in/out" of the studio. In addition, the room will be the centralized archive of student digital portfolios.

The equipment located in the electronic media studio includes:

- Video control systems
- CD –RW
- DVD players/recorders
- Mounted LCD/PVP (Portable Video Projectors)
- Laptops
- CAT 7 data drops with LAN, WAN, and Internet access and computer workstations
- Interactive Video Distance Learning (IVDL)
- Circulation system
- Media retrieval system
- Fiber pulled to media center for future expansion
- 2-25 stationed wireless notebook carts

Office

Office areas have the following needs:

- Appropriate voice and fiber/CAT 7 data drops and/or wireless capability with LAN, WAN, and Internet access
- Electric power availability (quad per drop)
- Capability to support computer, network, printer, and fax
- Staff workstations
- Telephones (voicemail and fax capability)
- Security video system (main office only)
- PA system
- Audio system
- Analog phone lines for fax machine
- Capability to support high speed networked copier

Conference

Conference areas should include:

- Voice, video, and CAT 7 data drops with LAN, WAN, Internet access, and fiber pulled for future
- Electric power availability [quad per drop]
- Capability to support video monitor and video projection
- One telephone
- One computer

Cafeteria / Multipurpose Room

These spaces should have the following equipment:

- Video ports and monitors that can be used for video displays of electronic bulletin boards
- CAT 7 data drops and/or wireless capability with LAN, WAN, and internet access to support point-of-sale devices, fiber pulled for future, inventory system access, and student access
- Telephones (voicemail capability in Cafeteria Office)
- Analog phone line to monitor refrigeration systems
- Mounted LCD and workstation
- Centralized control panel for video and data
- Storage space

Gymnasium

The gymnasium should have the following equipment:

• Video ports and monitors that can be used for video displays of electronic bulletin boards
• 2-3 video and fiber/CAT 5/6 data drops with LAN, WAN, and Internet access
• Portable video projector (PVP) and computer
• Large, electric front projection screen budget and includes:
• Telephone
• PA system
• Audio system
• Centralized control panel for scoreboard, video
• Upgrading specific computers for specific monitors, electric front screen, and audio curriculum tasks

Technology Control Room

The Technology Control Room will house Uninterruptible Power Supplies (UPS), communication servers, PBX, video system, network router, and network switches. In addition, this room will have additional cooling systems to maintain a consistent room temperature.

Furniture will consist of IEEE racks, worktable, and monitor stand. All equipment must be located by ample electricity and have an assessable diameter of 4-5 feet.

Funding and Implementation

Educational software is typically funded through operating budget grants and includes:

• Productivity software
• Computer lab applications
• Library automation software
• Reference resources (computer and A/V)
• Curriculum-specific software
• Curriculum-specific A/V media

Maintenance is funded as a line item in the yearly budget and includes:

• Annual software support
• Annual hardware support agreements
• Upgrading specific computers for specific curriculum tasks

Staff Development is funded from the operating budget and grants and includes:

• In-service training on technology
• Special training activities for advanced users [stipends and summer grants]
• Attendance at regional and national shows

Staff Support is also funded from the operating budget and grants and includes:

• Technology directors hired to implement plan[s] instructional focus
• Educational technology specialists
• Technology technicians – repair and maintenance (computers, network, and telecommunications)
• Building-level technology coordinator
• Media production staff
• Help desk staff
• Webmaster

Upgrades – funded as capital
• Expansion of network resources
• Expansion of telecommunications
• Media production
• Replacement of technology hardware
• Replacement of obsolete video equipment
• Replacement of obsolete computers

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Safety & Security

There is a high interest in maintaining an inviting and deinstitutionalized environment, while simultaneously providing a safe environment for students, staff, and community who use the facility and adjacent support services. The organization of a building will have a major impact on student behavior and safety concerns. Building security can be addressed in an active or a passive manner: active security is based on security systems; passive security is based on program design, building configuration, and community participation. Schools should be based on passive concepts with applied active concepts where necessary.

If we deal with the symptoms of the problem, we tend to focus on the active security procedures that can be implemented. If we deal with the cause of the problem, we are likely to address most of these issues through passive or program and building configuration solutions.

The problems and their causes are multi-dimensional: some issues can be addressed, while others cannot. Causes include, but are not limited to, family problems, lack of sense of belonging, lack of identity, lack of communication, lack of accountability, and student/teacher relationships. Passive program and building configuration should be the primary focus and active security systems the secondary focus.

Since the greatest number of discipline problems in a school occurs when students switch classes and have to travel from one end of the building to the other, having students spend the majority of their day in one section of the building, reducing movement will result in fewer discipline problems. Teams of teachers having responsibility for the same students improve the student/teacher relationship and results in greater continuity and monitoring of behavior issues.

Organizing a building into teams or clusters results in a number of changes which will reduce behavior problems:

- Teacher preparation areas place adults in closer and more direct contact with students.
- Utilizing a decentralized administration approach provides the opportunity to have counselors, and/or assistant principals easily accessible to student sin the academic clusters.
- Students have a greater sense of belonging and identity. For the majority of the day, their place is in the cluster/house.
- School pride becomes more apparent.
- Block scheduling is commonly utilized in secondary schools and also helps reduce pedestrian traffic within the building

The glass wall into the administration reception/waiting area in the pictures here provides good visibility of the main entrance. It serves a dual purpose of being inviting and welcoming to visitors while allowing administrative staff to monitor access during school hours. Way-finding is crucial to a successful school facility. The front entrance and reception area should be immediately obvious to anyone approaching and entering the building.

MASON HS, Mason, OH

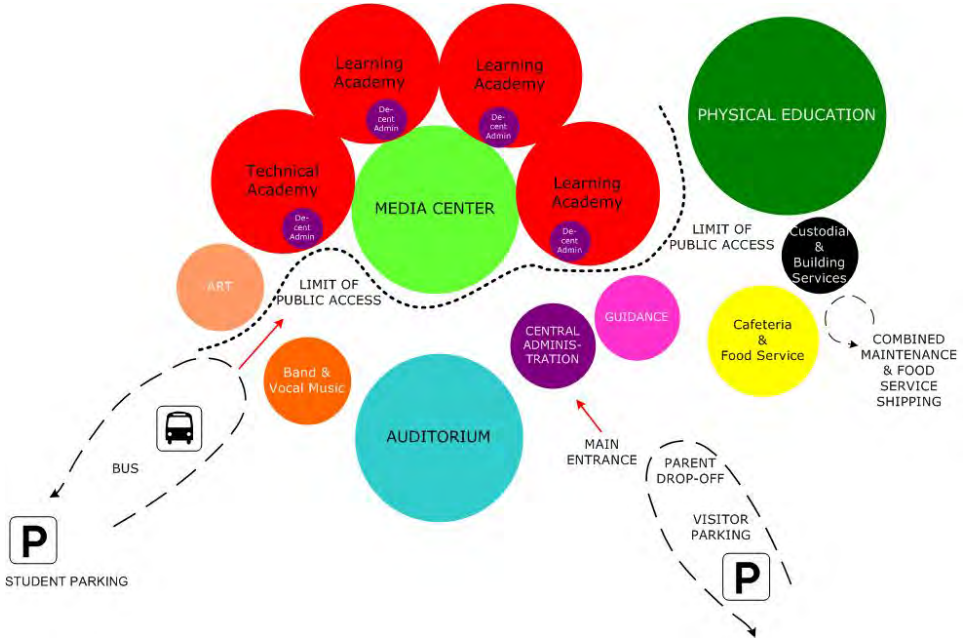
LAKEVIEW HS, Battle Creek, MI

Passive Security Concepts

Building Layout

- Avoid blind spots, corners, and cubby holes
- Locate administrative and teacher preparation with good visual contact of major circulation areas [i.e., corridors, cafeteria, bus drop-off, parking]
- Develop spatial relationships in such a manner that there are natural transitions from one location to another
- Locate toilets in close proximity to classrooms
- Design toilets to balance the need for privacy with the ability to supervise; consider having the access of staff toilet rooms through student toilet rooms
- Locate areas likely to have significant community [after school] use close to parking and where these areas can be closed off from the rest of the building.
- Provide for natural integration of students and staff
- External exits from offices
- Wide stairwells in two-story buildings; close in stairwell to outside
- Ability to partition unused portions of building
- Include elevator in two-story buildings

This example illustrates a cluster approach in a high school. Having teacher workrooms, commons area, restrooms, and storage integral to the cluster, reduces traffic and increases safety and security.



Types of Building Materials

- Use durable wall surfaces that are easy to clean so graffiti can be removed
- Incorporate pitched roofs which inhibit roof entry and are aesthetically pleasing
- Limits size of windows – use multiple smaller windows rather than one large window
- Glaze or tint windows
- Install non-slip floors at point of entry

Vehicular and Pedestrian Traffic

- Separate bus drop-off area from other vehicular traffic
- Separate staff, student, and community parking area, located in appropriate areas
- Separate student [pedestrian] traffic flow
- Consider impact on safety of "closed" campus vs. "open" campus

Uses of Technology

For instructional and administrative purposes, the new school should have extensive technology systems. These same infrastructures and technology components can be use to enhance building security.

- Phones in every instructional and support area
- Building-wide all-call designed to be heard throughout the school and on the play fields when needed.
- Motion or infra-red detectors, which can also be configured to conserve lighting costs.
- Video cameras that are used for instructional purposes could also be used for security purposes during non-school hours.
- Smoke and heat detectors located throughout the building.
- For access control into the building, there are alternatives to keys, such as access control cards. These are plastic "swipe cards" and proximity cards, both of which can be used as identification cards. The swipe card is places in a machine, while the proximity card simply has to be used close [usually three to seven inches] to the reader to unlock a door. The cards are coded to allow entry to appropriate doors at selected times. Only one card is required for multiple entry points. Used in conjunction with the card is the controller, which monitors alarms, and the software, which is customized for the application [establishes parameters, maps input-output points, enters phone numbers for dial-up site]. Other approaches include a battery-operated lock that requires a numerical code on a keypad.
- Wiring for CCTV in all hallways, offices, classrooms, and parking area
- Panic buttons located in all rooms
- Securable lobby area
- Programmed wipe cards used for doors
- Sound detection system

Landscaping, Playing and Practice Fields, Site, and Lighting

- Use high trees and low bushes [less than three feet high] to deter hiding
- Use aesthetically pleasing fencing around perimeter of the building
- Place some buildings or a tree buffer along the perimeter of the property to avoid extensive fencing
- Non-intrusive lighting of all area [not correctional-type lighting]
- Emergency lighting/power in hallways, stairwells, and rooms
- Provide security lighting around building and parking lots with photo cell timer with on/off capacity
- Separate athletic fields and informal gathering areas
- Locate athletic facilities away from building
- Recess building on site to avoid vehicular and pedestrian conflicts

Mountain View ES- Johnson City, TN
Ken Ross Architects, Inc.

The images left and below are examples of exterior and interior lighting usage to create a warm, safe, and inviting environment.

Council Rock HS – Richboro, PA Gilbert Architects

The image above is an example of using low bushes and high trees as landscaping features that deter hiding.

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Site Issues

Long Beach Unified School District offers the following considerations for of its 9-12 school sites in Long Beach.

Design Considerations

- Separate faculty and visitor parking areas
- Blacktop area
- Multi-purpose playfield
- Exterior lighting
- Fire vehicle access
- Fencing around school
- Location of “athletic centers”
- Service entry
- Separate drives for parent drop-off and buses
- Landscaping
- Use of adjacent properties

Traffic Flow

- Car, bus, and service vehicle traffic must be separated
- Vehicular and pedestrian traffic must be separated
- Consider access by fire department emergency vehicles when planning site circulation
- Provide drive-up access for large items in areas such as Food Service and Custodial/Maintenance
- Provide adequate areas for entering and leaving play fields

Parking

- Adequate and separate parking facilities should be provided for visitors and staff
- The school site must provide adequate areas for entering and leaving, parking, and play fields
- Consider covered walkways from car and bus drop-off areas
- Comply with regulations for handicapped access

Parking Spaces Based on Percentage of School Population			
	Elementary	**Middle**	**High**
Staff	10%	10%	10%
Visitor	3%	3%	3%
Student	20%	20%	20%

Lighting

- Include exterior security lighting with photo-cell timer for parking lots and exterior of building
- Provide appropriate lighting for athletic and practice fields
- Provide appropriate lighting for walkways

Landscape

- Design irrigation of fields, lawn, and landscaped areas
- Low-maintenance landscaping plantings
- Consider outdoor spaces as an extension of the classroom and opportunities for exploration and education

Playing Fields

- Provide secure and safe playing fields for students with direct access from the building

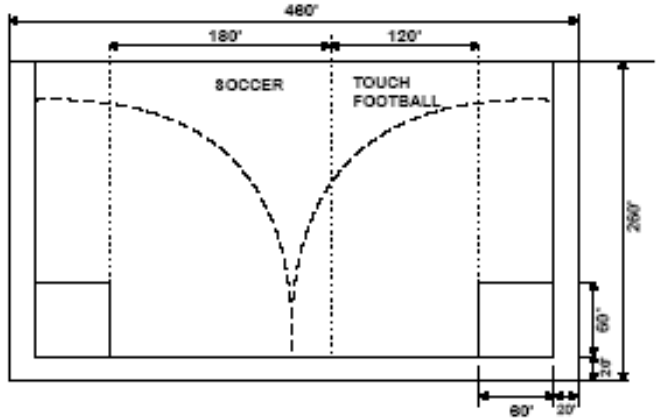
The following site guidelines for play fields are taken from the California Department of Education's ***Guide to School Site Analysis and Development: 2000 Edition***.

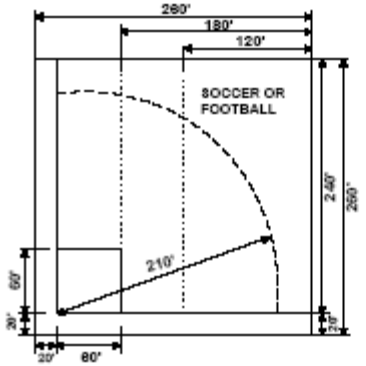
Table 6 Site Requirements for Grades Nine Through Twelve

	Enrollment										
	Up to 400	*401 to 600*	*601 to 800*	*801 to 1,000*	*1,001 to 1,200*	*1,201 to 1,400*	*1,401 to 1,600*	*1,601 to 1,800*	*1,801 to 2,000*	*2,001 to 2,200*	*2,201 to 2,400*
Type of outdoor facility	*Number of facilities required*										
G Field area 260' × 260'	1	1		1	1						
H Field area 260' × 460'			1	1	1	2	2	3	3	3	3
K Hardcourt area 100' × 120'	2	2	3	3	3	3	3	3	4	4	4
L Field area 360' × 360'	1	1	1	1	1	1	1	1	1	1	1
M Field area 300' × 750'	1	1	1	1	1	1	1	1	1	1	1
N Hardcourt area 100' × 110'	3	4	5	5	6	6	6	7	7	7	8
O Field area 200' × 360'		1	1	1	1	1	1	1	1	2	2
P Apparatus area (1,000 sq. ft.)	2	3	3	4	4	5	5	6	6	7	7
Percentage factor for layout	25	20	20	20	20	15	15	15	15	10	10

BASIC UNIT H

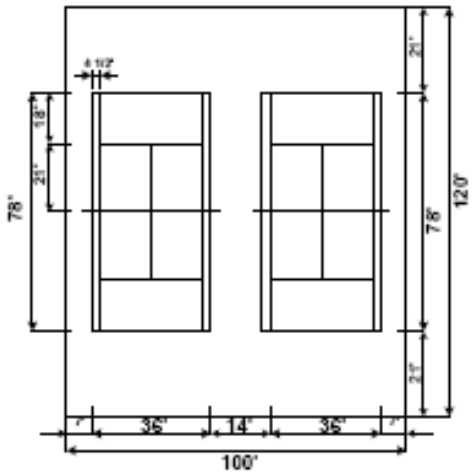
280' x 460' = 118,800 sq. ft.
2 SOFTBALL OR 2 FIELD AREAS





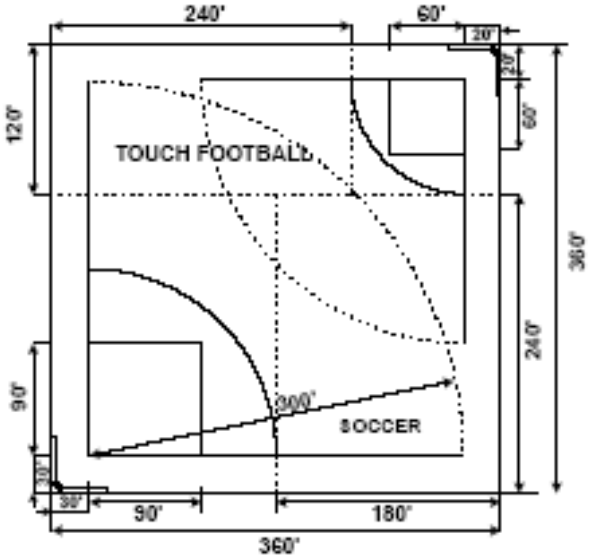
BASIC UNIT G

260' x 260' = 67,600 sq. ft.
1 SOFTBALL OR 1 FIELD AREA



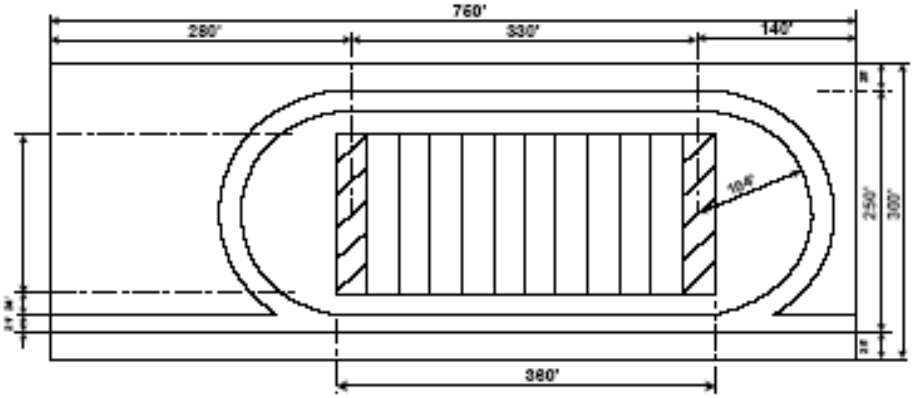
BASIC UNIT K

100' x 120' = 12,000 sq. ft.
2 TENNIS COURTS



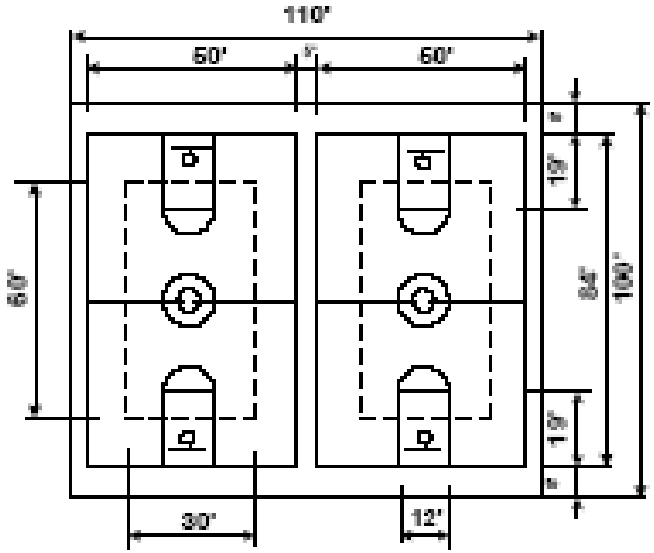
BASIC UNIT L

360' x 360' = 129,600 sq. ft.
1 BASEBALL AND SOFTBALL OR 2 FIELD AREAS



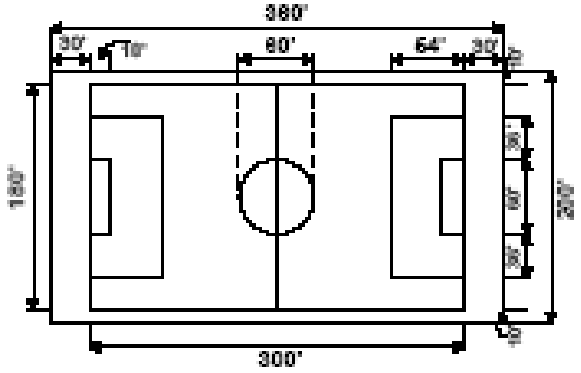
BASIC UNIT M

300' x 760' = 228,000 sq. ft.
FOOTBALL & TRACK



BASIC UNIT N

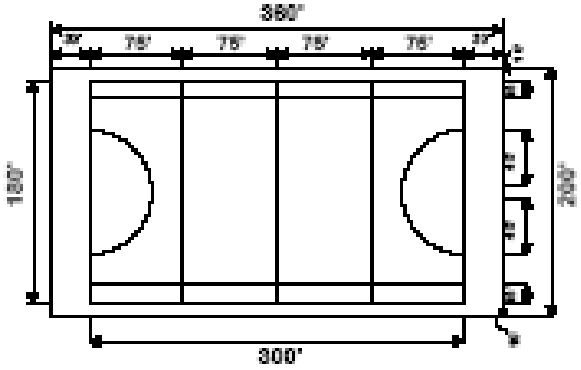
100' x 110' = 11,000 sq. ft.
BASKETBALL OR VOLLEYBALL



BASIC UNIT O

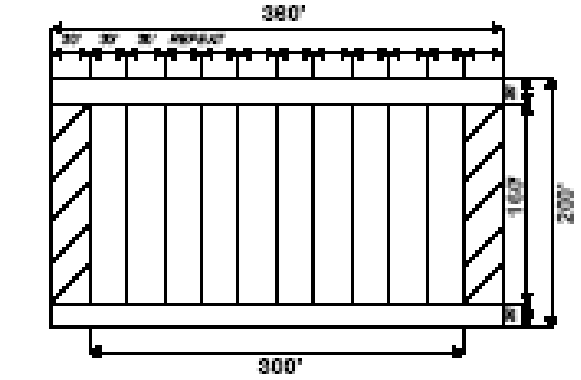
200' x 360' = 72,000 sq. ft.

SOCCER



FIELD HOCKEY

Basic Unit P, an apparatus area, is a space module of 1,000 square feet. The architect may design the area according to the dimensions of the particular type of apparatus to be installed as long as the total area does not exceed 1,000 square feet. Basic Unit P provides space for up to 75 students in grades six through twelve. (See Tables 4, 5, and 6 for additional basic units needed for enrollments beyond 75 in the upper grades.)



TOUCH FOOTBALL

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Aesthetics

The indoor and outdoor structures and spaces where students go to school need to be aesthetically pleasing and healthful settings. The facility should capture the students, making them feel that the space is special, and therefore emphasizing that each individual is important. Aesthetics that affirm the value of the individual must be stressed, with spaces for the admiration of the accomplishments of self and others. The school should resemble a place for academic success, high self-esteem, social interaction, and physical safety. The facility layout should be especially easy to comprehend and reflect how classes relate to one another in order to minimize the lost feeling common in students. Spaces should be provided for socialization among students and with teachers.

Variety of Instructional / Learning Spaces

Ongoing assessment of student progress will require facilities to be able to adapt with a changing program. Multi-use of buildings should be the norm. Spaces should allow for a wide variety of specialized instructional and hands-on learning experiences.

Today, students do not just work in groups of 20-25. As technology continues to advance, students are becoming more involved in extensive individual learning activities that are supplemented by small group [2-6 students], moderate group [10-20], and large group [50-150] activities. Space should be provided for students to plan work independently and collaboratively, give and/or receive tutoring as well as accept instruction.

Staffing Patterns

The predominant staffing pattern is composed of teachers, supplemented with para-professionals and specialists. As the programs and groupings change, a more differentiated staffing pattern may emerge with lead or master teachers and more specialists and para-professional facilitators.

Indoor and Outdoor Learning Environments

By rethinking spaces, better use of the facilities can be made. Some ideas include: use gardens instead of pavement and use hallways as art galleries or museum strips. Creativity and functionality should work hand-in-hand. Color, greenery, building materials, and furniture should be selected carefully to develop a pleasing and inviting atmosphere.

The learning environment should be student-centered and designed for "hands-on learning," promoting student autonomy and independence. Space for active participation should be incorporated with modular, flexible classrooms providing opportunities for integrating disciplines and easy access to tools of exploration. The outdoor site should serve as a proactive learning environment as well.

Learning from Others

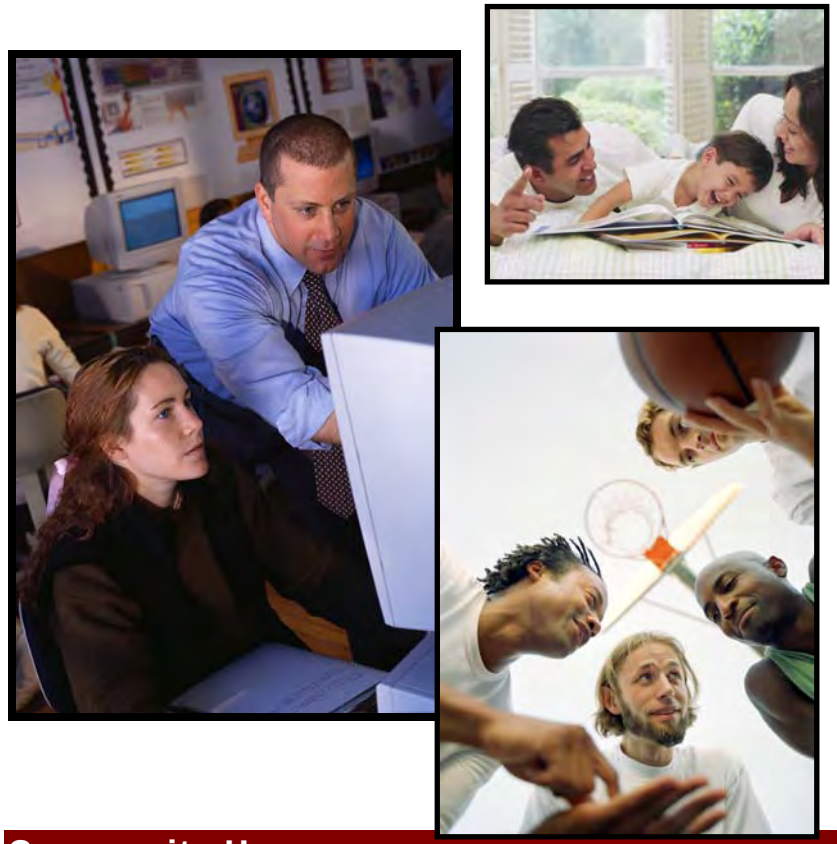
Modern office environments provide greater insights into flexibility than current school environments. Many of their concepts should be taken into consideration:

- Demountable, movable wall systems
- Modular furnishings
- In – floor wiring
- Non-load bearing wall systems
- Raceways, cable trays
- More generic space that can be adapted to specialized uses

Planning Principles

Following are planning principles employed by other districts when developing high school sites:

- Good signage – marquee board (with directions on how to find entrance and location within the facility)
- Landscaping – good upkeep
- Dumpster not visible
- Separate access road for deliveries
- Pleasing, inviting, happy colors (soothing colors)
- Cove lighting in corridors
- Arched ceilings in corridors
- Lighting – natural – skylights
- Enclosed media center with skylights
- Student art work – 1 showcase by office
- Plants – artificial and real
- Classroom –tile with soothing pattern and color
- Complimentary carpet and tile mix appropriately used throughout the building
- Top windows operable



Community Use

Overview

School districts and governmental agencies are beginning to realize that cooperation is needed, especially considering shrinking budgets and the diverse needs of the community. Community involvement in education can take a variety of forms before, during, and after the school day.

The following is a partial list of potential community uses:

- Mentoring Programs
- After School Youth Enrichment
- Speech/Debate Clubs
- Pageants
- Teen Parenting Programs
- Child care (staff, students, community)
- Recreation Programs
- Outdoor Festivals
- Intramural Sports Programs/Athletics
- Dance Recitals
- Open House Activities
- Parental Involvement
- Satellite Campus for Higher Education
- Community College Classes
- Adult Education
- Senior Citizens Programs
- Community Meetings
- Board of Education Meetings
- School/Business Partnerships
- Church-Related Activities
- Health Screening
- Substance Abuse Intervention
- Special Seminars
- Voting

Based on limitations established for the size of school facilities and budget constraints, most of the community uses will need to focus on shared space that is used primarily for school programs during the school day and community uses during non-school hours.

The areas in schools that have the greatest possibility for community usage include:

- Community Room/ Project Lab
- Library/Media Center
- Conference Rooms
- Small Group Rooms
- Gymnasium
- Cafetorium/Multi-Purpose Room
- Music/Performing Arts Center
- Parking Lots
- Playfields

Special considerations include:

- Disaster and emergency use
- Configure and zone facility and site to enhance parking and circulation, security, and energy conservation
- Adequate signage to assist community members
- Layout of community use areas should be of a "user friendly" design
- Storage

Community Support

Many schools rely on community volunteers to participate in tutoring and mentoring programs that take place in the school facility. It is important to program adequate space for these programs. For instance, where does a volunteer tutor sit with a student, or small group of students to conduct tutoring? Is there a specific place for this to occur, or is the volunteer in the hallway or stairwell? Where does the volunteer put his or her belongings? Tutoring space can be provided through small group rooms adjacent to classrooms or through conference rooms located in each learning community. Adequate parking space should be provided for volunteers in the visitor parking lot.

Collaboration and partnerships require greater cooperation in the planning of schools and community facilities. It is important for the school district, governmental agencies, and corporate partnerships to participate collaboratively in the planning of schools.

Planning for future schools should include joint use considerations at the beginning of the process. School districts and governmental agencies are beginning to realize that cooperation is needed, especially considering shrinking budgets and the diverse needs of the community. There are potential opportunities in jointly developing parks, libraries, and one-stop shopping centers for human services. Partnerships and joint ventures should be considered and encouraged by the Board of Education.

Multi-Service Center

Today, social and family issues of students and the community have caused the schools to re-examine its' services. Schools are forced to not only educate students, but to address a myriad of social economic and family issues. This arduous task is far too massive for schools alone. As a

result, schools are beginning to partner with various agencies as a means of its' students and the community.

The multi-service center concept incorporates a "one-stop" shopping center for the delivery of community and educational services. Typically, community services have been delivered separately. Schools, recreational programs, libraries, preschool, daycare, health care, employment agencies, and governmental services have been housed in their own buildings. Today, multi-service centers are housing different agencies in a shared space arrangement.

The initial start-up cost for this type of facility would be greater than that of a traditional school, but the cost of housing and operating all of the services separately far exceed the collective cost. For years, the debate has been where the school's responsibility begins and ends. The multi-service center clearly assumes more responsibility than the typical school, yet it is composed of several agencies to handle the burden. Articulation and cooperation among service providers is essential and appears to be possible in the current climate.

Issues that need to be considered include:

- **Location of the Facility and Its Constituents**
  Not all social service agencies share the same geographical area. One site may be more appropriate for one group than another. Because such a facility will be larger than a typical school, more space is needed and greater attention should be paid to where the facility is located in conjunction with the surrounding neighborhood.

- **Size of Building**
  Multi-service centers can become large and complex institutions when several services and programs are added to an already large school. Instead of one mega-building, the center may consist of a series of small, interconnecting facilities. Another option is to organize the facility as a cluster of pavilions along a central mall or enclosed street. The shopping center concept best characterizes most multi-service centers.

- **Separation of School, Community & Shared Spaces**
  The most common practice in the interior layout of centers is to separate spaces intended for school use only, community use only, and shared use. The facility's entrances and corridors are designed so that each area can be accessed separately. Though one may assume shared space among agencies in a shared facility would be the norm, it is not. Although agencies tend to carve out their own "turf" within a shared facility, the goal should be to integrate services.

- **Finance**
  Often educational and community services have their own capital improvement and operating funding sources. There are a number of state policies and statutes that prohibit shared use of space or co-mingling of funds even though most policy-makers readily endorse the multi-service center concept. Several state governments have had to revise current statutes and practices to make this concept permissible and others have actually provided school districts and governmental agencies with financial incentives to engage in joint use of facilities.

Governance

Typically, the facility is owned by one agency (most often the city/school system) and is operated through a joint governance structure, such as an interagency council.

The following are suggestions regarding use of the Providence Public School Department facilities:

- A media center with flexibility to support small groups.
- A cafetorium/multi-purpose room and gymnasium close to visitor parking and restrooms.
- Outside access to the media center and community room for after hours use.
- On site child care area for staff and volunteers.
- Emergency space for natural disasters for community use if necessary.
- Community room area close to cafetorium/multi-purpose /gymnasium with storage space, table, file cabinets, telephone, computer, and copier access.

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SWS/Small Learning Community Concept

The SWS/Small learning community concept has been developed nationally as a way of achieving many of the advantages of small schools while maintaining many of the advantages of larger schools. When properly organized and supported through facilities the SWS/Cluster concept can deliver:

- Small School Advantages: Greater administrative flexibility, collective professional decision-making, smaller learning communities, greater personalization, less anonymity for students and teachers, possibility of thematic, focused instruction.
- Large School Advantages: Economies of scale, available of facilities, such aw large media centers, auditoriums and gymnasiums, only affordable in large schools, greater range of competitive sports and extracurricular activities, shared special services and specialized instructional programs.

Additionally, in Long Beach the SWS concept allows the continued use of existing, large high school buildings when many of the educational and social values support small high schools.

This concept takes a total building capacity of 600-3,600 students and breaks it down into SWS of 600 students each. These schools have their own core academic spaces, special needs spaces, administration spaces, student spaces, and technology education spaces within their cluster or pod.

Potential Types of Schools within Schools:

A. Traditional Departmental
B. Thematic School
C. Tech Focused [i.e. Engineering, Communications, Business]
D. Combination of approaches

Shared between each school would be the self-contained special needs, cafeteria, media center, art, music and performing arts area, the physical education area and some administrative spaces.

The space requirements table here lists the total square footage for each SWS. The pages are broken down into two parts, the spaces within each of the SWS and the spaces shared between the SWS.

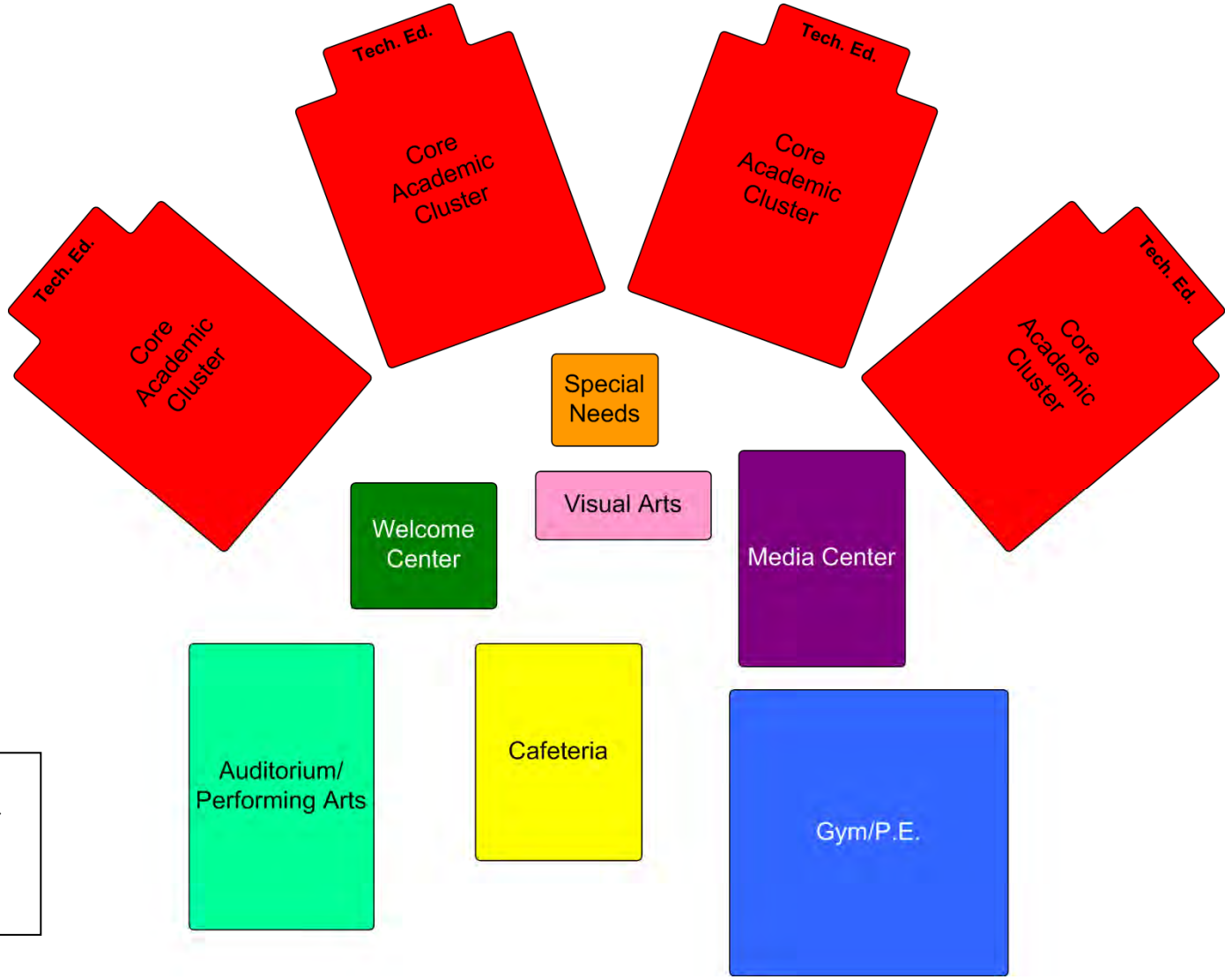
		# of SWS	SF
School for	600	1	25,280
School for	1,200	2	50,560
School for	1,800	3	75,840
School for	2,400	4	101,120
School for	3,000	5	126,400
School for	3,600	6	151,680

Space Requirements for Six Size Model Schools

Space requirements have been developed for high schools of six different sizes ranging from 600 to 3,600 students.

Space	School for 600		School for 1200		School for 1800		School for 2400		School for 3000		School for 3600	
	TS*	Total	TS	Total	TS	Total	TS	Total	TS	Total	TS	Total
School-within-School	19	26,080	38	52,160	57	78,240	76	104,320	95	130,400	114	156,480
Special Needs [Severe]	1	1,310	2	2,270	3	3,430	4	4,540	5	5,500	6	6,660
Media Center	0	5,775	0	10,300	0	12,700	0	15,325	0	18,425	0	18,750
Visual Arts	1	1,700	2	3,300	3	5,000	4	6,600	5	8,200	6	9,900
Music/Perf Arts	2	2,760	3	4,860	3	14,860	4	16,960	5	21,160	5	21,260
Physical Education	4	15,920	5	26,070	9	32,420	11	46,180	13	58,880	13	58,980
Career/Tech Ed	See SWS Spaces Above		See SWS Spaces Above		See SWS Spaces Above		See SWS Spaces Above		See SWS Spaces Above		See SWS Spaces Above	
Welcome Center/Administration		3,450		4,750		5,170		5,290		6,040		6,160
Food Service		9,110		12,810		12,760		14,560		16,360		17,110
Custodial		1,800		2,900		3,700		4,200		4,600		5,000
Sub Total Programmed Areas		**67,905**		**119,420**		**168,280**		**217,975**		**269,565**		**300,300**
Building Services, Circulation, etc	25%	16,976	25%	29,855	25%	42,070	25%	54,494	25%	67,391	25%	75,075
Total	**27**	**84,881**	**50**	**149,275**	**75**	**210,350**	**99**	**272,469**	**123**	**336,956**	**144**	**375,375**
*Teacahing Station												
Capacity [27 Students]		**Capacity**		**Capacity**		**Capacity**		**Capacity**		**Capacity**		**Capacity**
Regular Teaching Stations	24	648	44	1188	66	1782	87	2349	108	2916	126	3402
Special Needs	2	26	4	52	6	78	8	104	10	130	12	156
Special Needs Severe	1	9	2	18	3	27	4	36	5	45	6	54
Total Capacity	**27**	**683**	**50**	**1258**	**75**	**1887**	**99**	**2489**	**123**	**3091**	**144**	**3612**
Sq Ft Per Student Students		**SF per student**		**SF per student**		**SF per student**		**SF per student**		**SF per student**		**SF per student**
683		**124.3**		**118.7**		**111.5**		**109.5**		**109.0**		**103.9**
Capacity [35 Students]		**Capacity**		**Capacity**		**Capacity**		**Capacity**		**Capacity**		**Capacity**
Regular Teaching Stations	24	840	44	1540	66	2310	87	3045	108	3780	126	4410
Special Needs	2	26	4	52	6	78	8	104	10	130	12	156
Special Needs Severe	1	9	2	18	3	27	4	36	5	45	6	54
Total Capacity	**27**	**875**	**50**	**1610**	**75**	**2415**	**99**	**3185**	**123**	**3955**	**144**	**4620**
Sq Ft Per Student Students		**SF per student**		**SF per student**		**SF per student**		**SF per student**		**SF per student**		**SF per student**
875		**97.0**		**92.7**		**87.1**		**85.5**		**85.2**		**81.3**

Overall Building Spatial Relationships



Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

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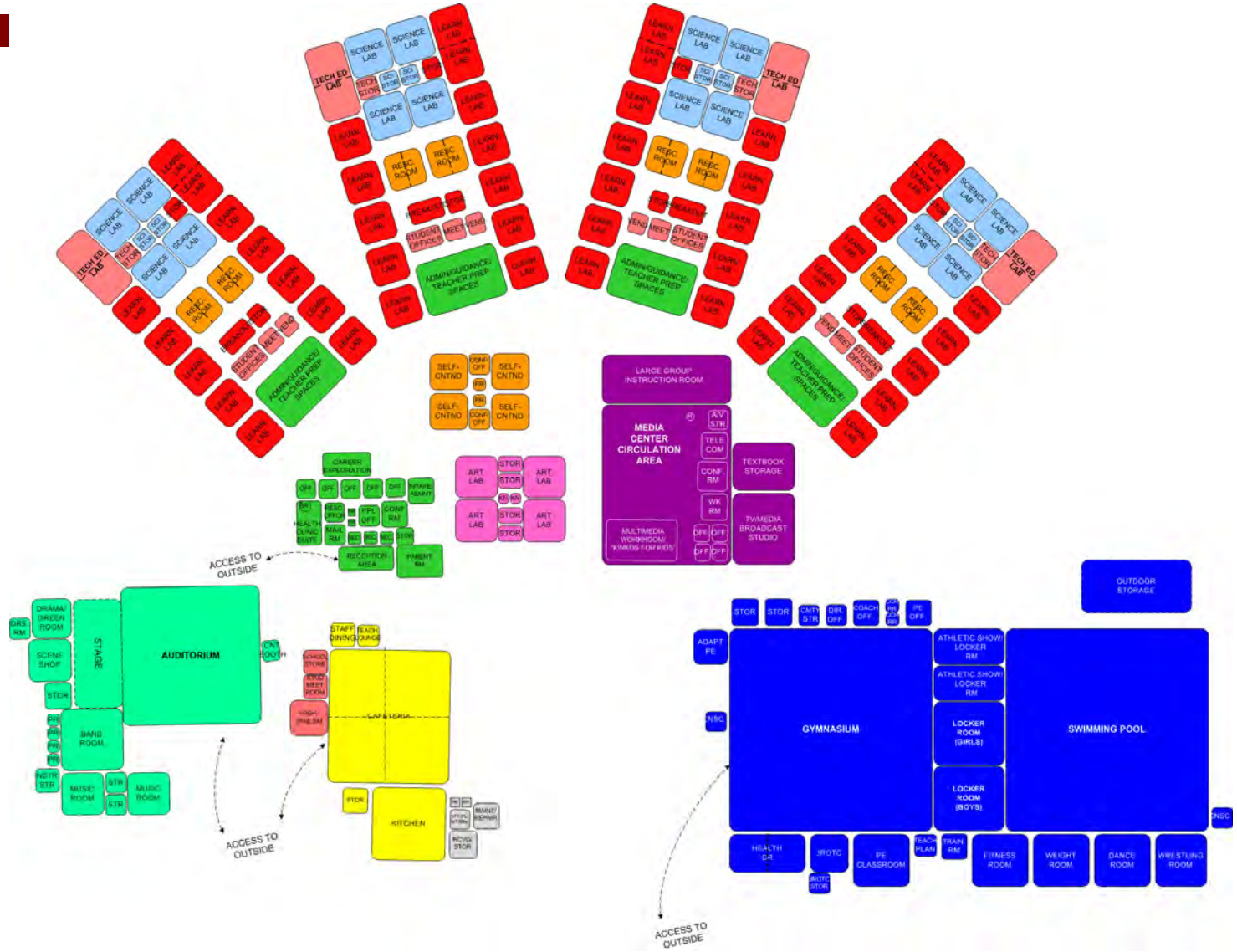
Overall Building Illustration (2,400 Students)



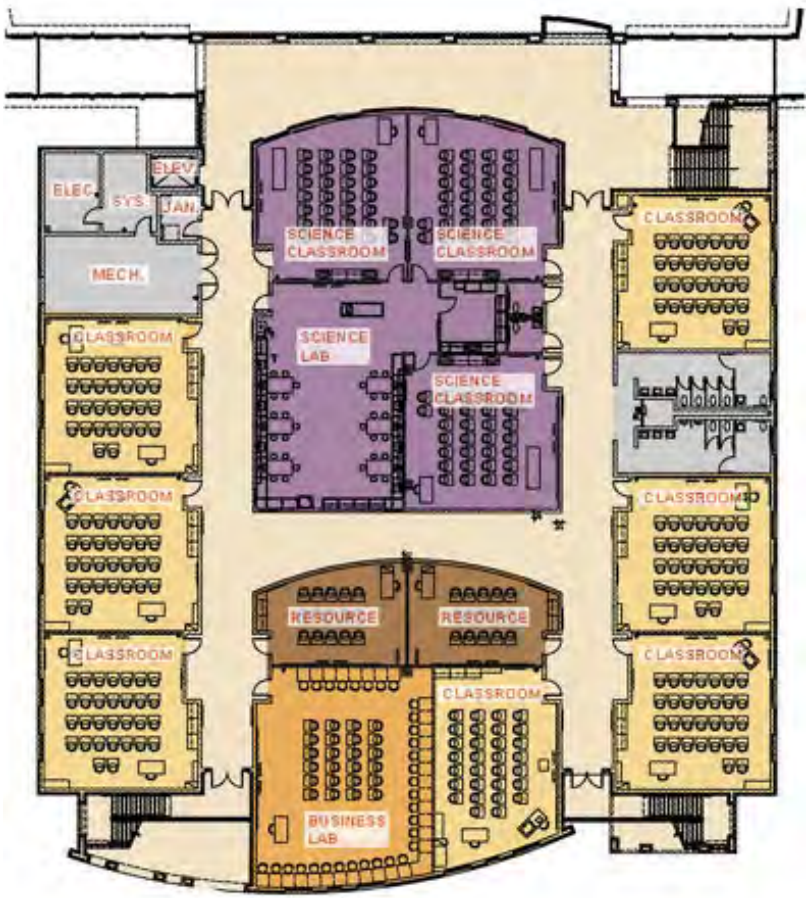
Space Requirements for Each SWS

The following table lists the type, quantity, and size of each space to be included within each cluster/pod.

School Within School for 600 Small Learning Communities	School for 600			
Space	**TS**	**Quantity**	**SF**	**Total**
Core Academic				
Learning Lab	10	10	960	9,600
Learning Lab w/ divider wall	2	2	960	1,920
Instructional Material Storage		2	150	300
Science Lab	4	4	1,400	5,600
Science Prep/Storage		2	200	400
Tech Ed Lab*	1	1	2,000	2,000
Tech Ed Storage		1	300	300
Breakout/Circulation		1	500	500
Special Needs [RSP, SDC: ED, MM, DHH]				
Resource Classroom w/ divider wall	2	2	960	1,920
Student Area				
Student Offices/ Meeting Area		1	500	500
Student Meeting Room		1	300	300
Vending Area		1	200	200
Admin/Guidance/Teacher Prep Area				
House Leader/Principal Office		1	150	150
Guidance Counselor's Office		1	150	150
Secretary/Admin Assistant		1	200	200
Conference Room		1	250	250
Additional Offices		2	120	240
Work/Copy		1	300	300
Conf/Hotel/Coffee		1	350	350
Restrooms		2	50	100
Teacher Prep/Offices		1	800	800
SWS/Cluster	**19**			**26,080**

Regular Teaching Stations 17
Special Needs Teaching Staions 2

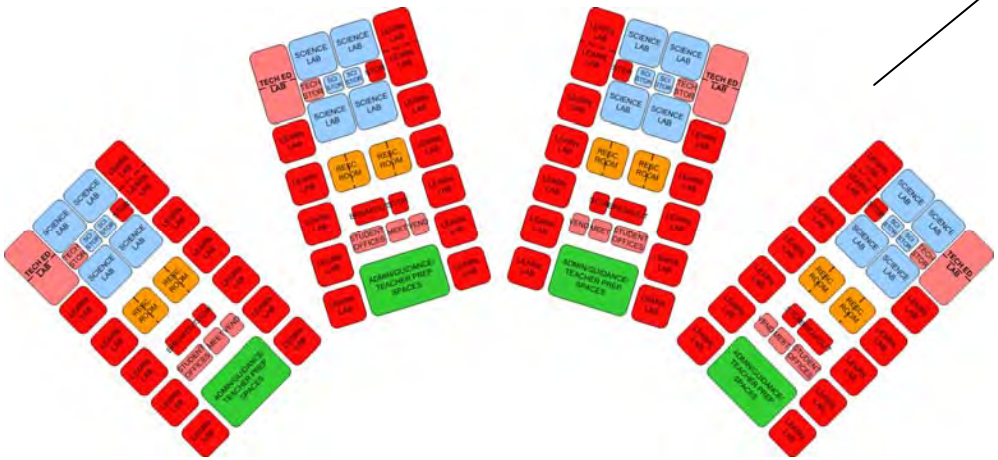
*Tech Ed Labs [Engineering/Robotics, Communications, Health Services, Business]
Large Group Instruction: See Media Center but should be located near Core Academics
Note: Each School within School for 600 can be subdivided into 2 clusters of 300

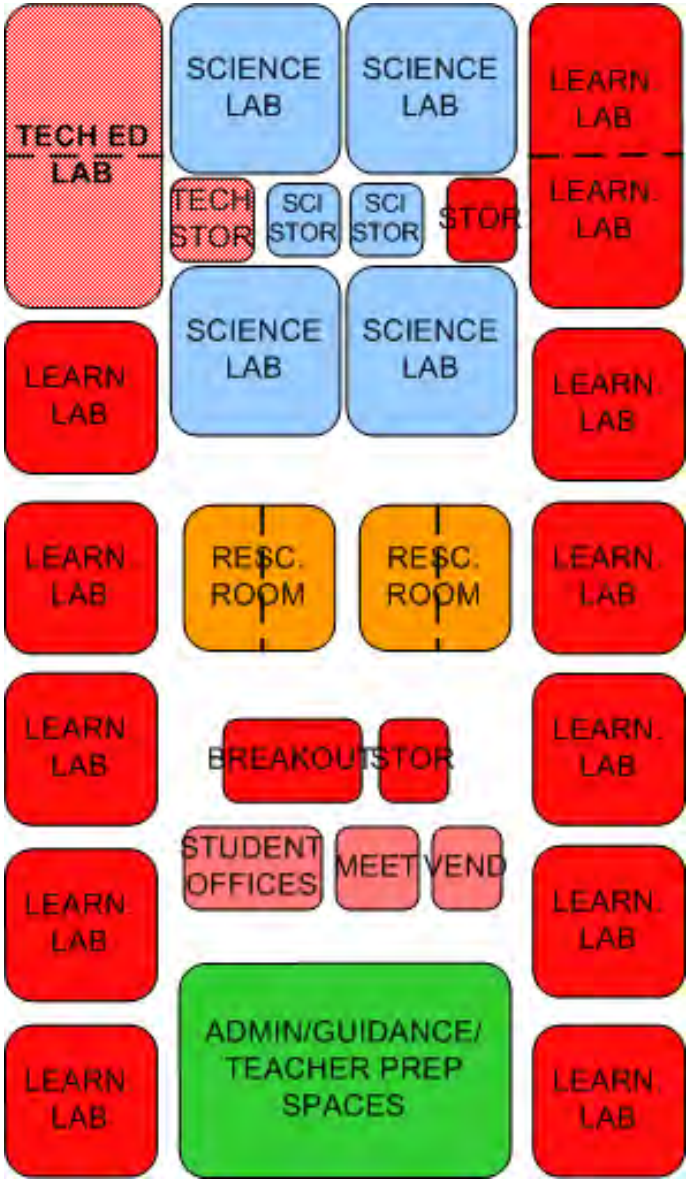


sample plan: may not represent LBUSD facilities

SWS Illustration

This four pod/cluster illustration is for a 2,400 student school.





Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

Space Requirements for Shared Spaces

Special Needs [Severe]	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Resource Rooms [RSP, SDC: ED, MM, DHH]	See SWS Concept Page				See SWS Concept Page				See SWS Concept Page			
Self-Contained Classrooms [SDC: MS, M, OI]	1	1	960	960	2	2	960	1,920	3	3	960	2,880
Restroom/Shower		1	150	150		1	150	150		1	150	150
Conference/Office		1	200	200		1	200	200		2	200	400
Special Needs Total	**1**			**1,310**	**2**			**2,270**	**3**			**3,430**

Special Needs [Severe]	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Resource Rooms [RSP, SDC: ED, MM, DHH]	See SWS Concept Page				See SWS Concept Page				See SWS Concept Page			
Self-Contained Classrooms [SDC: MS, M, OI]	4	4	960	3,840	5	5	960	4,800	6	6	960	5,760
Restroom/Shower		2	150	300		2	150	300		2	150	300
Conference/Office		2	200	400		2	200	400		3	200	600
Special Needs Total	**4**			**4,540**	**5**			**5,500**	**6**			**6,660**

Media Center	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Reading Room/Circulation		1	3,000	3,000		1	4,000	4,000		1	5,000	5,000
Multi Media Workroom/Kinkos		1	800	800		1	1,200	1,200		1	1,200	1,200
TV Media/Broadcast Studio		0	0	0		0	0	0		1	1,000	1,000
Media Specialist		1	150	150		1	150	150		1	150	150
Other Offices		1	125	125		2	125	250		3	150	450
Workroom		1	300	300		1	500	500		1	500	500
Telecommunications Room		1	200	200		1	200	200		1	300	300
Hub Rooms, distributed thru Bldg		4	25	100		8	25	200		12	25	300
A/V Storage		1	200	200		1	400	400		1	400	400
Conf Room/Project Room		1	300	300		2	300	600		2	300	600
Textbook Storage		1	600	600		1	800	800		1	800	800
Large Group Instruction Room*						1	2,000	2,000		1	2,000	2,000
Media Center Sub-Total	**0**			**5,775**	**0**			**10,300**	**0**			**12,700**

*Large Group Instruction could be located near core academic areas

Media Center	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Reading Room/Circulation		1	6,000	6,000		1	7,000	7,000		1	7,000	7,000
Multi Media Workroom/Kinkos		1	1,500	1,500		1	1,500	1,500		1	1,500	1,500
TV Media/Broadcast Studio		1	1,500	1,500		1	1,500	1,500		1	1,500	1,500
Media Specialist		1	150	150		1	150	150		1	150	150
Other Offices		3	125	375		3	125	375		4	125	500
Workroom		1	600	600		1	600	600		1	600	600
Telecommunications Room		1	400	400		1	400	400		1	500	500
Hub Rooms, distributed thru Bldg		16	25	400		20	25	500		24	25	600
A/V Storage		1	500	500		1	500	500		1	500	500
Conf Room/Project Room		3	300	900		3	300	900		3	300	900
Textbook Storage		1	1,000	1,000		1	1,000	1,000		1	1,000	1,000
Large Group Instruction Room		1	2,000	2,000		2	2,000	4,000		2	2,000	4,000
Media Center Sub-Total	**0**			**15,325**	**0**			**18,425**	**0**			**18,750**

Visual Arts	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Art Lab	1	1	1,400	1,400	2	2	1,400	2,800	3	3	1,400	4,200
Kiln Room		1	100	100		1	100	100		2	100	200
Storage		1	200	200		2	200	400		3	200	600
Visual Arts Sub-Total	**1**			**1,700**	**2**			**3,300**	**3**			**5,000**

Visual Arts	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Art Lab	4	4	1,400	5,600	5	5	1,400	7,000	6	6	1,400	8,400
Kiln Room		2	100	200		2	100	200		3	100	300
Storage		4	200	800		5	200	1,000		6	200	1,200
Visual Arts Sub-Total	**4**			**6,600**	**5**			**8,200**	**6**			**9,900**

Music/Performing Arts	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Music Room					1	1	1,200	1,200	1	1	1,200	1,200
Storage (Robes, Music)						1	200	200		1	200	200
Band Room	1	1	1,500	1,500	1	1	2,000	2,000	1	1	2,000	2,000
Band Storage (Instruments, Music)		1	300	300		1	400	400		1	400	400
Practice Rooms						2	50	100		2	50	100
Auditorium Seating	*See Food Service Area*				*See Food Service Area*					1	5,400	5,400
Control Booth										1	200	200
Auditorium Stage										1	3,000	3,000
Scene Shop										1	600	600
Make Up/Dressing (Shared)										1	300	300
Storage (Costumes, Props)										1	500	500
Drama Classroom/Green Room/Classroom	1	1	960	960	1	1	960	960	1	1	960	960
Music/ Performing Arts Sub-total	**2**			**2,760**	**3**			**4,860**	**3**			**14,860**

Music/Performing Arts	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Music Room	2	2	1,200	2,400	3	3	1,500	4,500	3	3	1,500	4,500
Storage (Robes, Music)		2	200	400		2	200	400		2	200	400
Band Room	1	1	2,200	2,200	1	1	2,200	2,200	1	1	2,200	2,200
Band Storage (Instruments, Music)		1	400	400		1	400	400		1	400	400
Practice Rooms		4	50	200		4	50	200		6	50	300
Auditorium Seating		1	5,400	5,400		1	7,000	7,000		1	7,000	7,000
Control Booth		1	200	200		1	200	200		1	200	200
Auditorium Stage		1	3,000	3,000		1	3,500	3,500		1	3,500	3,500
Scene Shop		1	1,000	1,000		1	1,000	1,000		1	1,000	1,000
Make Up/Dressing (Shared)		1	300	300		1	300	300		1	300	300
Storage (Costumes, Props)		1	500	500		1	500	500		1	500	500
Drama Classroom/Green Room/Classroom	1	1	960	960	1	1	960	960	1	1	960	960
Music/ Performing Arts Sub-total	**4**			**16,960**	**5**			**21,160**	**5**			**21,260**

Physical Education	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Gym	1	1	8,500	8,500	2	1	10,000	10,000	2	1	12,000	12,000
Seating included in above		400				1,000				1,500		
Storage		1	300	300		1	600	600		2	450	900
Shower/Locker Room		2	800	1,600		2	1,200	2,400		2	1,200	2,400
Fitness Area						1	1,000	1,000	1	1	1,500	1,500
Weight Room						1	1,000	1,000	1	1	1,500	1,500
Dance Room						1	1,000	1,000	1	1	1,500	1,500
Wrestling Room						1	1,000	1,000	1	1	1,000	1,000
Auxilary Gym												
Athletics Shower/Locker Room										2	800	1,600
Trainer Room						1	450	450		1	700	700
Adaptive PE		1	400	400		1	800	800		1	800	800
PE Office Area						1	500	500		1	500	500
Coaches Office Area						1	500	500		1	500	500
Coaches Toilets/Showers						2	150	300		2	150	300
PE Classroom	1	1	1,500	1,500	1	1	1,500	1,500	1	1	1,500	1,500
Health Classroom [divider walls betw clrms]	1	1	960	960	1	1	960	960	1	1	960	960
JROTC Classroom	1	1	960	960	1	1	960	960	1	1	960	960
JROTC Storage		1	500	500		1	500	500		1	500	500
Community Storage		1	200	200		1	200	200		1	200	200
Concessions						1	400	400		1	400	400
Swimming Pool & Storage												
Athletic Director										1	200	200
Teacher Planning Center						1	500	500		1	500	500
Outdoor Athletic Equipment Storage		1	1,000	1,000		1	1,500	1,500		1	2,000	2,000
Physical Education Sub-Total	**4**			**15,920**	**5**			**26,070**	**9**			**32,420**

Physical Education	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Gym	2	1	12,000	12,000	3	1	14,000	14,000	3	1	14,000	14,000
Seating included in above		1,500				2,000				2,000		
Storage		2	500	1,000		2	500	1,000		2	500	1,000
Shower/Locker Room		2	1,200	2,400		2	1,200	2,400		2	1,200	2,400
Fitness Area	1	1	1,500	1,500	1	1	2,500	2,500	1	1	2,500	2,500
Weight Room	1	1	1,500	1,500	1	1	2,500	2,500	1	1	2,500	2,500
Dance Room	1	1	1,500	1,500	1	1	2,500	2,500	1	1	2,500	2,500
Wrestling Room	1	1	1,000	1,000	1	1	1,000	1,000	1	1	1,000	1,000
Auxilary Gym					1	1	7,000	7,000	1	1	7,000	7,000
Athletics Shower/Locker Room		2	800	1,600		2	1,000	2,000		2	1,000	2,000
Trainer Room		1	700	700		1	700	700		1	700	700
Adaptive PE		1	800	800		1	800	800		1	800	800
PE Office Area		1	700	700		1	700	700		1	700	700
Coaches Office Area		1	700	700		1	700	700		1	700	700
Coaches Toilets/Showers		2	150	300		2	150	300		2	150	300
PE Classroom	1	1	1,500	1,500	1	1	1,500	1,500	1	1	1,500	1,500
Health Classroom [divider walls betw clrms]	2	2	960	1,920	2	2	960	1,920	2	2	960	1,920
JROTC Classroom	1	1	960	960	1	1	960	960	1	1	960	960
JROTC Storage		1	500	500		1	500	500		1	500	500
Community Storage		1	200	200		1	200	200		1	200	200
Concessions		2	300	600		2	300	600		2	300	600
Swimming Pool & Storage	1	1	12,000	12,000	1	1	12,000	12,000	1	1	12,000	12,000
Director		1	200	200		2	200	400		2	200	400
Teacher Planning Centers		1	600	600		1	700	700		1	800	800
Outdoor Athletic Equipment Storage		1	2,000	2,000		1	2,000	2,000		1	2,000	2,000
Physical Education Sub-Total	**11**			**46,180**	**13**			**58,880**	**13**			**58,980**

Welcome Center / Administration	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Welcome Center / Admin												
Reception Area		1	400	400		1	600	600		1	800	800
Secretarial Area		2	80	160		3	80	240		3	80	240
Principal's Office/Conference		1	200	200		1	200	200		1	200	200
Assistant Principal's Office	See SWS Sm Learning Communities				See SWS Sm Learning Communities				See SWS Sm Learning Communities			
Head Counselor		1	150	150		1	150	150		1	150	150
Conference Room		1	250	250		1	250	250		1	250	250
Career Exploration/Computer Area		1	500	500		1	750	750		1	750	750
Mail/Work/Copy Room		1	250	250		1	250	250		1	250	250
Administrative Storage		1	150	150		1	150	150		1	150	150
Textbook Storage	See Media Center				See Media Center				See Media Center			
Restrooms		2	50	100		2	50	100		2	50	100
Resource Officer						1	150	150		1	150	150
Intake/Pre-Assessment Room		1	250	250		1	250	250		1	250	250
Additional Offices		2	120	240		3	120	360		4	120	480
Health Clinic/Suite (including restroom)		1	400	400		1	500	500		1	600	600
Parent/Community Office		1	400	400		1	800	800		1	800	800
Guidance / Student Services	See SWS Sm Learning Communities				See SWS Sm Learning Communities				See SWS Sm Learning Communities			
Administration Sub-Total	**0**			**3,450**	**0**			**4,750**	**0**			**5,170**

Welcome Center / Administration	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Welcome Center / Admin												
Reception Area		1	800	800		1	800	800		1	800	800
Secretarial Area		3	80	240		4	80	320		4	80	320
Principal's Office/Conference		1	200	200		2	200	400		2	200	400
Assistant Principal's Office	See SWS Sm Learning Communities				See SWS Sm Learning Communities				See SWS Sm Learning Communities			
Head Counselor		1	150	150		1	150	150		1	150	150
Conference Room		1	250	250		2	250	500		2	250	500
Career Exploration/Computer Area		1	750	750		1	750	750		1	750	750
Mail/Work/Copy Room		1	250	250		1	250	250		1	250	250
Administrative Storage		1	150	150		1	150	150		1	150	150
Textbook Storage	See Media Center				See Media Center				See Media Center			
Restrooms		2	50	100		4	50	200		4	50	200
Resource Officer		1	150	150		1	150	150		1	150	150
Intake/Pre-Assessment Room		1	250	250		1	250	250		1	250	250
Additional Offices		5	120	600		6	120	720		7	120	840
Health Clinic/Suite (including restroom)		1	600	600		1	600	600		1	600	600
Parent/Community Office		1	800	800		1	800	800		1	800	800
Guidance / Student Services	See SWS Sm Learning Communities				See SWS Sm Learning Communities				See SWS Sm Learning Communities			
Administration Sub-Total	**0**			**5,290**	**0**			**6,040**	**0**			**6,160**

Food Service	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Kitchen, warming/serving only												
Satellite Kitchen												
Serving Area												
Dry Food Storage												
Cooler/Freezer		1	2,000	2,000		1	2,250	2,250		1	2,500	2,500
Ware Washing												
Kitchen Mgr Office												
Restroom												
Lockers												
Multipurpose Room/Cafeteria/Commons		1	2,000	2,000		1	3,000	3,000		1	6,000	6,000
Dencentralized Serving Area												
Table & Chair Storage		1	200	200		1	300	300		1	400	400
Stage		1	600	600		1	800	800	*See Music Area*			
Auditorium Seating		1	2,000	2,000		1	3,000	3,000	*See Music Area*			
Oudoor Covered Eating Area(s)			3,000	Outdoors			4,000	Outdoors			4,000	Outdoors
School Store		1	300	300		1	800	800		1	800	800
Student Meeting Room*		1	300	300		1	600	600		1	800	800
Journalism/Yearbook		1	960	960		1	960	960		1	960	960
Staff Dining w/Vending		1	450	450		1	800	800		1	1,000	1,000
Teacher Lounge w/Kitchenette		1	300	300		1	300	300		1	300	300
Food Service Sub-Total	**0**			**9,110**	**0**			**12,810**	**0**			**12,760**

***Also see SWS/Small Learning Communities for additional Student spaces**

Food Service	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Kitchen												
Satellite Kitchen												
Serving Area												
Dry Food Storage												
Cooler/Freezer		1	2,750	2,750		1	3,000	3,000		1	3,250	3,250
Ware Washing												
Kitchen Mgr Office												
Restroom												
Lockers												
Multipurpose Room/Cafeteria/Commons		1	7,000	7,000		1	8,000	8,000		1	8,000	8,000
Dencentralized Serving Area		1	500	500		2	500	1,000		3	500	1,500
Table & Chair Storage		1	450	450		1	500	500		1	500	500
Stage	*See Music Area*				*See Music Area*				*See Music Area*			
Auditorium Seating	*See Music Area*				*See Music Area*				*See Music Area*			
Oudoor Covered Eating Area(s)			5,000	Outdoors			5,000	Outdoors			5,000	Outdoors
School Store		1	800	800		1	800	800		1	800	800
Student Meeting Room		1	800	800		1	800	800		1	800	800
Journalism/Yearbook		1	960	960		1	960	960		1	960	960
Staff Dining w/Vending		1	1,000	1,000		1	1,000	1,000		1	1,000	1,000
Teacher Lounge w/Kitchenette		1	300	300		1	300	300		1	300	300
Food Service Sub-Total	**0**			**14,560**	**0**			**16,360**	**0**			**17,110**

For Larger Schools, consideration should be given to multiple Cafeterias or Food venues

Custodial/Building Services	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Receiving/Storage		1	500	500		1	750	750		1	900	900
Maintenance/Repair Area		1	500	500		1	750	750		1	900	900
Office/Planning/Meeting Area/Break Room		1	200	200		1	300	300		1	400	400
Locker Room/Toilets		2	100	200		2	150	300		2	150	300
Custodial Hopper Room [throughout school]		4	100	400		8	100	800		12	100	1,200
Mechanical Rooms & Restrooms	See Building Service in Sum Chart				See Building Service in Sum Chart				See Building Service in Sum Chart			
Loading Area			outside				outside				outside	
Custodial Sub-Total	**0**			**1,800**	**0**			**2,900**	**0**			**3,700**

Custodial/Building Services	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Receiving/Storage		1	1,000	1,000		1	1,000	1,000		1	1,000	1,000
Maintenance/Repair Area		1	900	900		1	900	900		1	900	900
Office/Planning/Meeting Area/Break Room		1	400	400		1	400	400		1	400	400
Locker Room/Toilets		2	150	300		2	150	300		2	150	300
Custodial Hopper Room [throughout school]		16	100	1,600		20	100	2,000		24	100	2,400
Mechanical Rooms	See Building Service in Sum Chart				See Building Service in Sum Chart				See Building Service in Sum Chart			
Loading Area			outside				outside				outside	
Custodial Sub-Total	**0**			**4,200**	**0**			**4,600**	**0**			**5,000**

Quantity Standards for Typical Spaces

The following tables list standards for typical spaces in a high school building. These tables list standards for typical offices, conference rooms, mail/work/copy rooms, as well as typical learning labs/classrooms and high school science labs. These tables can also be found later in this document, within the particular program area with which they are associated. Refer to the program area section for special design requests.

STANDARDS FOR TYPICAL OFFICES

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Desk with return	1
Desk chair	1
Credenza in rooms > 200SF	1
Guest chairs, rooms < 150SF	2
Guest chairs, rooms 155-200SF	4
Conf chairs, rooms over 200SF	4
Conf table, rooms over 200SF	1
Bookshelves	18 LF
Marker board	4 LF
Laptop computer	1
Printer	1
File cabinet, 4 drawer	1 to 2
Bulletin board	4 LF
Clock	1

MECHANICAL	QTY
Air Conditioning	Yes

ELECTRICAL	QTY
Duplex outlet	each wall
Quad outlet @ ea. data port	1

PLUMBING	QTY
No special requirements	

TECHNOLOGY	QTY
Data port and/or access to wireless	1
Telephone	1
Video port	1
Intercom through phone handset	Yes

STANDARDS FOR TYPICAL CONFERENCE ROOMS

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Modular conf table	1
Conference chairs	1/ 25 SF
Credenza, rooms > 200SF	1
Marker board	8 LF
Clg mtd data projector, rooms > 150SF	1
Drop down projection screen, rooms > 150SF	1
Bulletin board	4 LF
Clock	1

MECHANICAL	QTY
Air Conditioning	Yes

ELECTRICAL	QTY
Duplex outlet	5' oc
Quad outlet @ ea. data port	1

PLUMBING	QTY
No special requirements	

TECHNOLOGY	QTY
Data port and/or access to wireless	1
Telephone	1
Video port	1
Intercom through phone handset	Yes
Video projector, rooms > 200SF	Yes

STANDARDS FOR TYPICAL MAIL/WORK/COPY ROOMS

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Work tables	2
Countertop over base cabinets	16 LF
Overhead cabinets	8 LF
Chairs	2
Computer workstations	1
Shelving	8 LF
Locking storage cabinet	1
Printer	1
Scanner	1
Fax machine	1
Copier w/ sorter	1
Marker board	8 LF

MECHANICAL	QTY
No special requirements	

ELECTRICAL	QTY
Duplex outlet	5' oc
Quad outlet @ ea. data port	1

PLUMBING	QTY
Hot & cold water for sink	1

TECHNOLOGY	QTY
Data port and/or access to wireless	2
Telephone	1
Intercom through phone handset	Yes

STANDARDS FOR TYPICAL LEARNING LABS/CLASSROOMS, HIGH SCHOOL

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Student work tables, 2 students each	18
Student chairs	36
Countertop over base cabinets	4 LF
Overhead cabinets	4 LF
Marker board	16 LF
Bulletin board	24 LF
Shelving	24 LF
Locking storage cabinet	6 LF
AIO (All in One) Device	1
Mobile bookcases, 3' long	2
Pull down screen	1

MECHANICAL	QTY
No special requirements	

ELECTRICAL	QTY
Duplex outlet	1 per wall
Quad outlet @ ea. data port	1
Front row of light, dimmable	

PLUMBING	QTY
Hot & cold water for sink	1

TECHNOLOGY	QTY
Voice, data, video outlets at teacher desk	1
6 data drops with double, triple, or quad CNOs (Communications Network Outlets)	6
2 data drops at teacher desk area	2
Single data drop dedicated to wirless, high on wall	1

TECHNOLOGY	QTY
Analog telephone	1
Intercom	Yes
Smartboard w/ integral LCD projector	1
Audio Enhancement	1 system
Laptop computers with carts, shared	26

STANDARDS FOR TYPICAL SCIENCE LAB, HIGH SCHOOL

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Student work tables, 4 students each, 4' X 6'	9
Student chairs	36
Countertop over base cabinets	Perimeter
Overhead cabinets	Perimeter
Marker board	16 LF
Bulletin board	24 LF
Shelving	24 LF
Locking storage cabinet	6 LF
AIO (All in One) Device	1
Tablet arm chairs	26
Teacher demonstration desk	12
Equipment storage/display cabinets	6 LF
Pull down screen	1

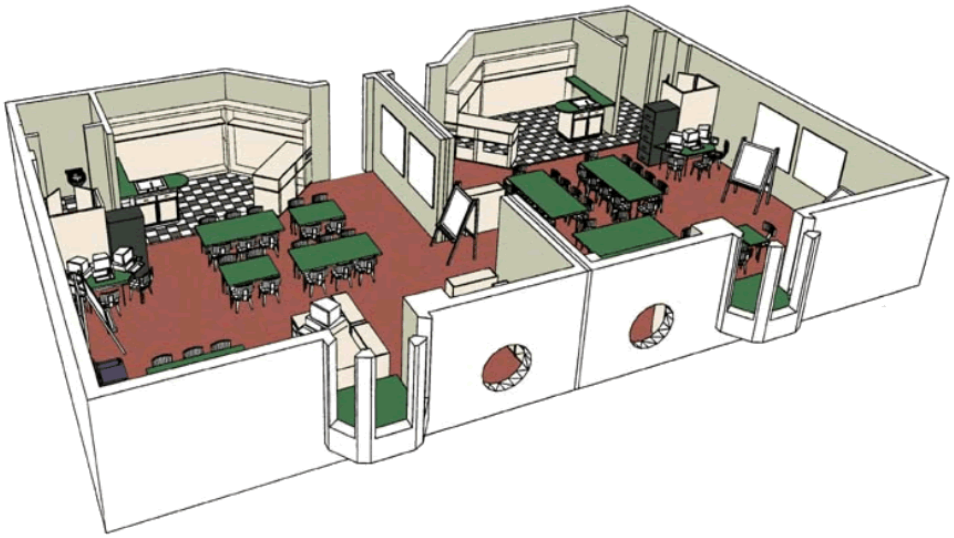
MECHANICAL	QTY
Fume hood in 20% of Labs	Yes
Exhaust fan	Yes
Gas at each sink	8

ELECTRICAL	QTY
Duplex outlet	1 per wall
Quad outlet @ ea. data port	1
Front row of light, dimmable	

PLUMBING	QTY
Hot & cold water for sinks	8
Emergency eyewash, shower	1 each

TECHNOLOGY	QTY
Voice, data, video outlets at teacher desk	1
6 data drops with double, triple, or quad CNOs (Communications Network Outlets)	6
2 data drops at teacher desk area	2
Single data drop dedicated to wirless, high on wall	1

TECHNOLOGY	QTY
Analog telephone	1
Intercom	Yes
Smartboard w/ integral LCD projector	1
Audio Enhancement	1 system
Laptop computers with carts, shared	26



sample plan: may not represent LBUSD facilities

Core Academics

Introduction

It is the goal of the core academic program to provide opportunities for students of all grade levels to foster mastery of basic skills in reading, language, social studies, mathematics, science, citizenship, health, technology, and other content areas; experience and enhance their awareness and understanding of multi-cultural values, beliefs, and other aspects of society; and become involved in inquiry-based learning expressed by hands-on, minds-on, experiences.

The core academic area is composed of spaces associated with typically academic content areas such as language arts, mathematics, science, and social studies. Spaces include classrooms, teacher workrooms, restrooms, and materials storage.

Specific spaces associated with the core academics and corresponding illustrations and adjacencies are described herein. Additionally, descriptions of activities and persons to be accommodated as well as design considerations are listed.

Overview

The core academics concept should be organized to facilitate an interdisciplinary approach to instruction. Characteristics of this area are:

- Ability to organize space by teams
- Instruction and facility space to encourage team and student communication
- A flexible learning environment that is:
  - ✓ adaptable to change and supportive of different program delivery/organizational patterns
  - ✓ adequately sized with space to support the work of teams and production of student work, and encourages the integration of curricula

The concepts that will give direction to this interdisciplinary approach are:

- Integrated curricula
- Performance objectives for students
- Individualized/intra-dependent learning environments
- Performance assessment

- Decentralized/shared decision-making
- Coordination of services provided to students

In addition to the traditional large and small group instruction, many varied activities take place in the various Core Academic learning areas:

- Writing/composing
- Role playing – skits, acting out situations
- Hands-on projects and activities – individuals and groups
- Oral presentations
- Interactive activities – room-to-room, school-to-school, class-to-community
- Team teaching among all the disciplines
- Group and teamwork activities

sample photos: may not represent LBUSD facilities

Listed are the core academic areas to be included in each cluster/pod in the SWS/Cluster Concept. The pages that follow describe each of these program area spaces in more detail.

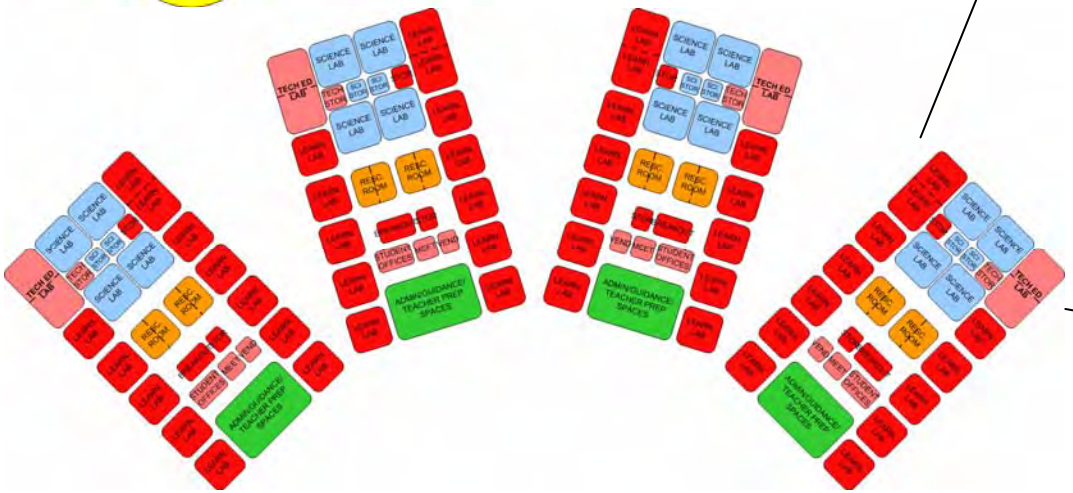
School Within School for 600 Small Learning Communities	School for 600			
Space	**TS**	**Quantity**	**SF**	**Total**
Core Academic				
Learning Lab	10	10	960	9,600
Learning Lab w/ divider wall	2	2	960	1,920
Instructional Material Storage		2	150	300
Science Lab	4	4	1,400	5,600
Science Prep/Storage		2	200	400
Tech Ed Lab*	1	1	2,000	2,000
Tech Ed Storage		1	300	300
Breakout/Circulation		1	500	500
Special Needs [RSP, SDC: ED, MM, DHH]				
Resource Classroom w/ divider wall	2	2	960	1,920
Student Area				
Student Offices/ Meeting Area		1	500	500
Student Meeting Room		1	300	300
Vending Area		1	200	200
Admin/Guidance/Teacher Prep Area				
House Leader/Principal Office		1	150	150
Guidance Counselor's Office		1	150	150
Secretary/Admin Assistant		1	200	200
Conference Room		1	250	250
Additional Offices		2	120	240
Work/Copy		1	300	300
Conf/Hotel/Coffee		1	350	350
Restrooms		2	50	100
Teacher Prep/Offices		1	800	800
SWS/Cluster	**19**			**26,080**

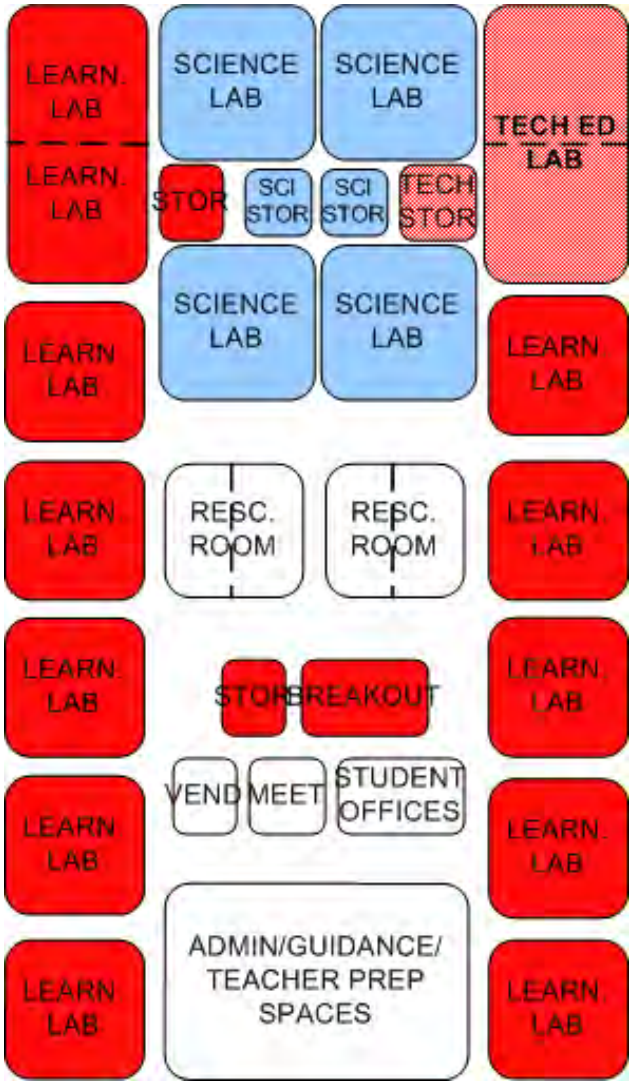
Regular Teaching Stations 17
Special Needs Teaching Staions 2

*Tech Ed Labs [Engineering/Robotics, Communications, Health Services, Business]
Large Group Instruction: See Media Center but should be located near Core Academics
Note: Each School within School for 600 can be subdivided into 2 clusters of 300

Spatial Relationships

Core academics should be located adjacent to all other program areas, specifically, special needs, the media center, physical education, and administration. The four pod/cluster illustration is for a 2,400 student school.





Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

STANDARDS FOR TYPICAL OFFICES

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Desk with return	1
Desk chair	1
Credenza in rooms > 200SF	1
Guest chairs, rooms < 150SF	2
Guest chairs, rooms 155-200SF	4
Conf chairs, rooms over 200SF	4
Conf table, rooms over 200SF	1
Bookshelves	18 LF
Marker board	4 LF
Laptop computer	1
Printer	1
File cabinet, 4 drawer	1 to 2
Bulletin board	4 LF
Clock	1

MECHANICAL	QTY
Air Conditioning	Yes

ELECTRICAL	QTY
Duplex outlet	each wall
Quad outlet @ ea. data port	1

PLUMBING	QTY
No special requirements	

TECHNOLOGY	QTY
Data port and/or access to wireless	1
Telephone	1
Video port	1
Intercom through phone handset	Yes

STANDARDS FOR TYPICAL CONFERENCE ROOMS

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Modular conf table	1
Conference chairs	1/ 25 SF
Credenza, rooms > 200SF	1
Marker board	8 LF
Clg mtd data projector, rooms > 150SF	1
Drop down projection screen, rooms > 150SF	1
Bulletin board	4 LF
Clock	1

MECHANICAL	QTY
Air Conditioning	Yes

ELECTRICAL	QTY
Duplex outlet	5' oc
Quad outlet @ ea. data port	1

PLUMBING	QTY
No special requirements	

TECHNOLOGY	QTY
Data port and/or access to wireless	1
Telephone	1
Video port	1
Intercom through phone handset	Yes
Video projector, rooms > 200SF	Yes

STANDARDS FOR TYPICAL MAIL/WORK/COPY ROOMS

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Work tables	2
Countertop over base cabinets	16 LF
Overhead cabinets	8 LF
Chairs	2
Computer workstations	1
Shelving	8 LF
Locking storage cabinet	1
Printer	1
Scanner	1
Fax machine	1
Copier w/ sorter	1
Marker board	8 LF

MECHANICAL	QTY
No special requirements	

ELECTRICAL	QTY
Duplex outlet	5' oc
Quad outlet @ ea. data port	1

PLUMBING	QTY
Hot & cold water for sink	1

TECHNOLOGY	QTY
Data port and/or access to wireless	2
Telephone	1
Intercom through phone handset	Yes

STANDARDS FOR TYPICAL LEARNING LABS/CLASSROOMS, HIGH SCHOOL

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Student work tables, 2 students each	18
Student chairs	36
Countertop over base cabinets	4 LF
Overhead cabinets	4 LF
Marker board	16 LF
Bulletin board	24 LF
Shelving	24 LF
Locking storage cabinet	6 LF
AIO (All in One) Device	1
Mobile bookcases, 3' long	2
Pull down screen	1

MECHANICAL	QTY
No special requirements	

ELECTRICAL	QTY
Duplex outlet	1 per wall
Quad outlet @ ea. data port	1
Front row of light, dimmable	

PLUMBING	QTY
Hot & cold water for sink	1

TECHNOLOGY	QTY
Voice, data, video outlets at teacher desk	1
6 data drops with double, triple, or quad CNOs (Communications Network Outlets)	6
2 data drops at teacher desk area	2
Single data drop dedicated to wirless, high on wall	1

TECHNOLOGY	QTY
Analog telephone	1
Intercom	Yes
Smartboard w/ integral LCD projector	1
Audio Enhancement	1 system
Laptop computers with carts, shared	26

STANDARDS FOR TYPICAL SCIENCE LAB, HIGH SCHOOL

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Student work tables, 4 students each, 4' X 6'	9
Student chairs	36
Countertop over base cabinets	Perimeter
Overhead cabinets	Perimeter
Marker board	16 LF
Bulletin board	24 LF
Shelving	24 LF
Locking storage cabinet	6 LF
AIO (All in One) Device	1
Tablet arm chairs	26
Teacher demonstration desk	12
Equipment storage/display cabinets	6 LF
Pull down screen	1

MECHANICAL	QTY
Fume hood in 20% of Labs	Yes
Exhaust fan	Yes
Gas at each sink	8

ELECTRICAL	QTY
Duplex outlet	1 per wall
Quad outlet @ ea. data port	1
Front row of light, dimmable	

PLUMBING	QTY
Hot & cold water for sinks	8
Emergency eyewash, shower	1 each

TECHNOLOGY	QTY
Voice, data, video outlets at teacher desk	1
6 data drops with double, triple, or quad CNOs (Communications Network Outlets)	6
2 data drops at teacher desk area	2
Single data drop dedicated to wirless, high on wall	1

TECHNOLOGY	QTY
Analog telephone	1
Intercom	Yes
Smartboard w/ integral LCD projector	1
Audio Enhancement	1 system
Laptop computers with carts, shared	26

Learning Labs with / without Divider Wall

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Individual, small, and large group activities
- Storage of materials
- Project-based learning
- Demonstrations
- Computer-based instruction

Persons

- Students
- Teachers
- Aides
- Volunteers
- Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- Sink with hot and cold water

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting
- Room darkening capability – dimmer switches
- Controlled day lighting
- Mobile tables need variety of ways to set electricity [floor or fixed table]

Technology

- Access to voice, video, data ports, and electrical outlets
- Teacher data port separate from student data ports
- Smartboard with integral LCD Projector
- Audio enhancement
- Document cameras

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door with view panel
- Energy efficient windows with blinds
- Windows to corridor and /or Learning Community
- Large windows to outdoors

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Flexible or multiple display surfaces
- Foldable partitions between 2 learning labs per pod
- 1 learning lab with folding partition within to divide into 2 smaller labs per pod
- Storage cabinets (with locks)
- Comfortable ergonomic chairs that allow movement
- Flexible furniture: can be used as individual desks or fit together to make tables
- Mobile bookcases
- Adjustable shelving

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Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Vinyl tile flooring
- Movable divider wall within Learning Labs greater than 900 square feet

Instructional Material Storage

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storage of team materials

Persons

- Teachers
- Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Overhead lighting

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Keypad access

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Lockable storage cabinets
- Flexible surfaces
- Abundant shelving

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- No special requirements

sample photo: may not represent LBUSD facilities

Science Lab

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Cooperative learning
- Hands-on experiments
- Demonstrations
- Long-term projects
- Independent Study
- Interdisciplinary team teaching
- Computer-based instruction

Persons

- Teachers
- Aides
- Staff
- Volunteers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Exhaust fan
- Fume hoods in 20% of Labs

Plumbing

- Access to water, air, electric, and gas at every lab station
- Sinks with sliding/lockable cover (possibly with quick disconnects)
- Eye washing station, shower station, and sprinkler system

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting
- Controlled day lighting
- Room darkening capability

Technology

- Access to voice, video, data ports, and electrical outlets at lab stations
- Separate teacher data port
- Localized routers for computer WIFI Wireless network access
- Smartboard with integrated LCD Projector
- Audio enhancement

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

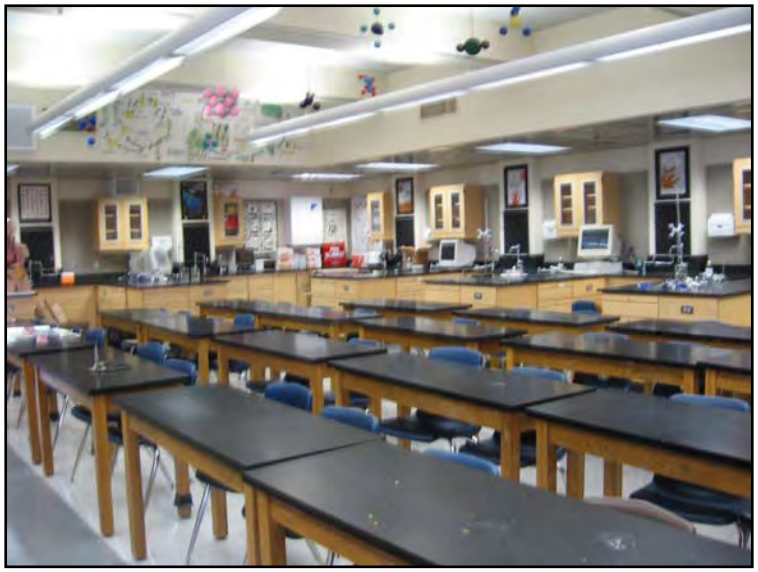
- View panel in door
- Glass to Learning Community and/ or corridor

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Abundant shelving
- Perimeter base cabinets
- Flexible or multiple display surfaces
- Modular and mobile, connectable tables (some stainless steel some made from non-conductive material)
- Universal Design features for mobility and quick disconnect
- Drains and utilities
- Whiteboards, doubled with sliding panels



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Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Vinyl tile
- Accessible to Science Prep area and storage
- Vandal and acid resistant surfaces
- Master shut-off switch for water, gas, and electric
- Flip down gas outlets to regain table-top space
- Secure gas outlets below table-top with sliding, locking cover
- General exhaust fan to outside

Science Prep /Storage

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Staff meetings
- Lesson planning and grading
- Scheduling of appointments
- Record keeping
- Development and review of teacher materials
- Lab preparations
- Chemical (acid) storage
- Flammable storage
- Storage of refrigerated items

Persons

- Teachers
- Aides
- Staff
- Volunteers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Exhaust fan

Plumbing

- Sinks
- Eye washing station, shower station, and sprinkler system

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting

Technology

- Access to voice, video, data ports, and electrical outlets

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space

Doors & Windows

- View panel at door

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Lockable storage cabinets
- Abundant shelving
- Flexible or multiple display surfaces
- Adequate counter-top space for small appliances and production equipment

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Vinyl tile
- Accessible to Science Lab/Classroom
- Vandal and acid resistant surfaces
- Temperature and humidity control
- Secure
- Fire safety equipment
- Acid storage cabinet
- Nitric acid storage
- Flammable storage
- Corrosives storage

Tech Education Labs

Activities and Persons

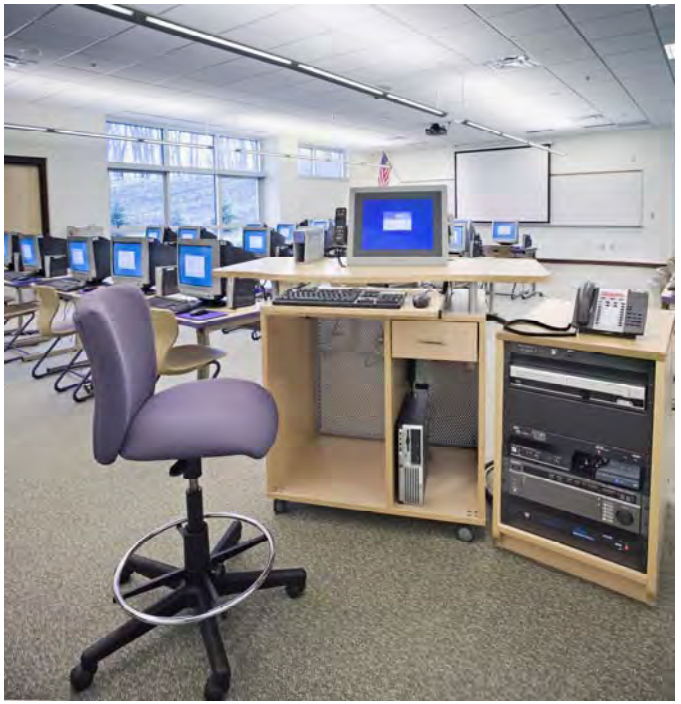
The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Whole group and small group instruction
- Computer learning
- Digital Design
- Graphic Technology
- Project work
- Problem-solving

Persons

- Students
- Teacher
- Aides
- Parents
- Community Members



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Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Adequate ventilation

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall
- Day-lighting
- Uniform lighting
- Ability to control specific lighting areas
- Room darkening capability

Technology

- Telephone/intercom/voicemail port
- Video ports and monitors
- Data ports
- Quad outlet adjacent to each data port
- Smartboard with integral LCD projector
- Wireless laptops with carts for battery recharging
- Area for distance learning (with video conferencing)
- Headphones and Microphones

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Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: double doors large view panel
- Windows: operable, allow controlled natural lighting

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Handicapped Accessible
- Computer tables and chairs
- Printers and printer tables
- Networked computers w/access to programs and card catalog
- LCD projector and mounted screen
- Tack board
- Magnetic marker board
- ADA accessible computer tables
- Anti-static carpets

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Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Natural light
- Auditory privacy
- Provide method to darken room for AV presentations
- Accessible computer equipment for special needs
- Soundproofing

Tech Ed Storage

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storage

Persons

- Staff
- Community Members
- Volunteers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Temperature and humidity control

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: solid
- Windows: none

Break Out Room / Circulation

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Small group presentations
- Tutorials
- Make up tests
- Collaborative student teams
- Teacher/parent conferences

Persons

- Students
- Teachers
- Visiting speakers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- Sink

Electrical & Lighting

- Duplex electrical outlets on each wall
- Additional outlets for computers
- Overhead lighting

Technology

- Access to voice, video, data ports, and electrical outlets
- Intercom
- Overhead LCD projector
- Audio enhancement
- Drop down projection screen

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Controlled natural light if reasonable
- Windows to adjacent learning labs

Mechanical

- No special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Varied furniture determined by adjacent users
- Small group-able student desk/conf tables
- Book cases/storage units on wheels
- 8' base cabinet with sink; overhead cabinets

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Combine space SF allocation with general circulation allowance to create larger overall space.

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The special needs spaces within the SWS are intended to be pull-out resource rooms for RSP and SDC students needing individualized and small group attention. Spaces for severe special needs students [MS, M, OI] are located in the Shared Spaces section.

The pages that follow contain a list of spaces and drawings illustrating the relationship between various program areas, and the individual spaces within the program area. Additionally, a description of the activities, persons to accommodate, and items to be considered is included.

Special Needs

Introduction

The goal of the Special Needs Program Area is to meet the requirements of students with disabilities within the least restrictive environment enabling them to become responsible, life-long learners. To meet students' needs, the Special Education Program provides instruction within the general education environment through an inclusion process as well as separate classrooms for those students who need a self-contained environment.

Listed are the special needs areas to be included in each cluster/pod in the SWS/Cluster Concept. The pages that follow describe each of these program area spaces in more detail.

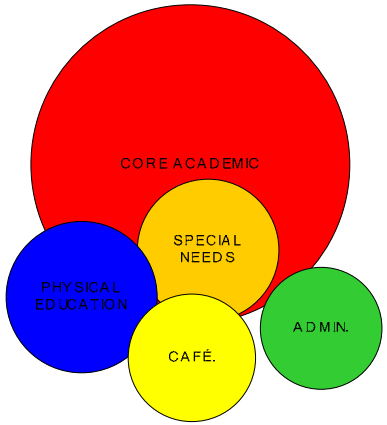
School Within School for 600 Small Learning Communities	School for 600			
Space	**TS**	**Quantity**	**SF**	**Total**
Core Academic				
Learning Lab	10	10	960	9,600
Learning Lab w/ divider wall	2	2	960	1,920
Instructional Material Storage		2	150	300
Science Lab	4	4	1,400	5,600
Science Prep/Storage		2	200	400
Tech Ed Lab*	1	1	2,000	2,000
Tech Ed Storage		1	300	300
Breakout/Circulation		1	500	500
Special Needs [RSP, SDC: ED, MM, DHH]				
Resource Classroom w/ divider wall	2	2	960	1,920
Student Area				
Student Offices/ Meeting Area		1	500	500
Student Meeting Room		1	300	300
Vending Area		1	200	200
Admin/Guidance/Teacher Prep Area				
House Leader/Principal Office		1	150	150
Guidance Counselor's Office		1	150	150
Secretary/Admin Assistant		1	200	200
Conference Room		1	250	250
Additional Offices		2	120	240
Work/Copy		1	300	300
Conf/Hotel/Coffee		1	350	350
Restrooms		2	50	100
Teacher Prep/Offices		1	800	800
SWS/Cluster	**19**			**26,080**

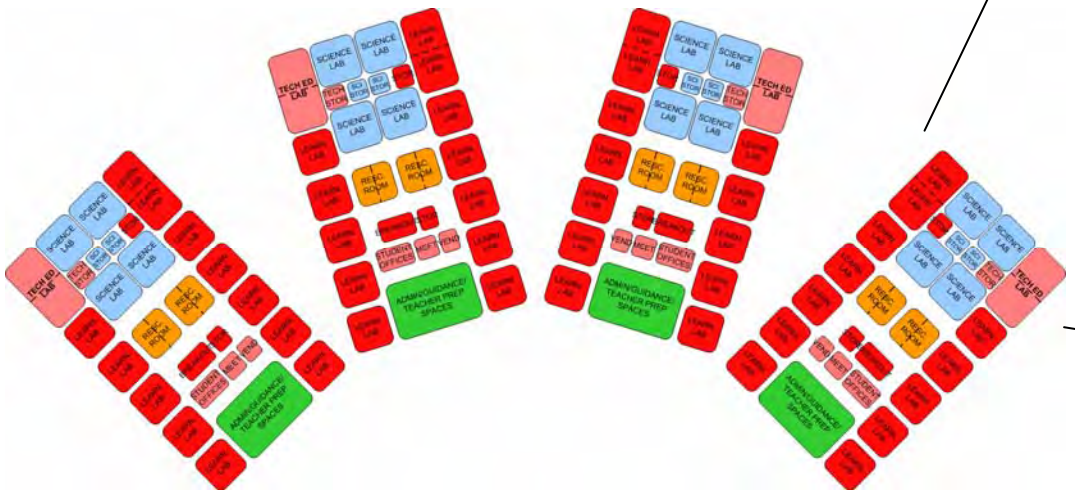
Regular Teaching Stations 17
Special Needs Teaching Staions 2

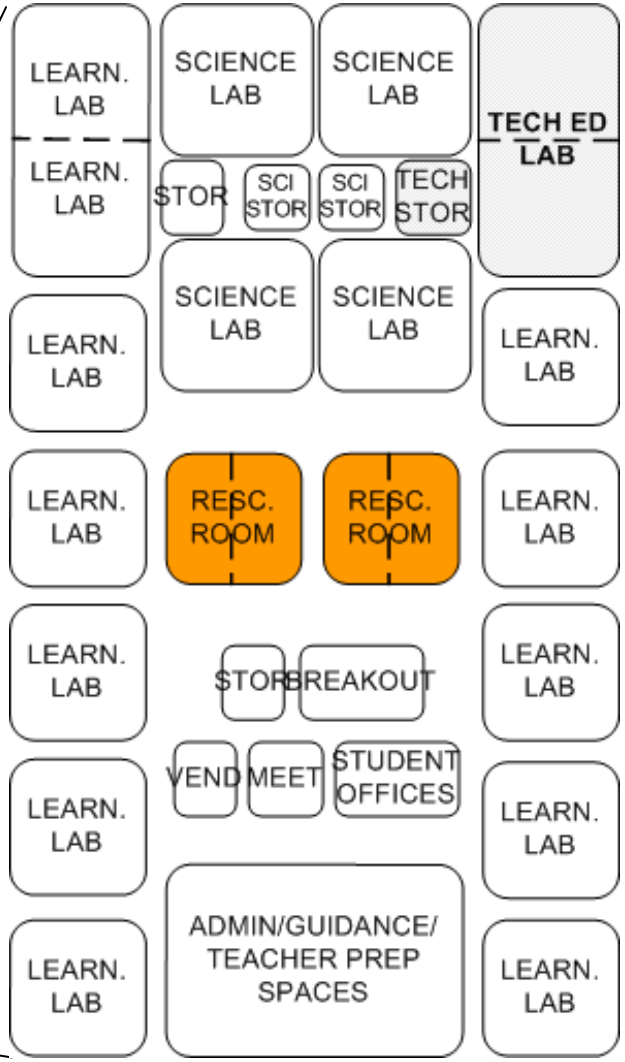
*Tech Ed Labs [Engineering/Robotics, Communications, Health Services, Business]
Large Group Instruction: See Media Center but should be located near Core Academics
Note: Each School within School for 600 can be subdivided into 2 clusters of 300

Spatial Relationships

Within the SWS, special education resource rooms should be centrally located. Self-contained special needs areas are described in the Shared Spaces section of the document.







Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

Resource Room [RSP and ED, MM, DHH]

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Individual, small, and large group activities
- Storage of materials
- Observation of the outside environment
- Display of student works and educational materials
- Art and other "messy" projects
- Computer-based learning
- Storage

Persons

- Teachers
- Students
- Aides
- Staff
- Volunteers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Moveable wall

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting
- Controlled day lighting

Technology

- Access to voice, video, data ports, and electrical outlets

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Visual access from class or corridor

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Lockable storage cabinets
- Flexible surfaces
- Abundant shelving
- Flexible or multiple display surfaces
- Flexible student desks able to be combined into large tables
- Adaptive desk with adjustable writing levels and writing services

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Vinyl tile flooring
- Movable partition to divide room
- Handicapped accessible and accessible to large wheelchairs
- Accessible to teachers' center

Student Spaces

Introduction

The Student Spaces Area will present students the opportunity to learn independent study skills as well as work in groups. This part of the high school facility provides an area for project work, student activity club meetings, and a student run store.

The pages that follow contain a list of spaces and drawings illustrating the relationship between various program areas and the individual spaces within the program area. Additionally, a description of the activities, persons to accommodate, and items to be considered is included.

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Listed are the student areas to be included in each cluster/pod in the SWS/Cluster Concept. The pages that follow describe each of these program area spaces in more detail.

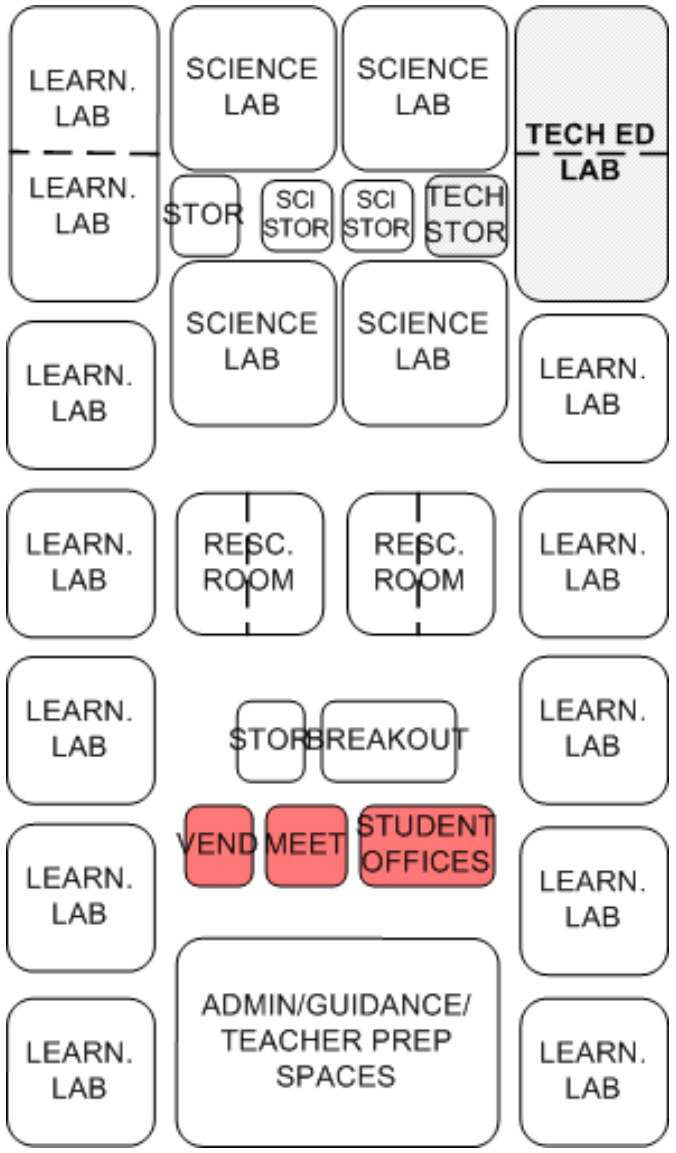
School Within School for 600 Small Learning Communities	School for 600			
Space	**TS**	**Quantity**	**SF**	**Total**
Core Academic				
Learning Lab	10	10	960	9,600
Learning Lab w/ divider wall	2	2	960	1,920
Instructional Material Storage		2	150	300
Science Lab	4	4	1,400	5,600
Science Prep/Storage		2	200	400
Tech Ed Lab*	1	1	2,000	2,000
Tech Ed Storage		1	300	300
Breakout/Circulation		1	500	500
Special Needs [RSP, SDC: ED, MM, DHH]				
Resource Classroom w/ divider wall	2	2	960	1,920
Student Area				
Student Offices/ Meeting Area		1	500	500
Student Meeting Room		1	300	300
Vending Area		1	200	200
Admin/Guidance/Teacher Prep Area				
House Leader/Principal Office		1	150	150
Guidance Counselor's Office		1	150	150
Secretary/Admin Assistant		1	200	200
Conference Room		1	250	250
Additional Offices		2	120	240
Work/Copy		1	300	300
Conf/Hotel/Coffee		1	350	350
Restrooms		2	50	100
Teacher Prep/Offices		1	800	800
SWS/Cluster	**19**			**26,080**

Regular Teaching Stations 17
Special Needs Teaching Staions 2

*Tech Ed Labs [Engineering/Robotics, Communications, Health Services, Business]
Large Group Instruction: See Media Center but should be located near Core Academics
Note: Each School within School for 600 can be subdivided into 2 clusters of 300

Spatial Relationships

The student spaces program area should be in a centralized location and easily accessed by the school community. It should also be adjacent to the academic core.



Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

STANDARDS FOR TYPICAL OFFICES

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Desk with return	1
Desk chair	1
Credenza in rooms > 200SF	1
Guest chairs, rooms < 150SF	2
Guest chairs, rooms 155-200SF	4
Conf chairs, rooms over 200SF	4
Conf table, rooms over 200SF	1
Bookshelves	18 LF
Marker board	4 LF
Laptop computer	1
Printer	1
File cabinet, 4 drawer	1 to 2
Bulletin board	4 LF
Clock	1

MECHANICAL	QTY
Air Conditioning	Yes

ELECTRICAL	QTY
Duplex outlet	each wall
Quad outlet @ ea. data port	1

PLUMBING	QTY
No special requirements	

TECHNOLOGY	QTY
Data port and/or access to wireless	1
Telephone	1
Video port	1
Intercom through phone handset	Yes

STANDARDS FOR TYPICAL CONFERENCE ROOMS

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Modular conf table	1
Conference chairs	1/ 25 SF
Credenza, rooms > 200SF	1
Marker board	8 LF
Clg mtd data projector, rooms > 150SF	1
Drop down projection screen, rooms > 150SF	1
Bulletin board	4 LF
Clock	1

MECHANICAL	QTY
Air Conditioning	Yes

ELECTRICAL	QTY
Duplex outlet	5' oc
Quad outlet @ ea. data port	1

PLUMBING	QTY
No special requirements	

TECHNOLOGY	QTY
Data port and/or access to wireless	1
Telephone	1
Video port	1
Intercom through phone handset	Yes
Video projector, rooms > 200SF	Yes

Student Offices / Meeting Area

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Community, parent, and student activity planning and collaboration
- Meetings
- Scheduling of appointments
- Preparation of materials
- Storage of materials
- Club/organization meetings

Persons

- Students
- Coaches
- Advisors
- Teachers
- Parents
- Community Members
- Volunteers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting

Technology

- Access to voice, video, data ports, and electrical outlets

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Visual access to commons area

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Lockable storage cabinets
- Flexible surfaces
- Portable work stations

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Acoustical privacy
- Access to student commons area

Student Meeting Room

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Community, parent, and student activity planning and collaboration
- Meetings
- Scheduling of appointments
- Preparation of materials
- Storage of materials

Persons

- Students
- Coaches
- Advisors
- Teachers
- Parents
- Community Members
- Volunteers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting
- Controlled day lighting

Technology

- Access to voice, video, data ports, and electrical outlets

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Visual access to commons area

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Lockable storage cabinets
- Flexible surfaces
- Portable work stations

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Acoustical privacy
- Access to student commons area

Vending Area

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Snacks for during/after school activities

Persons

- Students
- Coaches
- Advisors
- Teachers
- Parents
- Community Members
- Volunteers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Sink

Electrical & Lighting

- Dedicated electrical outlets for vending machines/freezers and microwave

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Adjacent to commons area

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- No special requirements

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Multiple machines

Brooklyn Park MS (MD) Grimm and Parker Architects

The pages that follow contain a list of spaces and drawings illustrating the relationship between various program areas and the individual spaces within the program area. Additionally, a description of the activities, persons to accommodate, and items to be considered is included.

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Administration / Guidance / Teacher Prep

Introduction

Administration will provide the organizational and instructional leadership needed to create an atmosphere that is conducive for teaching and learning. This area includes the decentralized administrative functions of the SWS and student support services (counselors, support staff, etc.).

School Within School for 600 Small Learning Communities	School for 600			
Space	**TS**	**Quantity**	**SF**	**Total**
Core Academic				
Learning Lab	10	10	960	9,600
Learning Lab w/ divider wall	2	2	960	1,920
Instructional Material Storage		2	150	300
Science Lab	4	4	1,400	5,600
Science Prep/Storage		2	200	400
Tech Ed Lab*	1	1	2,000	2,000
Tech Ed Storage		1	300	300
Breakout/Circulation		1	500	500
Special Needs [RSP, SDC: ED, MM, DHH]				
Resource Classroom w/ divider wall	2	2	960	1,920
Student Area				
Student Offices/ Meeting Area		1	500	500
Student Meeting Room		1	300	300
Vending Area		1	200	200
Admin/Guidance/Teacher Prep Area				
House Leader/Principal Office		1	150	150
Guidance Counselor's Office		1	150	150
Secretary/Admin Assistant		1	200	200
Conference Room		1	250	250
Additional Offices		2	120	240
Work/Copy		1	300	300
Conf/Hotel/Coffee		1	350	350
Restrooms		2	50	100
Teacher Prep/Offices		1	800	800
SWS/Cluster	**19**			**26,080**

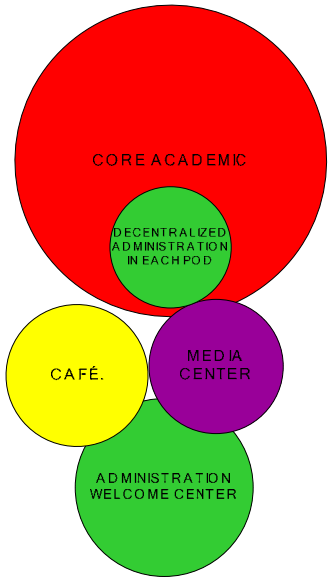
Listed are the administration/ guidance/teacher prep areas to be included in each cluster/pod in the SWS/Cluster Concept. The pages that follow describe each of these program area spaces in more detail.

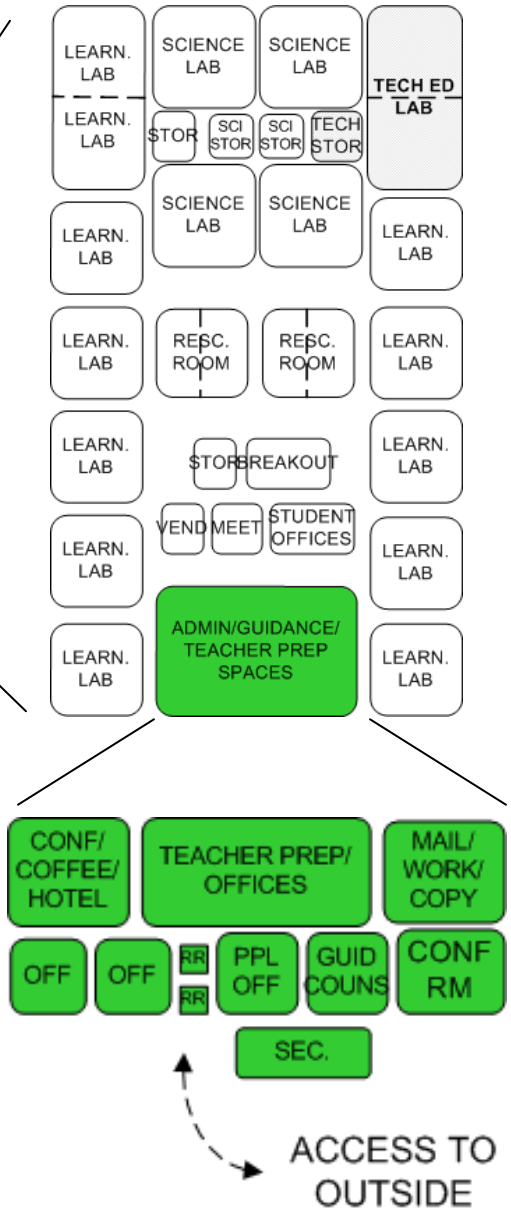
Regular Teaching Stations 17
Special Needs Teaching Staions 2

*Tech Ed Labs [Engineering/Robotics, Communications, Health Services, Business]
Large Group Instruction: See Media Center but should be located near Core Academics
Note: Each School within School for 600 can be subdivided into 2 clusters of 300

Spatial Relationships

The Administrative Program Area should be located near the SWS's entrance. It should be accessible to the community and adjacent to the Core Academic Program Area.





Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

STANDARDS FOR TYPICAL OFFICES

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Desk with return	1
Desk chair	1
Credenza in rooms > 200SF	1
Guest chairs, rooms < 150SF	2
Guest chairs, rooms 155-200SF	4
Conf chairs, rooms over 200SF	4
Conf table, rooms over 200SF	1
Bookshelves	18 LF
Marker board	4 LF
Laptop computer	1
Printer	1
File cabinet, 4 drawer	1 to 2
Bulletin board	4 LF
Clock	1

MECHANICAL	QTY
Air Conditioning	Yes

ELECTRICAL	QTY
Duplex outlet	each wall
Quad outlet @ ea. data port	1

PLUMBING	QTY
No special requirements	

TECHNOLOGY	QTY
Data port and/or access to wireless	1
Telephone	1
Video port	1
Intercom through phone handset	Yes

STANDARDS FOR TYPICAL CONFERENCE ROOMS

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Modular conf table	1
Conference chairs	1/ 25 SF
Credenza, rooms > 200SF	1
Marker board	8 LF
Clg mtd data projector, rooms > 150SF	1
Drop down projection screen, rooms > 150SF	1
Bulletin board	4 LF
Clock	1

MECHANICAL	QTY
Air Conditioning	Yes

ELECTRICAL	QTY
Duplex outlet	5' oc
Quad outlet @ ea. data port	1

PLUMBING	QTY
No special requirements	

TECHNOLOGY	QTY
Data port and/or access to wireless	1
Telephone	1
Video port	1
Intercom through phone handset	Yes
Video projector, rooms > 200SF	Yes

STANDARDS FOR TYPICAL MAIL/WORK/COPY ROOMS

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Work tables	2
Countertop over base cabinets	16 LF
Overhead cabinets	8 LF
Chairs	2
Computer workstations	1
Shelving	8 LF
Locking storage cabinet	1
Printer	1
Scanner	1
Fax machine	1
Copier w/ sorter	1
Marker board	8 LF

MECHANICAL	QTY
No special requirements	

ELECTRICAL	QTY
Duplex outlet	5' oc
Quad outlet @ ea. data port	1

PLUMBING	QTY
Hot & cold water for sink	1

TECHNOLOGY	QTY
Data port and/or access to wireless	2
Telephone	1
Intercom through phone handset	Yes

House Leader / Principal's Office

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Conferences with staff and other visitors
- Telephone calls
- Administrative activities
- Planning
- Computer input

Persons

- Principal
- Assistant Principal

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port
- Security monitor

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: narrow view panel
- Windows: operable, blinds, allow controlled natural lighting

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Storage cabinets
  - Bookshelves
  - File cabinets
- Desk and chair
- Side chairs
- Lamps
- Networked computer
- Magnetic marker board
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Carpeting
- Large area within office for 6-8 people meeting

Guidance Counselor's Office

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Counseling of students with concerns
- Conferencing with parents, students, and staff

Persons

- Counselors
- School staff
- Parents
- Students
- Visitors

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: narrow or view panel with blinds

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Bookcases
  - Storage closet/ wardrobe
  - Locking file cabinets
- Legal size file lateral drawer
- Desk and chair
- Side chairs and table
- Rolling carts
- Lamps
- Networked computer
- Bulletin board
- Magnetic marker board
- Clocks

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Auditory/visual privacy
- Carpeting

Secretary / Administrative Assistant

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Greeting people
- Assisting in administrative duties
- Waiting for appointments

Persons

- School staff
- Students

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port at each workstation
- Video port and monitor
- Data ports for each workstation
- Quad outlet for each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel
- Windows: operable, with blinds to allow controlled natural lighting

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Desk/computer workstation
- Locking file cabinets
- Ergonomic task chairs
- Bulletin board
- Magnetic marker board
- Message board
- Networked computers
- Printer, copier
- Paper shredder
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Inviting to visitors
- Colorful
- Carpeting

Conference Room

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Small group meetings/conferences

Persons

- Administrators/Counselors/Staff
- Parents
- Students
- Visitors

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Sink with hot and cold water

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: large view panel with optional sidelight

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Counter top with sink, base and wall cabinets
- Conference tables and chairs
- Side chairs
- Magnetic marker board
- Tack board
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Consideration for sound transfer
- Carpeting
- Vinyl tile at sink

Additional Offices

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Meeting with students

Persons

- School staff
- Student population

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlets adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Book case
  - Locking cabinets
  - Legal size lockable lateral file cabinet
- Desk and chair
- Side chair
- Networked computer
- Bulletin board
- Magnetic marker board
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Bright, yet soft lighting
- Inviting to visitors
- Carpeted flooring

Work/Copy Room

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Copying
- Collating
- Preparing communications for mailing
- Laminating, book making
- General office work
- Delivery of general office mail
- Storage

Persons

- Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Sink with hot and cold water

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: large view panel with optional sidelight
- Windows: no special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Countertop with sink, base and wall cabinets
  - Lockable storage cabinets
  - Wall shelving
- Work tables and chairs
- Staff mailboxes [with hallway access]
- Networked computer
- Copier
- Binding equipment
- Fax machine and printers
- Laminating machine
- Paper storage, shredder, and cutter
- Tack board/marker board
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Consideration for sound transfer
- Vinyl tile
- Locking room; no student access

Conference / Hotel / Coffee Room

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Teacher planning and collaboration
- Team meetings
- Professional Development
- Record keeping
- Preparation of teaching materials
- Faculty lunch

Persons

- Teachers
- Staff
- Paraprofessional
- Volunteers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Staff restroom with sink

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting
- Controlled day lighting

Technology

- Access to voice, video, data ports, and electrical outlets
- LCD Projector

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- View panel at door
- Windows to corridor and/or Learning Community

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Lockable storage cabinets and closets
- Flexible surfaces
- Storage cabinets
- Teacher desks
- Round tables for lunch and team meeting

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Adequate counter-top space for small appliances and production equipment
- Acoustical privacy
- Small appliances (coffee, refrigerator, microwave)
- Copy and laminating machines
- Telephone with outside lines
- Walls painted with warm and cool colors

Restrooms

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Personal Hygiene

Persons

- Teachers
- Administration

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Exhaust fan

Plumbing

- Sink with hot and cold water
- Toilet

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: no view panel
- Windows: none

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Cabinet with mirror

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Hands free dispensers

Teacher Prep / Offices

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Teacher planning and collaboration
- Team meetings
- Scheduling of appointments
- Record keeping
- Preparation of teaching materials

Persons

- Teachers
- Staff
- Aides
- Volunteers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Staff restroom with sink

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting
- Controlled day lighting

Technology

- Access to voice, video, data ports, and electrical outlets
- Intercom
- LCD Projector

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- View panel at door
- Windows to corridor and/or Learning Community

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Lockable storage cabinets
- Flexible surfaces
- Storage cabinets
- Teacher desks
- Copier/scanner/fax/printer

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Adequate counter-top space for small appliances and production equipment
- Acoustical privacy
- Vinyl tile flooring
- Small appliances (coffee, refrigerator, microwave)
- Copy and laminating machines
- Telephone with outside lines

sample photo: may not represent LBUSD facilities

Special Needs

Introduction

The goal of the Special Needs Program Area is to meet the requirements of students with disabilities within the least restrictive environment enabling them to become responsible, life-long learners. To meet students' needs, the Special Education Program provides instruction within the general education environment through an inclusion process as well as separate classrooms for those students who need a self-contained environment.

Students with special needs require space designed to accommodate oversized wheelchairs, physical & occupational therapy equipment, etc.

For Long Beach Unified School District, the Special Needs Program Area includes spaces for self-contained [MS, M, OI] and mainstreamed students as well as support spaces such as a resource/tutorial room [RSP, SDC: MM, ED, DHH], conference room, offices and material storage may be shared with others.

The pages that follow contain a list of spaces and drawings illustrating the relationship between various program areas, and the individual spaces within the program area. Additionally, a description of the activities, persons to accommodate, and items to be considered is included.

Long Beach also has self-contained classrooms for their learning disabled students who are on a diploma track [departmentalized]. Each high school is also setting up one self-contained classroom for same population who are on a certificate track because they need a more functional/life skills/vocationally based classroom.

Long Beach also offers "outsource schools" for students who cannot succeed on a comprehensive campus. Extra spaces are provided in these schools.

Special Needs Categories

RSP – Resource Specialist Program
- Class size: 5-6
- Tutorial
- Curriculum – Strategies for Success [learning strategies]
- Students participate in five general education classes

SDC – Special Day Class

M/M: Mild/Moderate Learning Disabled
- Class size: 13
- Departmentalized
- Diploma or certificate track students
- Some students in elective general education classes

E/D: Emotionally Disturbed
- Class size: 13
- Diploma or certificate track students

M/S: Moderate Severe
- Class size: 9
- Certificate; life skills
- Self-contained

O/I: Orthopedically Impaired
- Class size: 9
- Diploma or certificate track students
- Self-contained

DHH: Deaf/Hard of Hearing
- Class size: 9
- Interpreters
- Diploma or certificate track students
- Some self-contained and some mainstreamed

"M" Class
- Class size: 13
- Functional academic, life skills, vocational training
- Certificate track students
- Self-contained

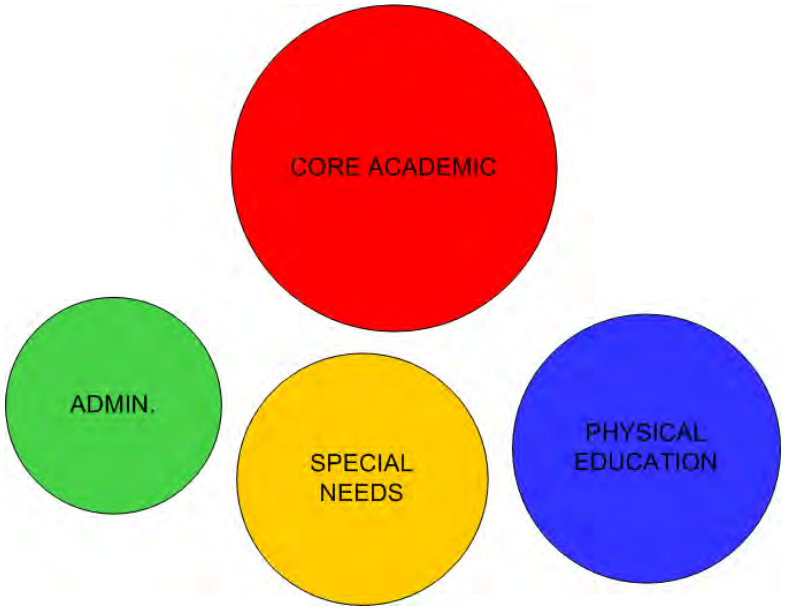
Space Requirements

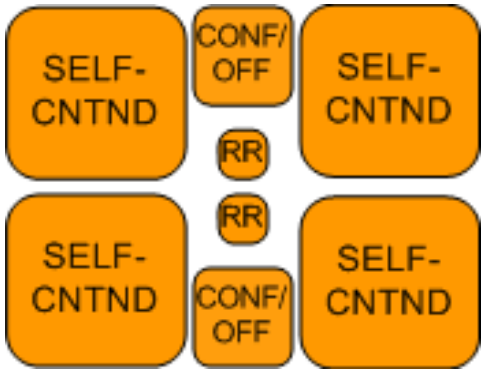
Special Needs [Severe]	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Resource Rooms [RSP, SDC: ED, MM, DHH]	See SWS Concept Page				See SWS Concept Page				See SWS Concept Page			
Self-Contained Classrooms [SDC: MS, M, OI]	1	1	960	960	2	2	960	1,920	3	3	960	2,880
Restroom/Shower		1	150	150		1	150	150		1	150	150
Conference/Office		1	200	200		1	200	200		2	200	400
Special Needs Total	**1**			**1,310**	**2**			**2,270**	**3**			**3,430**

Special Needs [Severe]	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Resource Rooms [RSP, SDC: ED, MM, DHH]	See SWS Concept Page				See SWS Concept Page				See SWS Concept Page			
Self-Contained Classrooms [SDC: MS, M, OI]	4	4	960	3,840	5	5	960	4,800	6	6	960	5,760
Restroom/Shower		2	150	300		2	150	300		2	150	300
Conference/Office		2	200	400		2	200	400		3	200	600
Special Needs Total	**4**			**4,540**	**5**			**5,500**	**6**			**6,660**

Spatial Relationships

The Special Education Program Areas should be adjacent to the Core Academic Program Areas and to Administration and Physical Education. The drawing shown to the right is for a 2,400 student school.





Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

STANDARDS FOR TYPICAL LEARNING LABS/CLASSROOMS, HIGH SCHOOL

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Student work tables, 2 students each	18
Student chairs	36
Countertop over base cabinets	4 LF
Overhead cabinets	4 LF
Marker board	16 LF
Bulletin board	24 LF
Shelving	24 LF
Locking storage cabinet	6 LF
AIO (All in One) Device	1
Mobile bookcases, 3' long	2
Pull down screen	1

MECHANICAL	QTY
No special requirements	

ELECTRICAL	QTY
Duplex outlet	1 per wall
Quad outlet @ ea. data port	1
Front row of light, dimmable	

PLUMBING	QTY
Hot & cold water for sink	1

TECHNOLOGY	QTY
Voice, data, video outlets at teacher desk	1
6 data drops with double, triple, or quad CNOs (Communications Network Outlets)	6
2 data drops at teacher desk area	2
Single data drop dedicated to wirless, high on wall	1

TECHNOLOGY	QTY
Analog telephone	1
Intercom	Yes
Smartboard w/ integral LCD projector	1
Audio Enhancement	1 system
Laptop computers with carts, shared	26

STANDARDS FOR TYPICAL OFFICES

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Desk with return	1
Desk chair	1
Credenza in rooms > 200SF	1
Guest chairs, rooms < 150SF	2
Guest chairs, rooms 155-200SF	4
Conf chairs, rooms over 200SF	4
Conf table, rooms over 200SF	1
Bookshelves	18 LF
Marker board	4 LF
Laptop computer	1
Printer	1
File cabinet, 4 drawer	1 to 2
Bulletin board	4 LF
Clock	1

MECHANICAL	QTY
Air Conditioning	Yes

ELECTRICAL	QTY
Duplex outlet	each wall
Quad outlet @ ea. data port	1

PLUMBING	QTY
No special requirements	

TECHNOLOGY	QTY
Data port and/or access to wireless	1
Telephone	1
Video port	1
Intercom through phone handset	Yes

Self-Contained Classrooms [MS, M, OI]

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Individual, small, and large group activities
- Storage of materials, equipment
- Project-based learning
- Computer-based instruction
- Mobility Training

Persons

- Students
- Teachers
- Parents
- Volunteers
- Other staff
- 1:1 Aide and Child Care worker

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Sink with hot and cold water
- Drinking fountain

Electrical & Lighting

- Duplex electrical outlets on each wall
- Banked switching to allow varied light levels

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port
- Audio enhancement system

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel, outside accessibility
- Windows with blinds
- One way window to office

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Comfortable rooms with pleasant décor that contribute to an atmosphere conducive to creativity
- Proportion classroom for effective viewing and listening from all areas of the classroom
- Plenty of natural/quality lighting
- Wheelchair accessibility
- Vinyl tile
- Wall mount for screen or TV
- Studio Apartment in one classroom:
  - Kitchen with sink [hot & cold water], counter, dishwasher, microwave, stove/oven, table and chairs
  - Laundry with counter and washer and dryer
  - Living room with sofa and coffee table
  - Bedroom area with single bed and small dresser

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Countertop with sink, base, and wall cabinets
  - 4 tall storage cabinets with shelving, drawers and lockable doors
  - Adjustable height bookshelves
  - Large shallow drawers sized to hold poster board and chart paper
  - Drawers for teacher storage
  - Lockable file cabinets
- Fixed cubbies for student storage with hooks (able to close like a locker)
- Tables, chairs, and student desks that are mobile (wheelchair accessibility)
- Networked computers
- Half circle shaped table
- Magnetic marker board on primary and secondary teaching wall
- Tack board at each end of marker board on primary wall
- Tack strip above marker board
- Refrigerator
- Washer, Dryer, Dishwasher in one room only

Restroom / Shower / Change

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Personal hygiene

Persons

- Nurse
- Aides
- Students
- Teachers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Exhaust fan

Plumbing

- Sink with hot and cold water
- Toilet
- Shower

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- No Special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: no view panel
- Windows: none

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Cabinet with mirror
- Changing table
- Hoyer lift

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Adjacent to Health Clinic

Conference Room

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Small group meetings/conferences

Persons

- Teachers
- Parents
- Volunteers
- Other staff
- 1:1 Aide and Child Care worker

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Sink with hot and cold water

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: large view panel with optional sidelight

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Counter top with sink, base and wall cabinets
- Conference tables and chairs
- Side chairs
- Magnetic marker board
- Tack board
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Consideration for sound transfer
- Carpeting
- Vinyl tile at sink

sample photo: may not represent LBUSD facilities

The Media Center Program Area is the program containing spaces for library and technology services. This includes spaces for a reading room and circulation, a media specialist's office, storage, and a workroom. It also includes separate spaces for the technology control center and student instruction.

Media Center

Introduction

The Media Center will serve as the information hub of the school, providing access to materials within and outside the physical facility. An important aspect of this area is the continual use of printed material as well as electronic sources of information.

All curricular areas of the school will share the Media Center instructional technologies, which include computers, audio, database access, and Internet information technologies. The Media Center is a technology-intensive environment, with computer information stations located throughout the Reading/Learning/Circulation area.

Overview

The Media Center should be utilized by all students, staff, teachers, and community members. Therefore, a centrally located Media Center with public access would be ideal.

The Media Center will consist of:

- Reading Room/Circulation/ Instructional Space
- Reference Center
- Computer Lab
- Media Specialist Office
- Workroom/Storage
- Telecommunications Room
- Document Storage

The Media Center maintains a high profile in the life of the school and is an active participant.

An emphasis was placed on the Media Center providing experiences regarding the following opportunities for students:

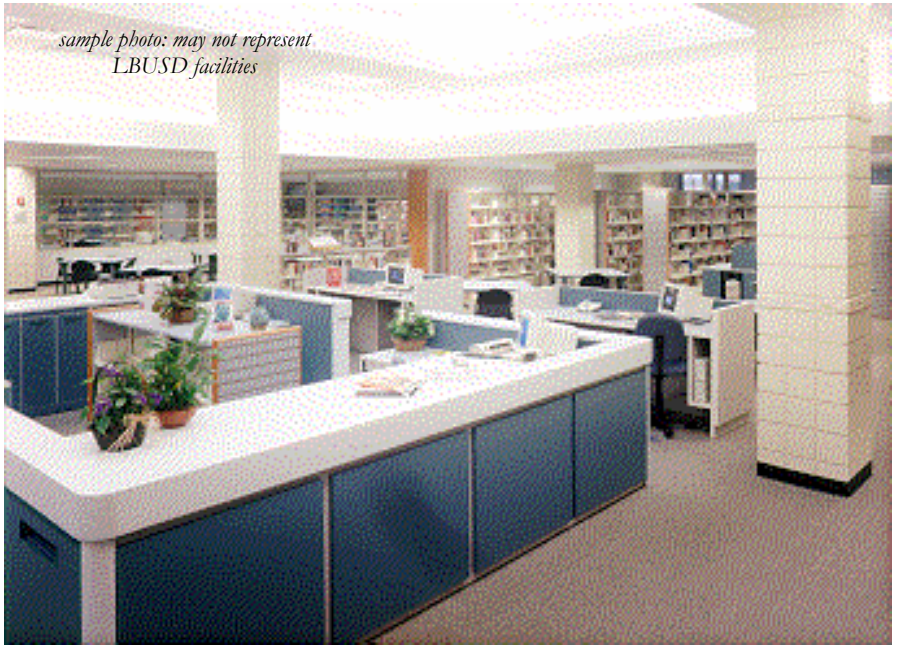
- Identify, evaluate, and communicate information
- Exercise responsibility when using materials, information, and technology
- Maintain the highest standards of scholarship
- Develop the habits of confident, skillful, and discerning readers

Students are expected to become self-directed learners and feel comfortable using the Media Center for any field of inquiry.

The Media Center will serve students in grades 9-12. Its resources are available to all students in an atmosphere that is inviting, comfortable, and vibrant.

The Media Center should have flexible work and social settings for multiple activities that take place simultaneously. The Media Center also provides spaces for reflection.

The pages that follow contain a list of spaces and drawings illustrating the relationship between various program areas, and the individual spaces within the program area. Additionally, a description of the activities, persons to accommodate, and items to be considered is included.



Space Requirements

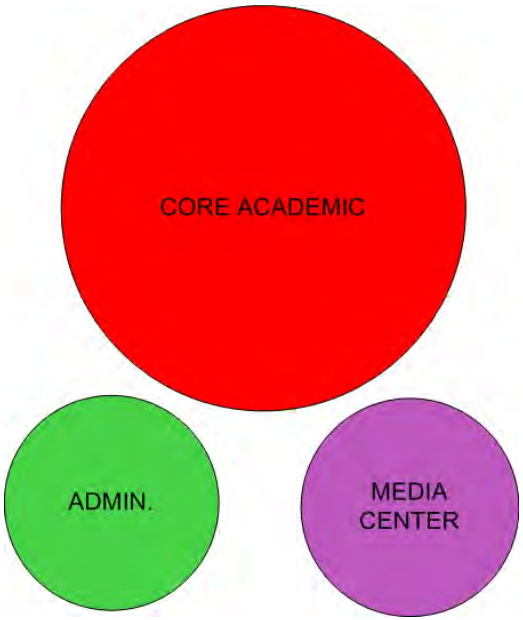
Media Center	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Reading Room/Circulation		1	3,000	3,000		1	4,000	4,000		1	5,000	5,000
Multi Media Workroom/Kinkos		1	800	800		1	1,200	1,200		1	1,200	1,200
TV Media/Broadcast Studio		0	0	0		0	0	0		1	1,000	1,000
Media Specialist		1	150	150		1	150	150		1	150	150
Other Offices		1	125	125		2	125	250		3	150	450
Workroom		1	300	300		1	500	500		1	500	500
Telecommunications Room		1	200	200		1	200	200		1	300	300
Hub Rooms, distributed thru Bldg		4	25	100		8	25	200		12	25	300
A/V Storage		1	200	200		1	400	400		1	400	400
Conf Room/Project Room		1	300	300		2	300	600		2	300	600
Textbook Storage		1	600	600		1	800	800		1	800	800
Large Group Instruction Room*						1	2,000	2,000		1	2,000	2,000
Media Center Sub-Total	**0**			**5,775**	**0**			**10,300**	**0**			**12,700**

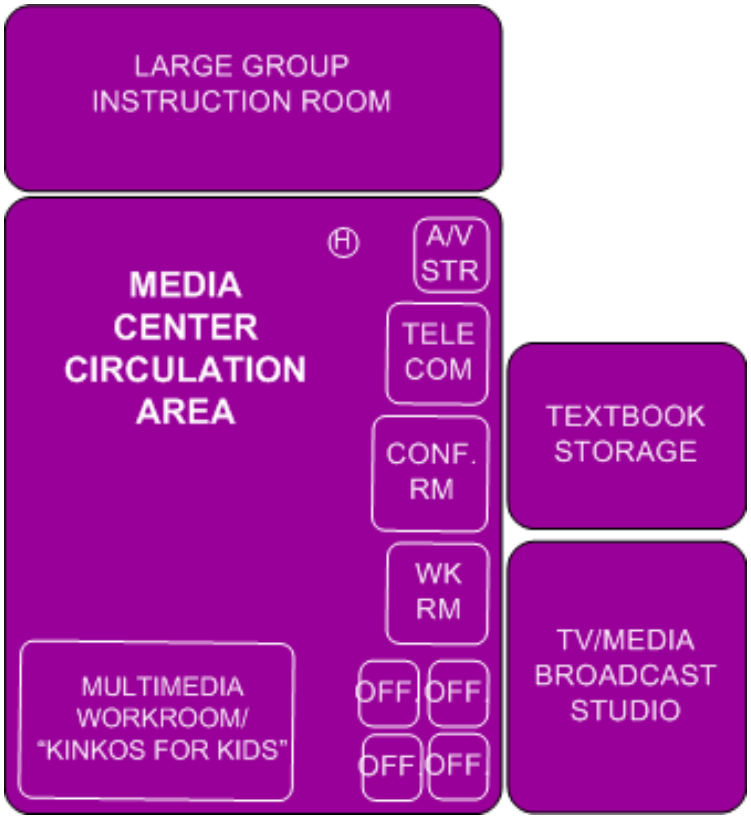
*Large Group Instruction could be located near core academic areas

Media Center	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Reading Room/Circulation		1	6,000	6,000		1	7,000	7,000		1	7,000	7,000
Multi Media Workroom/Kinkos		1	1,500	1,500		1	1,500	1,500		1	1,500	1,500
TV Media/Broadcast Studio		1	1,500	1,500		1	1,500	1,500		1	1,500	1,500
Media Specialist		1	150	150		1	150	150		1	150	150
Other Offices		3	125	375		3	125	375		4	125	500
Workroom		1	600	600		1	600	600		1	600	600
Telecommunications Room		1	400	400		1	400	400		1	500	500
Hub Rooms, distributed thru Bldg		16	25	400		20	25	500		24	25	600
A/V Storage		1	500	500		1	500	500		1	500	500
Conf Room/Project Room		3	300	900		3	300	900		3	300	900
Textbook Storage		1	1,000	1,000		1	1,000	1,000		1	1,000	1,000
Large Group Instruction Room		1	2,000	2,000		2	2,000	4,000		2	2,000	4,000
Media Center Sub-Total	**0**			**15,325**	**0**			**18,425**	**0**			**18,750**

Spatial Relationships

Media center spaces will be shared by each school. Members of the community will also use the media center before, after, and possibly during school hours. For this reason, the media center should have access to the outside, a separate secured entry, and should be located near the Welcome Center. The pages that follow describe in more detail each program area space listed in the table below.





Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

Reading Room / Circulation

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Reading
- Circulation of materials and resources
- Whole group and small group instruction
- Provide meeting areas
- Research
- Display space

Persons

- Students, teachers and classes
- Individual students for research
- Media specialist
- Media assistants
- Community patrons for after school hours
- Volunteers and support staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall
- Full spectrum lighting
- Ability to control specific lighting areas

Technology

- Telephone/intercom/voicemail port
- Video ports and monitors
- Data ports
- Quad outlet adjacent to each data port
- Wireless access points throughout school
- LCD Projector and drop down screen in 3 areas
- Wireless laptops with carts for battery recharging
- Circulation system

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: double doors large view panel
- Door: swinging half door into circulation desk and work area
- Windows: operable, with blinds for controlled natural lighting

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Natural light
- Ceiling height proportionate to room dimensions
- Open flow for traffic in reference/ professional/periodicals area
- Auditory privacy
- Provide method to darken room for AV presentations
- Access to Media Center during/ after school hours while maintaining security in the remainder of the school
- Carpeting with some non-carpeted areas

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Circulation counter and base cabinets
  - Countertop with base and wall cabinets
  - Periodical shelving
  - Display cases [secure/lockable]
  - Built-in cabinets/shelving behind circulation desk for processing
  - Corkboard on front of casework
- 4-6 person tables with chairs
- Soft seating
- Computer tables and chairs
- Printers and printer tables
- Networked computers w/access to programs and online catalog and databases
- LCD projector and mounted screen
- Tack board
- Magnetic marker board
- Built in TV/DVD/VCR and video conference equipment
- Double-sided shelving w/ built in book supports or peripheral shelving with book supports
- Networked copy machine
- Wireless microphone & built-in speakers

Multi-Media Workroom / "Kinko's for Kids"

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Multi-media production

Persons

- Students, teachers and classes
- Individual students
- Media specialist
- Media assistants

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall
- Full spectrum lighting
- Ability to control specific lighting areas

Technology

- Telephone/intercom/voicemail port
- Video ports and monitors
- Data ports
- Quad outlet adjacent to each data port
- Wireless access points throughout school
- LCD Projector and drop down screen
- Wireless laptops with carts for battery recharging
- Printers
- Copiers

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: double doors large view panel
- Windows: operable, with blinds for controlled natural lighting

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Natural light
- Auditory privacy
- Carpeting with some non-carpeted areas

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Countertop with base and wall cabinets
  - Corkboard on front of casework
- Computer tables and chairs
- Printers and printer tables
- Networked computers w/access to programs and online catalog and databases
- LCD projector and mounted screen
- Tack board
- Magnetic marker board
- Built in TV/DVD/VCR and video conference equipment
- Networked copy machine

TV Media / Broadcast Studio

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Oversee TV production
- Direction of Video/Audio productions in studio and Board Room

Persons

- Producer
- Director
- Tech Director
- Sound Mixer
- Tape Operator
- Students

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Air conditioning
- Ventilation

Plumbing

- No special requirements

Electrical & Lighting

- Recessed ceiling lighting with dimmers
- Duplex electrical outlets on each wall
- Lighting grid

Technology

- Access to voice, video, data ports, and electrical outlets
- Network comm. Ports
- Patch Panel
- Lighting control panels

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Glass on walls adjacent to the media center (with blinds)

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment
▪ Control consoles ▪ Portable video conferencing equipment ▪ Portable video production equipment

Special Considerations

The following table reflects design considerations for the space.

Special Considerations
▪ Sound proofing

Media Specialist / Other Offices

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Administrative work
- Scheduling
- Lesson planning
- Web research

Persons

- Media Specialist
- Other Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data port for each workstation
- Quad outlet adjacent to data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel
- Windows: ½ glass wall looking into Reading Stacks and Circulation

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Counter top with base and wall cabinets
  - File cabinet
  - Bookcase
  - Lockable cabinet
- Desk and chair
- Networked computer
- Networked Printer
- Magnetic marker board
- Small tack board
- Small meeting table
- Fax
- Scanner

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Auditory privacy
- Adjacent to workroom/storage
- Carpeting

Workroom

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Processing new media
- Preparing for Distance Learning
- Preparing for presentations
- Minor repairs
- Laminating
- Making displays and media

Persons

- Media specialist
- Other staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- Sink with hot water

Electrical & Lighting

- Duplex electrical outlets on each wall
- Electrical outlets with building surge protectors as needed
- Dedicated circuits with grounds
- Dimmer for all lights

Technology

- Telephone intercom/voicemail port
- Video port and monitor
- Data port
- Quad outlet adjacent to each data port
- Wireless network equipment
- Interactive video/distance learning

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: solid, lockable
- Windows: ½ glass wall looking into Reading Stacks and Circulation

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - 4 tall storage cabinets with shelving, drawers, and lockable devices
- Equipment racks
- Tables, chairs,
- Magnetic marker board at each end of room
- Tack strip above marker board

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Vinyl tile
- Must be a lockable and secure room

Telecommunications Room

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Security
- Networking of computers
- Storage of licensed technology
- Recharging laptop carts

Persons

- Media specialist
- Paraprofessional
- Technology technician
- Other staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- HVAC to meet requirements of heat producing equipment

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall
- Electrical outlets with surge protectors as needed
- Dedicated circuits with grounds

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data port
- Quad outlet adjacent to each data port
- Wireless network equipment
- Satellite access
- Video distribution system

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: solid, lockable
- Windows: no windows

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Equipment racks
- Shelving for video/cable system
- Desk and chair
- Two rolling storage carts for lap top units
- Compact disc interactive
- Still video players
- VCR's
- CD/DVD burner

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Vinyl tile

A/V Storage

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities
- Storage

Persons
- Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical
- No special requirements

Plumbing
- No special requirements

Electrical & Lighting
- Duplex electrical outlets on each wall

Technology
- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows
- Door: solid
- Windows: operable blinds for privacy

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Countertop with base and wall cabinets
  - Lockable storage cabinets
  - Wall shelving
- Fireproof storage cabinets
- Clock
- File cabinet
- Cabinet for map drawers

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Vinyl tile

Conference Room / Project Room

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Meeting space for school community
- Quiet reading/study area for students and staff

Persons

- Media Specialist
- Media Assistant
- Students
- Teachers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom port
- Electrical outlets
- Video ports and monitor
- Data ports

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: Solid
- Windows: large view panel

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Conference table with chairs
- Side chairs
- Magnetic marker board
- Tack board
- Clock
- Lockable cabinets

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Carpeting

Textbook Storage

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storage

Persons

- Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports, one adjacent to entrance door
- Quad outlet adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: solid

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Countertop with base and wall cabinets
  - Lockable storage cabinets
  - Wall shelving
- Fireproof storage cabinets
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Vinyl tile
- Adjacent to library with direct access to student walkway
- Window or half door for book distribution to students

Large Group Instruction

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Students work on special projects
- Multiple classes meet at the same time

Persons

- Students
- Teachers
- Volunteers
- Specialist
- Resource Professional
- Guest Speakers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- Sink

Electrical & Lighting

- Duplex electrical outlets

Technology

- Video port
- Phone
- Data ports or access to wireless network
- Smart board with integral LCD projector
- Intercom system

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door with glass, so project classroom is visible from other rooms
- Windows for student supervision and passive security

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Tables for group work
- Conference chairs
- White Boards
- Smart Boards
- Marker Board
- Bulletin Board
- Vinyl tile flooring
- 6' base cabinet with sink; overhead cabinets

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Movable divider wall within space

sample photo: may not represent LBUSD facilities

Visual Arts

Introduction

It is the goal of the visual arts program to increase the student's knowledge and appreciation for the visual arts.

The pages that follow contain a list of spaces and drawings illustrating the relationship between various program areas, and the individual spaces within the program area. Additionally, a description of the activities, persons to accommodate, and items to be considered is included.

Space Requirements

Visual arts spaces will be shared by each school. The pages that follow describe in more detail each program area spaces listed in the space requirements table below.

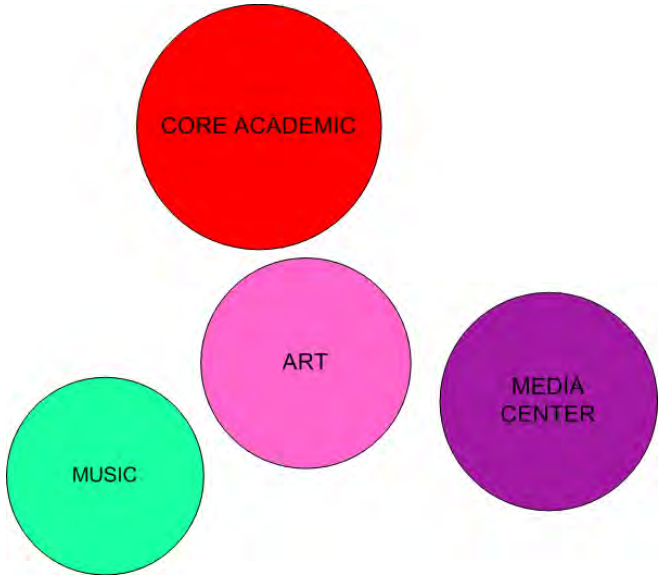
Visual Arts	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Art Lab	1	1	1,400	1,400	2	2	1,400	2,800	3	3	1,400	4,200
Kiln Room		1	100	100		1	100	100		2	100	200
Storage		1	200	200		2	200	400		3	200	600
Visual Arts Sub-Total	**1**			**1,700**	**2**			**3,300**	**3**			**5,000**

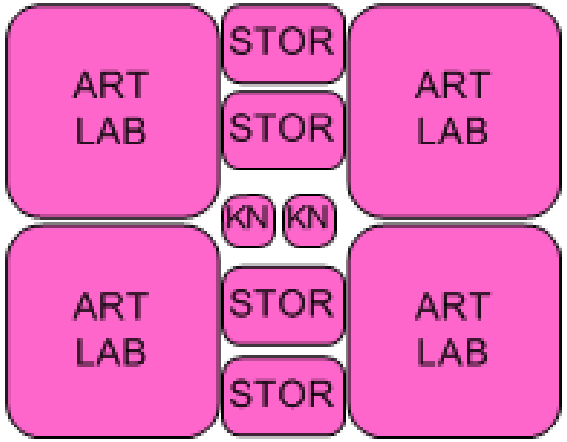
Visual Arts	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Art Lab	4	4	1,400	5,600	5	5	1,400	7,000	6	6	1,400	8,400
Kiln Room		2	100	200		2	100	200		3	100	300
Storage		4	200	800		5	200	1,000		6	200	1,200
Visual Arts Sub-Total	**4**			**6,600**	**5**			**8,200**	**6**			**9,900**

Type of Classroom	Number of Students					
	600	1,200	1,800	2,400	3,000	3,600
3D	X	X	X	X	X	X
2D		X	X	X	X	X
Ceramics			X	X	X	X
Graphic Arts/ Digital Photography				X	X	X
Art Appreciation					X	X
Jewelry						X

Spatial Relationships

The visual arts program area should be adjacent to performing arts and core academics. The drawing shown to the right is for a 2,400 student school.





Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

Art Lab

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Sculpture
- Ceramics
- 3-D & 2-D projects
- critique of art

Persons

- Students
- Teacher
- Other staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Ventilation for dust control
- Air outlet for airbrushing

Plumbing

- Large, deep bowled sinks with H/C water and clay traps
- Floor drains with sediment traps

Electrical & Lighting

- Multiple Duplex electrical outlets on each wall
- Adjustable full-spectrum lighting
- Movable track lighting
- Electrical service to support art equipment
- Track lighting for flexibility

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Smartboard with integral LCD projector
- Data ports
- Data port for teacher
- Quad outlets adjacent to each port
- LCD/Document camera

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel
- Windows: operable, with blinds to allow for controlled natural lighting

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Acid and heat resistant countertops with sink, base, and wall cabinets with adjustable shelves
  - Bookcases with adjustable shelves
  - Wardrobe cabinet
  - Built-in drying rack
  - Flat drawer storage for paper and student projects
  - Tackboard between base and wall cabinets
  - Clay bins with strong built-in counter
- Work tables with heavy flat surfaces and stools
- Potters' wheels for ceramics
- Computer tables
- Printer and table
- Desk and chair
- Tack boards and tack strips
- Magnetic marker boards
- Network computers
- Easels with tall stools
- Metal storage cabinet
- Wedging table for clay

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Floor to ceiling windows to allow tracing
- Natural lighting with a southern exposure
- Vinyl tile
- Access to outside
- Display areas
- Access to loading dock
- Shades to block light on windows
- Art gallery to display student work
- Jewelry classroom in larger schools need air/gas outlets

Kiln Room

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Store ceramic work
- Firing of student projects

Persons

- Students
- Teachers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Adequate ventilation for kiln (hood, fan)

Plumbing

- No special requirements

Electrical & Lighting

- Appropriate wiring for kiln
- Duplex electrical outlets on each wall
- Kiln shut-off

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: appropriate for high temperature
- Windows: none

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Storage for wet clay projects (green ware rack)
- Metal shelving for projects
- Metal cabinets for storing glaze
- Clay bin
- Kiln with vent

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Vinyl tile
- Kiln located on external wall of building with masonry walls on all sides

Storage

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storage of projects, equipment and supplies

Persons

- Teacher

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel
- Windows: none

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Adjustable, deep shelving built to ceiling height
  - Large, flat paper storage drawers
  - File cabinets
  - Flat files
  - Cabinets
- Tall center table for paper cutter

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Door to include tackboard
- Vinyl tile

Music/Performing Arts

Introduction

It is the goal of the music program to increase the student's knowledge and appreciation for music and the performing arts.

The pages that follow contain a list of spaces and drawings illustrating the relationship between various program areas, and the individual spaces within the program area. Additionally, a description of the activities, persons to accommodate, and items to be considered is included.

Space Requirements

Music/Performing Arts	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Music Room					1	1	1,200	1,200	1	1	1,200	1,200
Storage (Robes, Music)						1	200	200		1	200	200
Band Room	1	1	1,500	1,500	1	1	2,000	2,000	1	1	2,000	2,000
Band Storage (Instruments, Music)		1	300	300		1	400	400		1	400	400
Practice Rooms						2	50	100		2	50	100
Auditorium Seating	*See Food Service Area*				*See Food Service Area*					1	5,400	5,400
Control Booth										1	200	200
Auditorium Stage										1	3,000	3,000
Scene Shop										1	600	600
Make Up/Dressing (Shared)										1	300	300
Storage (Costumes, Props)										1	500	500
Drama Classroom/Green Room/Classroom	1	1	960	960	1	1	960	960	1	1	960	960
Music/ Performing Arts Sub-total	**2**			**2,760**	**3**			**4,860**	**3**			**14,860**

Type of Classroom	Number of Students					
	600	1,200	1,800	2,400	3,000	3,600
Music	X					
Choral		X	X	X	X	X
Band		X	X	X	X	X
Mini Lab				X	X	X
Orchestra					X	X

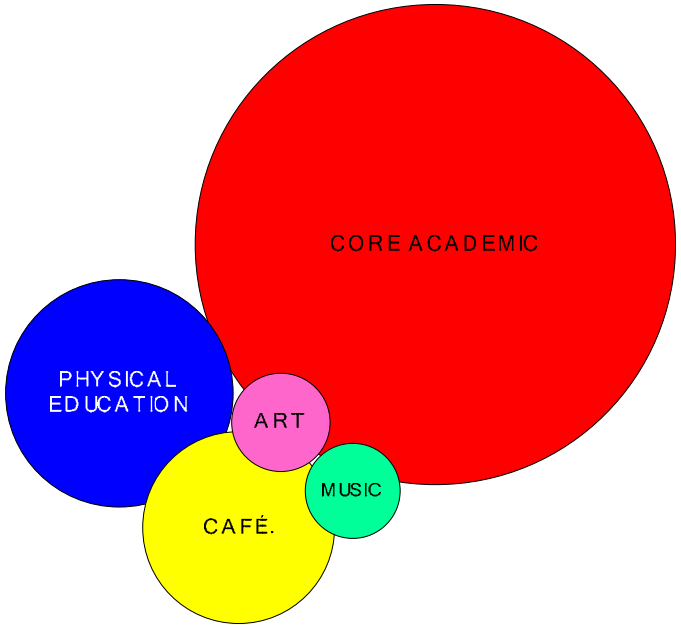
Space Requirements

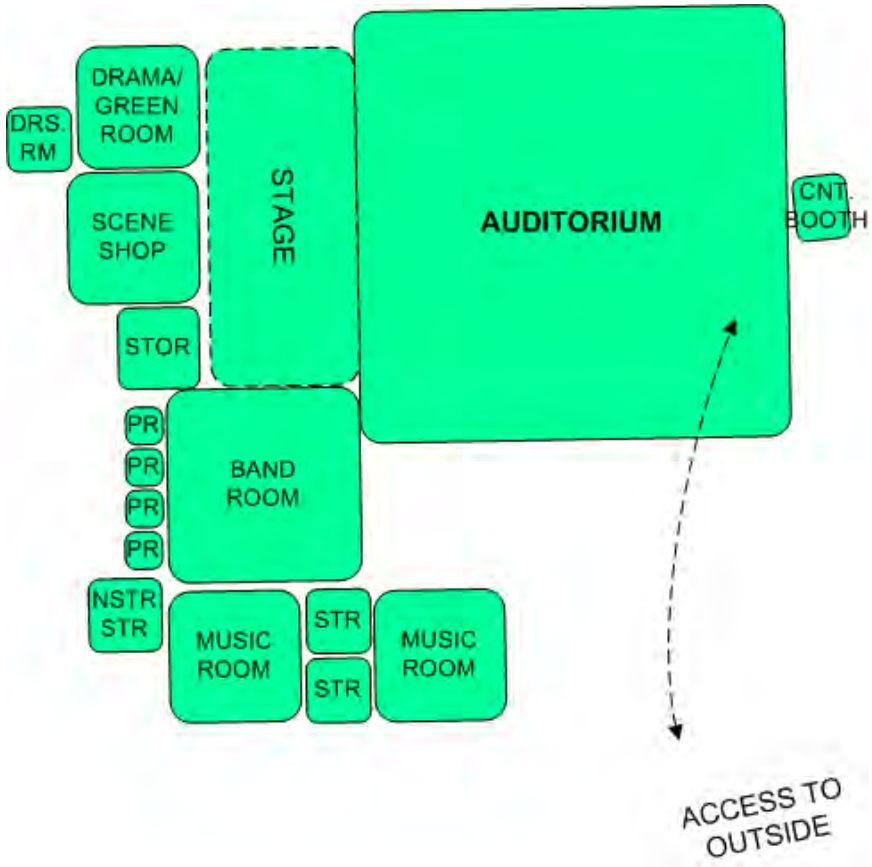
Music/Performing Arts	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Music Room	2	2	1,200	2,400	3	3	1,500	4,500	3	3	1,500	4,500
Storage (Robes, Music)		2	200	400		2	200	400		2	200	400
Band Room	1	1	2,200	2,200	1	1	2,200	2,200	1	1	2,200	2,200
Band Storage (Instruments, Music)		1	400	400		1	400	400		1	400	400
Practice Rooms		4	50	200		4	50	200		6	50	300
Auditorium Seating		1	5,400	5,400		1	7,000	7,000		1	7,000	7,000
Control Booth		1	200	200		1	200	200		1	200	200
Auditorium Stage		1	3,000	3,000		1	3,500	3,500		1	3,500	3,500
Scene Shop		1	1,000	1,000		1	1,000	1,000		1	1,000	1,000
Make Up/Dressing (Shared)		1	300	300		1	300	300		1	300	300
Storage (Costumes, Props)		1	500	500		1	500	500		1	500	500
Drama Classroom/Green Room/Classroom	1	1	960	960	1	1	960	960	1	1	960	960
Music/ Performing Arts Sub-total	**4**			**16,960**	**5**			**21,160**	**5**			**21,260**

Type of Classroom	Number of Students					
	600	1,200	1,800	2,400	3,000	3,600
Music	X					
Choral		X	X	X	X	X
Band		X	X	X	X	X
Mini Lab				X	X	X
Orchestra					X	X

Spatial Relationships

Music/performing arts spaces will be shared by each school. Members of the community will also use the music/performing arts before, after, and possibly during school hours. For this reason, there should be access to the outside, a separate secured entry, and a location near the Welcome Center. In 600 to 1,200 student schools, there will be a stage in the student dining area, serving as a performance area. In 1,800-3,600 student schools, there will be a separate auditorium. The drawing at the right is for a 2,400 student school.





Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

STANDARDS FOR TYPICAL LEARNING LABS/CLASSROOMS, HIGH SCHOOL

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Student work tables, 2 students each	18
Student chairs	36
Countertop over base cabinets	4 LF
Overhead cabinets	4 LF
Marker board	16 LF
Bulletin board	24 LF
Shelving	24 LF
Locking storage cabinet	6 LF
AIO (All in One) Device	1
Mobile bookcases, 3' long	2
Pull down screen	1

MECHANICAL	QTY
No special requirements	

ELECTRICAL	QTY
Duplex outlet	1 per wall
Quad outlet @ ea. data port	1
Front row of light, dimmable	

PLUMBING	QTY
Hot & cold water for sink	1

TECHNOLOGY	QTY
Voice, data, video outlets at teacher desk	1
6 data drops with double, triple, or quad CNOs (Communications Network Outlets)	6
2 data drops at teacher desk area	2
Single data drop dedicated to wirless, high on wall	1

TECHNOLOGY	QTY
Analog telephone	1
Intercom	Yes
Smartboard w/ integral LCD projector	1
Audio Enhancement	1 system
Laptop computers with carts, shared	26

Music Room

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Combined use: Music, Choral, Orchestra, Mini Lab
- Rehearsals and Recitals
- Gathering performance area
- Recitals
- Meeting area for school and community
- Instruction

Persons

- Students
- Teachers
- Parents
- Volunteers
- Other staff
- Community

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Quiet HVAC system [noise from mechanical equipment should not be audible in classroom]

Plumbing

- Sink with hot and cold water

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Video port and monitor
- Telephone/intercom/voicemail port
- Data ports
- Data port for teacher
- Smartboard with integral LCD projector
- Quad outlet adjacent to each data port
- Sound system w/microphone, amplifier, mixer, turntable, speaker for recording and playing back student rehearsals, performances

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: double doors that lead onto stage
- Windows: operable, with blinds to allow for controlled natural lighting
- Secure doors

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Appropriate acoustical treatment
- Direct access to stage from music room
- Vinyl tile
- Sound proof practice rooms with windows
- Portable risers/carpeted

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Countertop with sink, base, and wall cabinets
  - 4 tall storage cabinets with shelving, drawers and lockable doors
  - Adjustable height bookshelves
  - Wardrobe cabinets
  - Music storage cabinets
- Musician ergonomic chairs and stands
- Conductor's chair, podium, and stand
- Mobile student desks
- Printer and printer table
- Desk and chair
- Portable risers and guard rails
- Electronic keyboard
- CD/DVD player/burner, tape player, and video camera
- Networked computers
- Magnetic marker board with music staff on one section
- Tack boards and strips
- Overhead projector with screen
- Keyboard lab, 26 stations, with flat tables and computer teacher station

Storage

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storage of textbooks, instruments, equipment and supplies

Persons

- Teacher

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Sound system w/microphone, amplifier, mixer, turntable, speaker for recording and playing back student rehearsals, performances

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Secure door: view panel
- Windows: no special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Heavy duty, adjustable shelving on 2 walls
  - File cabinets
- Music folio cabinet
- Instrument storage shelving, specific to each size instrument

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- No special requirements

Band Room

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Rehearsals
- Gathering performance area
- Recitals
- Meeting area for school and community
- Instruction

Persons

- Students
- Teachers
- Parents
- Volunteers
- Other staff
- Community

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Quiet HVAC system [noise from mechanical equipment should not be audible in classroom]

Plumbing

- Sink with hot and cold water

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Video port and monitor
- Telephone/intercom/voicemail port
- Data ports
- Data port for teacher
- Quad outlet adjacent to each data port
- Smartboard with integral LCD projector
- Sound system w/microphone, amplifier, mixer, turntable, speaker for recording and playing back student rehearsals, performances

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Secure door: double doors that lead onto stage
- Windows: operable, with blinds to allow controlled natural lighting

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Appropriate acoustical treatment
- Direct access to stage from music room
- Vinyl composition tile
- Security system
- Portable carpeted risers

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Countertop with sink, base, and wall cabinets
  - 4 tall storage cabinets with shelving, drawers and lockable doors
  - Adjustable height bookshelves
  - Wardrobe cabinets
  - Music storage cabinets
- Musician ergonomic chairs and stands
- Conductor's chair, podium, and stand
- Mobile student desks
- Printer and printer table
- Desk and chair
- Portable risers and guard rails
- Electronic keyboard
- CD/DVD player/burner, tape player, and video camera
- Networked computers
- Magnetic marker board with music staff on one section
- Tack boards and strips

Band Storage

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storage of textbooks, instruments, equipment and supplies

Persons

- Teacher

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Sound system w/microphone, amplifier, mixer, turntable, speaker for recording and playing back student rehearsals, performances

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Secure door: view panel
- Windows: no special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Heavy duty, adjustable shelving on 2 walls
  - File cabinets
- Music folio cabinet
- Instrument storage shelving
- Instrument storage shelving, specific to each size instrument
- Percussion storage 20' x 20 '

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Lockers made for size of instrument

Music Practice Rooms

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Provides an exclusive area for student musical practice and one-on-one instruction

Persons

- Students
- Teachers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- Drinking fountain near vocal practice rooms

Electrical & Lighting

- Duplex electrical outlet
- Quad outlet adjacent to each data port

Technology

- Video port
- Phone

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Secure, sound proof doors and windows
- Doors with view panel

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Chairs
- Music Stands
- Mirror
- Acoustic tiling

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Sound proof walls
- Adjacent to music room and instrument storage
- Visibility from music room/band room
- Carpeting

Auditorium

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Student performances
- School and community program, meetings, and activities.
- Faculty meetings

Persons

- Staff members
- Community – primarily after school hours
- Students

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall
- Banked switching to allow for adjustable lighting levels
- Theater lighting

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port
- Audio enhancement system
- Sound system with portable or wireless microphones

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: double doors with access to outside courtyard/dining area
- Windows: None

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- CD/DVD player
- Equipment rack in control closet
- LCD projector and mounted screen
- Sound racks

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Good sight lines to all areas of the room for supervision
- Acoustic sound panels
- Control closet with light and sound control box
- Sloped floor
- Fixed seats
- First several rows of seats removable to create orchestra space

sample photo: may not represent LBUSD facilities

Control Booth

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Control of audio and lighting systems of Auditorium

Persons

- Students
- Teachers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- No special requirements

Electrical & Lighting

- Dimmable overhead lighting
- Multiple duplex outlets above work counter

Technology

- Intercom
- Wireless headset communication to Stage
- Plug ins for lighting and sound boards

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Sliding glass window to Auditorium
- Secure door with small view panel

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Built on work counter
- Adjustable height swivel stools

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Acoustical ceiling
- Dark colored walls

Stage

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Provides multi-function place for student and community performances
- Musical and dramatic performances and rehearsals
- Student assemblies
- Awards programs
- Presentations
- Guest speakers
- Community meetings
- Large group instruction

Persons

- Students
- Teachers
- Staff
- Parents
- Community members

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets
- Stage lighting
- Quad outlets adjacent to each data port
- Audio ports

Technology

- Voice port / phone
- Data ports and access to wireless network

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- No special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Upright piano
- Microphones
- Curtain
- Side curtains
- Pit cover
- Acoustic music shell and portable risers [instrumental and choral]
- Back drop screen

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Adjacent to auditorium and along edge that allow for the best sight lines of spectators to platforms
- Wood flooring, also conducive for dance programs
- Adjacent to or in close proximity to music room and art room and drama room
- Pulleys for backdrop scenery

sample photo: may not represent LBUSD facilities

Scene Shop

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Preparation of props and scenery for use on Stage

Persons

- Students
- Teachers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- Sink with hot and cold water

Electrical & Lighting

- Duplex outlets at 5' OC
- Uniform fluorescent lighting

Technology

- Intercom
- Voice, video, data ports

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Secure double doors

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- 2' deep storage racks for tools and props
- Flammable materials storage cabinets
- Work benches
- Adjustable height stools
- Racks for storing backdrops

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Ventilation
- Sealed concrete floor
- Paint rack area at one wall
- Adjacent to Stage

Makeup / Dressing Room

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Preparation of makeup and costumes for performances

Persons

- Students
- Teachers
- Community members
- Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- Sink with hot and cold water

Electrical & Lighting

- Makeup lighting at mirrors

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- View panels

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Make up counter with adjustable height chairs
- Mirrors with lighting above and adjacent

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- No special requirements

Storage for Costumes and Props

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storage for equipment, materials, props and costumes

Persons

- Students
- Teachers
- Staff
- Parents
- Community members
- Parents

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlet
- Quad outlet adjacent to each data port

Technology

- Video port
- Phone
- Data ports or access to wireless network

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Double doors to stage

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- No special requirements

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Adjacent to stage
- Large door opening

Drama Classroom / Green Room

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Preparation area for drama and music performance

Persons

- Students
- Parents
- Community members
- Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Overhead lighting
- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Data ports
- Data port for teacher

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Doors: View panel
- Windows: operable, with blinds to allow for controlled natural lighting

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Chairs and tables

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Access to stage and storage

sample photo: may not represent LBUSD facilities

Gym / Physical Education

Introduction

A variety of indoor and outdoor areas will be required to meet the physical education/health, athletic, and recreation needs of the students and the residents of the school district that will use these facilities.

Overview

Physical Education Goals: The goal of the physical education curricula is to ensure that all students will:

- Learn about the health issues that affect their lives
- Become more physically fit
- Have a greater understanding of the need for physical fitness and health
- Gain the skills to become more productive individuals through physical activity and training
- Learn team activities and sportsmanship
- Have a healthy lifestyle

The pages that follow contain a list of spaces and drawings illustrating the relationship between various program areas, and the individual spaces within the program area. Additionally, a description of the activities, persons to accommodate, and items to be considered is included.

Space Requirements

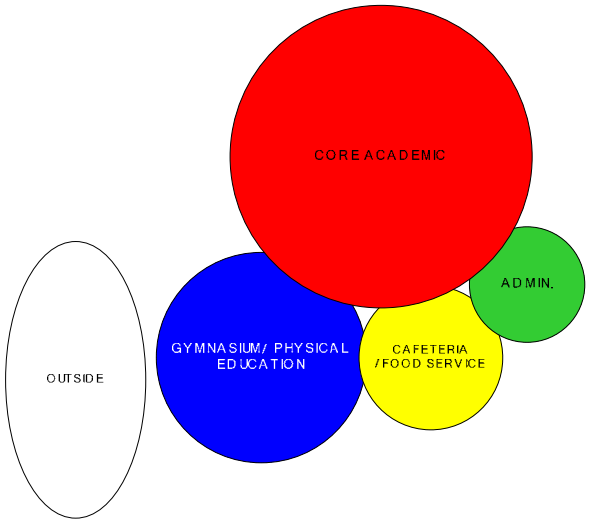
Physical Education	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Gym	1	1	8,500	8,500	2	1	10,000	10,000	2	1	12,000	12,000
Seating included in above		400				1,000				1,500		
Storage		1	300	300		1	600	600		2	450	900
Shower/Locker Room		2	800	1,600		2	1,200	2,400		2	1,200	2,400
Fitness Area						1	1,000	1,000	1	1	1,500	1,500
Weight Room						1	1,000	1,000	1	1	1,500	1,500
Dance Room						1	1,000	1,000	1	1	1,500	1,500
Wrestling Room						1	1,000	1,000	1	1	1,000	1,000
Auxilary Gym												
Athletics Shower/Locker Room										2	800	1,600
Trainer Room						1	450	450		1	700	700
Adaptive PE		1	400	400		1	800	800		1	800	800
PE Office Area						1	500	500		1	500	500
Coaches Office Area						1	500	500		1	500	500
Coaches Toilets/Showers						2	150	300		2	150	300
PE Classroom	1	1	1,500	1,500	1	1	1,500	1,500	1	1	1,500	1,500
Health Classroom [divider walls betw clrms]	1	1	960	960	1	1	960	960	1	1	960	960
JROTC Classroom	1	1	960	960	1	1	960	960	1	1	960	960
JROTC Storage		1	500	500		1	500	500		1	500	500
Community Storage		1	200	200		1	200	200		1	200	200
Concessions						1	400	400		1	400	400
Swimming Pool & Storage												
Athletic Director										1	200	200
Teacher Planning Center						1	500	500		1	500	500
Outdoor Athletic Equipment Storage		1	1,000	1,000		1	1,500	1,500		1	2,000	2,000
Physical Education Sub-Total	**4**			**15,920**	**5**			**26,070**	**9**			**32,420**

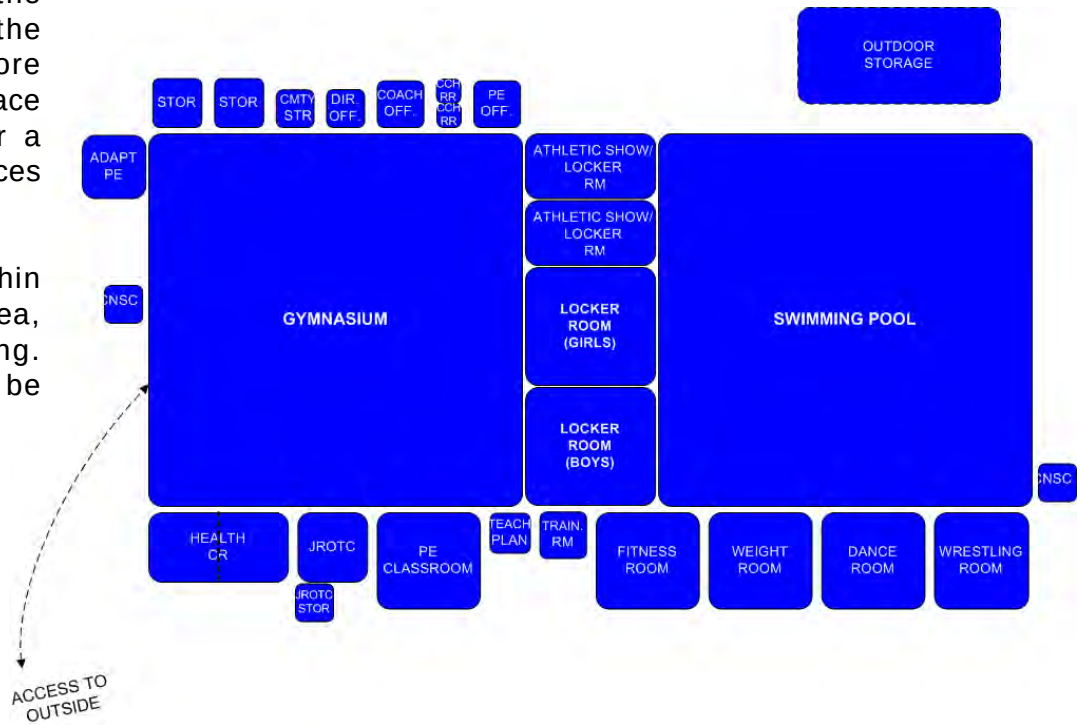
Physical Education	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Gym	2	1	12,000	12,000	3	1	14,000	14,000	3	1	14,000	14,000
Seating included in above		1,500				2,000				2,000		
Storage		2	500	1,000		2	500	1,000		2	500	1,000
Shower/Locker Room		2	1,200	2,400		2	1,200	2,400		2	1,200	2,400
Fitness Area	1	1	1,500	1,500	1	1	2,500	2,500	1	1	2,500	2,500
Weight Room	1	1	1,500	1,500	1	1	2,500	2,500	1	1	2,500	2,500
Dance Room	1	1	1,500	1,500	1	1	2,500	2,500	1	1	2,500	2,500
Wrestling Room	1	1	1,000	1,000	1	1	1,000	1,000	1	1	1,000	1,000
Auxilary Gym					1	1	7,000	7,000	1	1	7,000	7,000
Athletics Shower/Locker Room		2	800	1,600		2	1,000	2,000		2	1,000	2,000
Trainer Room		1	700	700		1	700	700		1	700	700
Adaptive PE		1	800	800		1	800	800		1	800	800
PE Office Area		1	700	700		1	700	700		1	700	700
Coaches Office Area		1	700	700		1	700	700		1	700	700
Coaches Toilets/Showers		2	150	300		2	150	300		2	150	300
PE Classroom	1	1	1,500	1,500	1	1	1,500	1,500	1	1	1,500	1,500
Health Classroom [divider walls betw clrms]	2	2	960	1,920	2	2	960	1,920	2	2	960	1,920
JROTC Classroom	1	1	960	960	1	1	960	960	1	1	960	960
JROTC Storage		1	500	500		1	500	500		1	500	500
Community Storage		1	200	200		1	200	200		1	200	200
Concessions		2	300	600		2	300	600		2	300	600
Swimming Pool & Storage	1	1	12,000	12,000	1	1	12,000	12,000	1	1	12,000	12,000
Director		1	200	200		2	200	400		2	200	400
Teacher Planning Centers		1	600	600		1	700	700		1	800	800
Outdoor Athletic Equipment Storage		1	2,000	2,000		1	2,000	2,000		1	2,000	2,000
Physical Education Sub-Total	**11**			**46,180**	**13**			**58,880**	**13**			**58,980**

Spatial Relationships

Physical education spaces will be shared by each school. Members of the community will also use some of the physical education spaces before, after, and possibly during school hours. For this reason, there should be access to the outside, a separate secured entry, and a location near the Welcome Center. The pages that follow describe in more detail each program area space listed in the space requirements table below. The drawing at the right, for a 2,400 student school, gives an idea of where these spaces might be located.

Physical education spaces should be centrally located within the facility and in close proximity to the administration area, outdoor play areas, student dining, and spectator parking. In addition, the physical education spaces should be accessible by the community.





Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

STANDARDS FOR TYPICAL OFFICES

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Desk with return	1
Desk chair	1
Credenza in rooms > 200SF	1
Guest chairs, rooms < 150SF	2
Guest chairs, rooms 155-200SF	4
Conf chairs, rooms over 200SF	4
Conf table, rooms over 200SF	1
Bookshelves	18 LF
Marker board	4 LF
Laptop computer	1
Printer	1
File cabinet, 4 drawer	1 to 2
Bulletin board	4 LF
Clock	1

MECHANICAL	QTY
Air Conditioning	Yes

ELECTRICAL	QTY
Duplex outlet	each wall
Quad outlet @ ea. data port	1

PLUMBING	QTY
No special requirements	

TECHNOLOGY	QTY
Data port and/or access to wireless	1
Telephone	1
Video port	1
Intercom through phone handset	Yes

sample photo: may not represent LBUSD facilities

Gymnasium

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Physical education
- Sports – Basketball, Volleyball, Baseball, Badminton, Hockey
- Fitness/Health presentations, workouts
- Fitness testing – PACER markings [20-meter distance marked]

Persons

- Students
- Faculty and staff
- After school community use
- Official league play and contests personnel

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Additional ventilation
- Air Conditioning

Plumbing

- Recessed drinking fountains located in corridor directly outside the gym
- Outside hose bibb

Electrical & Lighting

- Wiring for power scoreboards, bleachers, sound system, lighting, walls, curtains, and outlets on perimeter walls
- Lighting which does not add heat to gym
- Cage over lighting to avoid breakage
- Electronic system to raise/lower baskets

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port
- Audio enhancement system
- Sound system

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: large door to outside for equipment
- Windows: located high up on walls

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Adjustable baskets from ceiling: equipped with electrical winches
- Tack boards
- Scoreboard /message board
- Two portable magnetic marker boards
- Safety wall mats

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Must be able to isolate gym from the rest of the school for activities after hours
- Acoustics for activities other than basketball for community use, guest speaker, district in-service
- Glass basketball backboards
- Up to 1000 seat bleachers
- Multi-purpose flooring
- Vending machines
- Trophy Display Cases

P.E. Storage

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storing sound system and other equipment used in the physical education/athletic areas [soccer goals, high jump, etc.]

Persons

- Teachers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Floor drain

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Doors: Oversized that opens into gymnasium
- Windows: none

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Heavy duty adjustable shelving
- Equipment storage
- Mat storage

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- No special requirements

sample photo: may not represent LBUSD facilities

Shower/Locker Rooms

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storage of personal items while using gym or fitness area
- Personal hygiene

Persons

- Students
- After school community use

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Additional ventilation

Plumbing

- Drinking fountains
- Sinks
- Showers
- Restrooms

Electrical & Lighting

- Overhead lighting

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- No windows
- Solid door with no window

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Benches
- Lockers
- Informational boards
- Storage cabinets

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Handicap accessible
- Porcelain or ceramic tile flooring
- Hair dryers
- Vending machines

Fitness Area

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Physical fitness
- Aerobics
- Cardiovascular Training
- Physical Education
- Team Training
- Rehabilitation
- Plyometrics

Persons

- Students
- Faculty and staff
- After school community use

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Additional ventilation

Plumbing

- Recessed drinking fountains

Electrical & Lighting

- Lighting which does not add heat
- Uniform lighting

Technology

- Telephone/intercom/voicemail port
- Video port and monitor/flatscreen
- Data ports
- Quad outlet adjacent to each data port
- DVD player
- Audio enhancement system
- Sound system

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: windows to corridor
- Windows: no special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Tack boards
- Portable magnetic marker boards
- Safety wall mats
- Dumbell racks
- Physio balls
- Aerobic steps
- Stationary bikes

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Must be able to isolate fitness area from the rest of the school for activities after hours
- Resilient rubber flooring
- Adjacent to the Gymnasium and Locker Rooms
- Acoustical sound treatment

Weight Room

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Weight training
- Cardiovascular Training
- Physical Education
- Team Training
- Rehabilitation

Persons

- Students
- Faculty and staff
- After school community use

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Additional ventilation

Plumbing

- Recessed drinking fountains

Electrical & Lighting

- Lighting which does not add heat
- Uniform lighting

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port
- Audio enhancement system
- Sound system

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: windows to corridor
- Windows: no special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Tack boards
- Portable magnetic marker boards
- Safety wall mats
- Weights and stationary equipment

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Must be able to isolate fitness area from the rest of the school for activities after hours
- Resilient rubber flooring
- Adjacent to the Gymnasium and Locker Rooms
- Acoustical sound treatment

Dance Room

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Dance Class
- Musical Rehearsals
- Evening Community Dance Classes

Persons

- Instructor
- Students
- Community

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Additional ventilation

Plumbing

- Recessed drinking fountains

Electrical & Lighting

- Lighting which does not add heat
- Uniform lighting

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port
- Audio enhancement system
- Sound system

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Windows to corridor

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Sound System
- Floor to Ceiling mirrors on one long wall

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Sprung floor

Wrestling Room

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Wrestling
- Intramurals

Persons

- Students
- Community

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Heating and Cooling

Plumbing

- Water fountain

Electrical & Lighting

- Duplex electrical outlets on each wall
- Outlets for stationary bikes

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port
- Audio enhancement system

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- No special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Padded walls
- Padded floors

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Space for stationary bikes and jumping rope at one end

Auxiliary Gymnasium

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Physical education
- Sports – Basketball, Volleyball, Baseball, Badminton, Hockey
- Fitness/Health presentations, workouts
- Fitness testing – PACER markings [20-meter distance marked]

Persons

- Students
- Faculty and staff
- After school community use

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Additional ventilation

Plumbing

- Recessed drinking fountains

Electrical & Lighting

- Lighting which does not add heat
- Uniform lighting

Technology

- Telephone/intercom/voicemail port
- Wall mount TV
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port
- Audio enhancement system
- Sound system

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: windows to corridor
- Windows: no special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Tack boards
- Portable magnetic marker boards
- Safety wall mats
- Moveable benches with storage capability

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Must be able to isolate from the rest of the school for activities after hours
- Wooden flooring
- Adjacent to the Gymnasium and Locker Rooms
- Acoustical sound treatment
- Balance Bar
- Mirrors with Protective Covers (like wrestling mats) or a Sliding Panels System
- Storage space for wrestling mats

Trainer Room

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Athletic trainer conducts daily business
- Injury rehabilitation
- Injury prevention
- Injury management
- Treatments such as hydrotherapy, stretching and taping

Persons

- Athletic Trainer
- Physical Education Teachers
- Students
- Coaches

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- Sink
- Floor drain
- Portable whirlpool tubs

Electrical & Lighting

- No special requirements

Technology

- Voice, video, data ports
- Intercom

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- View panel

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Trainer workstation
- Trainer tables
- Lockable medicine cabinets
- Portable modesty screens/ceiling divider curtains
- Portable chairs

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Vinyl tile or ceramic tile floor

Adaptive PE

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Individual, small, and large group activities
- Storage of materials
- Physical therapy
- Occupational therapy
- Storage

Persons

- Occupational Therapist
- Physical Therapist
- Aides
- Staff
- Volunteers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Sink

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting
- Controlled day lighting

Technology

- Access to voice, video, data ports, and electrical outlets

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- One-way glass for observation

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Lockable storage cabinets
- Flexible surfaces
- Abundant shelving
- Flexible or multiple display surfaces

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Room for different OT/PT activities such as motor skill development
- Movable partition to divide room
- Handicapped accessible and accessible to large wheelchairs
- Accessible to teachers' center

PE Teachers/Coaches Office

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Central place for coach and teacher administrative duties
- Storage of PE student portfolios
- Secure storage for video cameras, heart rate monitors, DVDs, music, other equipment

Persons

- Coaches
- Athletic Trainer
- Physical Education Teacher
- Students

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- No special requirements

Electrical & Lighting

- Duplex outlets at each workstations

Technology

- Intercom
- Voice, data ports
- Overhead LCD projector
- Outlets for charging batteries of portable sound systems & for ball pumps

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- 1/2 windows to adjacent corridors

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Perimeter counter, built-in or systems workstations, for each coach, with built-in files and drawers

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- No special requirements

Coaches Toilet / Shower

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Changing clothes, showering and personal hygiene

Persons

- Coaches
- Athletic Trainer
- Physical Education Teacher
- Game Officials

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- Hot and cold water for sink
- Hot and cold water for shower

Electrical & Lighting

- No special requirements

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door to Modular Coach's Office

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Shower with adjacent private changing wall
- Floor drain
- Lockers
- Mirror above counter
- Paper towel holder
- Soap dispenser
- Hand dryer

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Adjacent to team locker rooms
- Adjacent to gymnasium
- Connected to coach's office

Health / PE Classroom

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Individual, small, and large group activities
- Storage of materials and books
- Project-based learning
- Demonstrations
- Computer-based instruction

Persons

- Physical Education / Health Teacher
- Students

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- Sink with hot and cold water

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting
- Room darkening capability
- Abundant day lighting

Technology

- Access to voice, video, data ports, and electrical outlets
- Teacher data port separate from student data ports
- Smartboard with integral LCD Projector

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door with view panel
- Windows with blinds

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Furniture for 54 students

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- No special requirements

JROTC Classroom

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Individual, small, and large group activities
- Storage of materials and books
- Demonstrations
- Computer-based instruction

Persons

- JROTC Teacher
- Students

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- Sink with hot and cold water

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting
- Room darkening capability
- Abundant day lighting

Technology

- Access to voice, video, data ports, and electrical outlets
- Teacher data port separate from student data ports
- Smartboard with integral LCD Projector

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door with view panel
- Windows with blinds

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Student desks and chairs

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- No special requirements

JROTC Storage

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storing materials and equipment used in the JROTC program

Persons

- Teachers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- None

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- No special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Heavy duty adjustable shelving
- Equipment storage
- Uniform racks

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- No special requirements

Community / Outside Agency Storage / Concessions

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storing equipment used by outside agencies

Persons

- Community members

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Floor drain
- Sinks
- Refrigerator/Freezer
- Stove

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Doors: Oversized that opens into gymnasium
- Windows: none

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Heavy duty adjustable shelving
- Equipment storage
- Mat storage

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- 6' counter with cabinets below

Swimming Pool

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Instruction
- Swimming
- Practice
- Competition

Persons

- Instructor
- Students
- Community

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Pool system

Electrical & Lighting

- Overhead lighting

Technology

- PA System
- Scoreboard

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Windows to exterior

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Pool equipment

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- None

Pool Storage

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storage of pool supplies/equipment

Persons

- Instructor
- Staff
- Students

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Overhead lighting

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- No special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Shelving
- Cabinets
- Storage

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- None

Athletic Director's Office

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Administration of athletics

Persons

- Athletic Director
- Athletic Trainer
- Physical Education / Health Teacher
- Coaches
- Students

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting

Technology

- Access to voice, video, data ports, and electrical outlets

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door with windows

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- No special requirements

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- No special requirements

Teacher Planning Center

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Central place for coach and teacher administrative duties
- Storage of PE student portfolios
- Planning curriculum

Persons

- Coaches
- Athletic Trainer
- Physical Education Teacher

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Plumbing

- No special requirements

Electrical & Lighting

- Duplex outlets at each workstations

Technology

- Intercom
- Voice, data ports
- Overhead LCD projector
- Outlets for charging batteries of portable sound systems & for ball pumps

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- 1/2 windows to adjacent corridors

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Tables, desks, and chairs

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- No special requirements

Outdoor Athletic Equipment Storage

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storing equipment used in the physical education/athletic areas [soccer goals, high jump, etc.]

Persons

- Teachers
- Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Floor drain

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Doors: Oversized, double
- Windows: none

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Heavy duty adjustable shelving
- Equipment storage
- Mat storage

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Secure, lockable

sample photo: may not represent LBUSD facilities

The pages that follow contain a list of spaces and drawings illustrating the relationship between various program areas and the individual spaces within the program area. Additionally, a description of the activities, persons to accommodate, and items to be considered is included.

Welcome Center / Administration

Introduction

Administration will provide the organizational and instructional leadership needed to create an atmosphere that is conducive for teaching and learning. This area includes the administrative functions of the school and student support services (counselors, health, support staff, etc.).

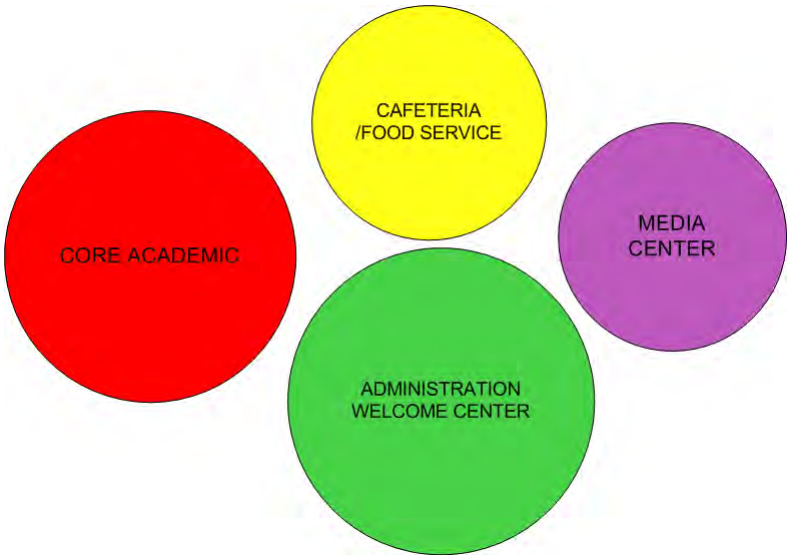
Space Requirements

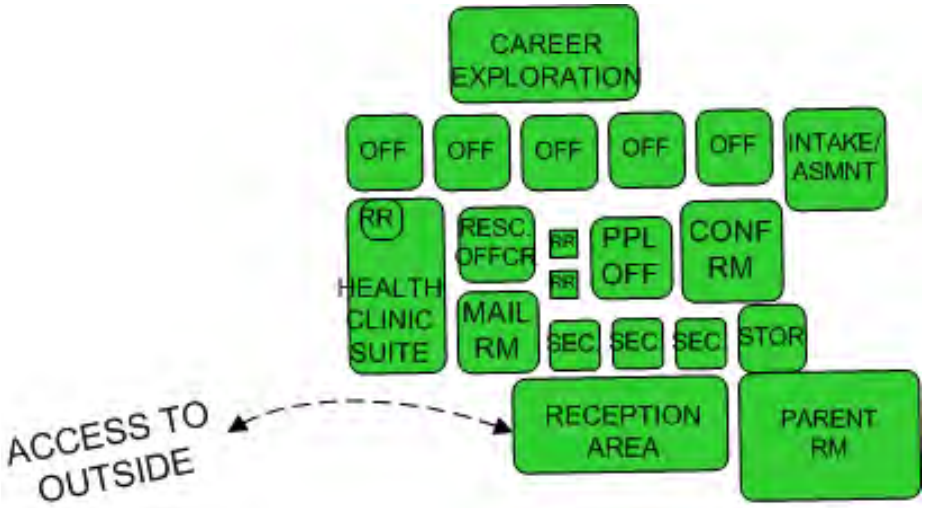
Welcome Center / Administration	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Welcome Center / Admin												
Reception Area		1	400	400		1	600	600		1	800	800
Secretarial Area		2	80	160		3	80	240		3	80	240
Principal's Office/Conference		1	200	200		1	200	200		1	200	200
Assistant Principal's Office	See SWS Sm Learning Communities				See SWS Sm Learning Communities				See SWS Sm Learning Communities			
Head Counselor		1	150	150		1	150	150		1	150	150
Conference Room		1	250	250		1	250	250		1	250	250
Career Exploration/Computer Area		1	500	500		1	750	750		1	750	750
Mail/Work/Copy Room		1	250	250		1	250	250		1	250	250
Administrative Storage		1	150	150		1	150	150		1	150	150
Textbook Storage	See Media Center				See Media Center				See Media Center			
Restrooms		2	50	100		2	50	100		2	50	100
Resource Officer						1	150	150		1	150	150
Intake/Pre-Assessment Room		1	250	250		1	250	250		1	250	250
Additional Offices		2	120	240		3	120	360		4	120	480
Health Clinic/Suite (including restroom)		1	400	400		1	500	500		1	600	600
Parent/Community Office		1	400	400		1	800	800		1	800	800
Guidance / Student Services	See SWS Sm Learning Communities				See SWS Sm Learning Communities				See SWS Sm Learning Communities			
Administration Sub-Total	**0**			**3,450**	**0**			**4,750**	**0**			**5,170**

Welcome Center / Administration	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Welcome Center / Admin												
Reception Area		1	800	800		1	800	800		1	800	800
Secretarial Area		3	80	240		4	80	320		4	80	320
Principal's Office/Conference		1	200	200		2	200	400		2	200	400
Assistant Principal's Office	See SWS Sm Learning Communities				See SWS Sm Learning Communities				See SWS Sm Learning Communities			
Head Counselor		1	150	150		1	150	150		1	150	150
Conference Room		1	250	250		2	250	500		2	250	500
Career Exploration/Computer Area		1	750	750		1	750	750		1	750	750
Mail/Work/Copy Room		1	250	250		1	250	250		1	250	250
Administrative Storage		1	150	150		1	150	150		1	150	150
Textbook Storage	See Media Center				See Media Center				See Media Center			
Restrooms		2	50	100		4	50	200		4	50	200
Resource Officer		1	150	150		1	150	150		1	150	150
Intake/Pre-Assessment Room		1	250	250		1	250	250		1	250	250
Additional Offices		5	120	600		6	120	720		7	120	840
Health Clinic/Suite (including restroom)		1	600	600		1	600	600		1	600	600
Parent/Community Office		1	800	800		1	800	800		1	800	800
Guidance / Student Services	See SWS Sm Learning Communities				See SWS Sm Learning Communities				See SWS Sm Learning Communities			
Administration Sub-Total	**0**			**5,290**	**0**			**6,040**	**0**			**6,160**

Spatial Relationships

Welcome Center/Administration spaces will be shared by each school. Members of the community will also use some of these spaces before, after, and possibly during school hours. For this reason, there should be access to the outside, a separate secured entry, and a location that is clearly marked and easy for visitors to find. The pages that follow describe in more detail each program area space listed in the space requirements table below.





Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

Reception Area

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Greeting people and directing them to the proper location or person
- Waiting area for students, visitors and staff members

Persons

- School staff
- Student population
- Parents
- Community members

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Chimes to indicate entrance into building

Plumbing

- No special requirements

Electrical & Lighting

- Multiple duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port at each workstation
- Video port and monitor
- Data ports for each workstation
- Quad outlet for each data port
- Wireless internet

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: all glass
- Windows: operable, with blinds to allow controlled natural lighting

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Desk/computer workstation
- Student and visitor seating
- Locking file cabinets
- Ergonomic task chairs
- Networked computers
- Information board
- Message board
- Bulletin board
- Magnetic marker board
- Clock
- Information kiosk
- Display cases
- Comfortable seating

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Bright, yet soft lighting
- Inviting to visitors
- Colorful
- Secure entry for visitors
- Carpeting
- Security/surveillance system
- Water cooler
- Plants and greenery

Secretarial Area

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Greeting people and directing them to the proper location or person
- Assisting in administrative duties

Persons

- School staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port at each workstation
- Video port and monitor
- Data ports for each workstation
- Quad outlet for each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel
- Windows: operable, with blinds to allow controlled natural lighting

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Desk/computer workstation
- Locking file cabinets
- Ergonomic task chairs
- Bulletin board
- Magnetic marker board
- Message board
- Networked computers
- Printer, copier
- Paper shredder
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Bright, yet soft lighting
- Inviting to visitors
- Colorful
- Secure entry for visitors
- Carpeting

Principal's Office / Conference

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Conferences with staff and other visitors
- Telephone calls
- Administrative activities
- Planning
- Computer input

Persons

- Principal
- Small group meetings [6-8 people]

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Multiple duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports [walls & floors]
- Quad outlet adjacent to each data port
- Security monitor
- Video conference unit
- Smart board

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: narrow view panel [two entrances]
- Windows: with blinds to control natural lighting
- Interior window with blinds

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Storage cabinets
  - Bookshelves
  - File cabinets
  - Wardrobe closet
- Desk and chair
- Conference table
- Side chairs
- Lamps
- Networked computer
- Small refrigerator/ microwave
- Magnetic marker board
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Second exit for security
- Carpeting

Conference Room

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Small group meetings/conferences

Persons

- Administrators/Counselors/Staff
- Parents
- Students
- Visitors

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Multiple duplex electrical outlets on each wall
- Overhead lighting

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port
- Video conference unit
- White board/screen
- LCD projector and computer

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: large view panel with optional sidelight

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Counter top with sink, base and wall cabinets
- Conference tables and chairs
- Side chairs
- Magnetic marker board
- Tack board
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Consideration for sound transfer
- Carpeting

Career Exploration/Computer Area

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Research colleges and careers

Persons

- Media Specialist
- Media Assistant
- Students

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom port
- Electrical outlets
- Video ports and monitor
- Data ports

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: Solid
- Windows: large view panel

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Conference table with chairs
- Side chairs
- Magnetic marker board
- Tack board
- Clock
- Lockable cabinets
- Pamphlet rack

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Carpeting

Mail / Work / Copy Room

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Copying
- Collating
- Preparing communications for mailing
- Laminating, book making
- General office work
- Delivery of general office mail
- Storage

Persons

- Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Sink with hot and cold water

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: large view panel with optional sidelight
- Windows: no special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Countertop with sink, base and wall cabinets
  - Lockable storage cabinets
  - Wall shelving
- Work tables and chairs
- Staff mailboxes [with hallway access]
- Networked computer
- Copier
- Binding equipment
- Fax machine and printers
- Laminating machine
- Paper storage, shredder, and cutter
- Tack board/marker board
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Consideration for sound transfer
- Vinyl tile
- Restrict student access

Administrative Storage

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storage

Persons

- Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: solid

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Countertop with base and wall cabinets
  - Lockable storage cabinets
  - Wall shelving
- Fireproof storage cabinets
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Vinyl tile
- Storage and electrical supply for principal's emergency communication equipment

Restrooms

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Personal Hygiene

Persons

- Teachers
- Administration
- Community members

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Exhaust fan

Plumbing

- Sink with hot and cold water
- Toilet

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: no view panel
- Windows: none

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Cabinet with mirror

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- No special requirements

Resource Officer Office

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Office space for resource officer

Persons

- Resource officer

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Sink with hot and cold water

Electrical & Lighting

- Multiple duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Data ports
- Quad outlet adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: large view panel with optional sidelight
- Windows: no special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Desk
- Additional seating

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Location near security staff offices
- Private outside campus exit door for exit of students in handcuffs
- Secure storage of confiscated materials

Intake/Pre-Assessment Room

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Testing

Persons

- Administrators/Counselors/Staff
- Parents
- Students

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Multiple duplex electrical outlets on each wall
- Overhead lighting

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port
- Video conference unit
- White board/screen
- LCD projector and computer

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: large view panel with optional sidelight

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Counter top with sink, base and wall cabinets
- Conference tables and chairs
- Side chairs
- Magnetic marker board
- Tack board
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Consideration for sound transfer
- Carpeting

Additional Office

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Office space for additional personnel

Persons

- Staff
- Volunteers
- Resource personnel

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlets adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Book case
  - Locking cabinets
  - Legal size lockable lateral file cabinet
- Desk and chair
- Side chair
- Networked computer
- Bulletin board
- Magnetic marker board
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Bright, yet soft lighting
- Inviting to visitors
- Carpeting

Health Clinic

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Treating students with illnesses
- Preventative health measures
- Small class instruction

Persons

- School nurse
- School staff
- Parents
- Students

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Exhaust fan

Plumbing

- Sink with hot and cold water
- Stacked washer and dryer
- Restroom with toilet and shower

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: narrow or view panel with blinds
- Windows: operable with blinds for privacy
- Window between office and clinic

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Countertop w/sink
  - Base and wall cabinets
  - Bookcases
  - Wardrobe cabinet
  - Locking file cabinets (min of 3)
  - Student clothing storage with drawers
  - Locking medicine cabinets
- Desk and chair
- Side chairs and table
- Cots, 3 minimum
- Rolling carts
- Lamps
- Refrigerator
- Networked computer
- Magnetic marker board
- Tack board
- Cubical curtains with track
- Clock
- Sharps waste disposal
- Information kiosk

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Auditory/visual privacy
- Health clinic to include restroom, nurse's office, exam room
- Tile flooring

Parent/Community Office

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Parent/community activities

Persons

- Parents
- Community members

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlets adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Book case
  - Locking cabinets
  - Legal size lockable lateral file cabinet
- Desk and chair
- Side chair
- Networked computer
- Bulletin board
- Magnetic marker board
- Clock

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Bright, yet soft lighting
- Inviting to visitors
- Carpeting
- Child play area enclosed with short wall

Cafeteria / Nutrition Services

Introduction

The Student Dining area will serve as a center where students, staff, and visitors can obtain a quick, desirable, economical snack or meal. The facility should be both comfortable and cheerful and can also serve as a banquet facility, meeting room, or hold other after school activities.

The Cafeteria/Nutrition Service area will consist of a large student eating area, kitchen where meals are prepared, storage areas, and an area for trucks delivering supplies for food service.

The physical layout should permit efficient movement and storage of tables and chairs so that the facility may be quickly converted from a dining area to large group meeting/instruction spaces and a large open area for dances and other reception activities.

As the main dining area will likely serve as a meeting area and location of social events after school hours, it should be near parking and have the ability to be closed off from areas of the school that may need to avoid unsupervised foot traffic during certain times.

Overview

The purpose of the Student Dining Area is to provide a pleasant atmosphere for students to eat meals and to provide a flexible meeting space for groups if needed.

The pages that follow contain a list of spaces and drawings illustrating the relationship between various program areas, and the individual spaces within the program area. Additionally, a description of the activities, persons to accommodate, and items to be considered is included.

All spaces should reference the California Uniform Retail Food Facility Law [CURFEL], excerpt from the California Health and Safety Code.

Space Requirements

Food Service	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Kitchen, warming/serving only												
Satellite Kitchen												
Serving Area												
Dry Food Storage												
Cooler/Freezer		1	2,000	2,000		1	2,250	2,250		1	2,500	2,500
Ware Washing												
Kitchen Mgr Office												
Restroom												
Lockers												
Multipurpose Room/Cafeteria/Commons		1	2,000	2,000		1	3,000	3,000		1	6,000	6,000
Dencentralized Serving Area												
Table & Chair Storage		1	200	200		1	300	300		1	400	400
Stage		1	600	600		1	800	800	*See Music Area*			
Auditorium Seating		1	2,000	2,000		1	3,000	3,000	*See Music Area*			
Oudoor Covered Eating Area(s)			3,000	Outdoors			4,000	Outdoors			4,000	Outdoors
School Store		1	300	300		1	800	800		1	800	800
Student Meeting Room*		1	300	300		1	600	600		1	800	800
Journalism/Yearbook		1	960	960		1	960	960		1	960	960
Staff Dining w/Vending		1	450	450		1	800	800		1	1,000	1,000
Teacher Lounge w/Kitchenette		1	300	300		1	300	300		1	300	300
Food Service Sub-Total	**0**			**9,110**	**0**			**12,810**	**0**			**12,760**

***Also see SWS/Small Learning Communities for additional Student spaces**

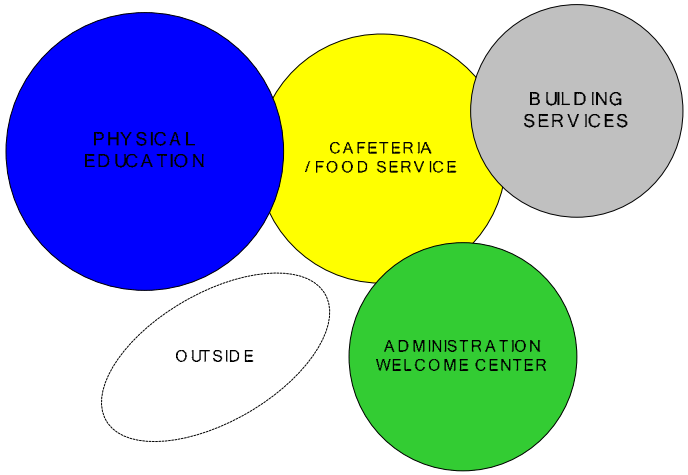
Food Service	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Kitchen												
Satellite Kitchen												
Serving Area												
Dry Food Storage												
Cooler/Freezer		1	2,750	2,750		1	3,000	3,000		1	3,250	3,250
Ware Washing												
Kitchen Mgr Office												
Restroom												
Lockers												
Multipurpose Room/Cafeteria/Commons		1	7,000	7,000		1	8,000	8,000		1	8,000	8,000
Dencentralized Serving Area		1	500	500		2	500	1,000		3	500	1,500
Table & Chair Storage		1	450	450		1	500	500		1	500	500
Stage	*See Music Area*				*See Music Area*				*See Music Area*			
Auditorium Seating	*See Music Area*				*See Music Area*				*See Music Area*			
Oudoor Covered Eating Area(s)			5,000	Outdoors			5,000	Outdoors			5,000	Outdoors
School Store		1	800	800		1	800	800		1	800	800
Student Meeting Room		1	800	800		1	800	800		1	800	800
Journalism/Yearbook		1	960	960		1	960	960		1	960	960
Staff Dining w/Vending		1	1,000	1,000		1	1,000	1,000		1	1,000	1,000
Teacher Lounge w/Kitchenette		1	300	300		1	300	300		1	300	300
Food Service Sub-Total	**0**			**14,560**	**0**			**16,360**	**0**			**17,110**

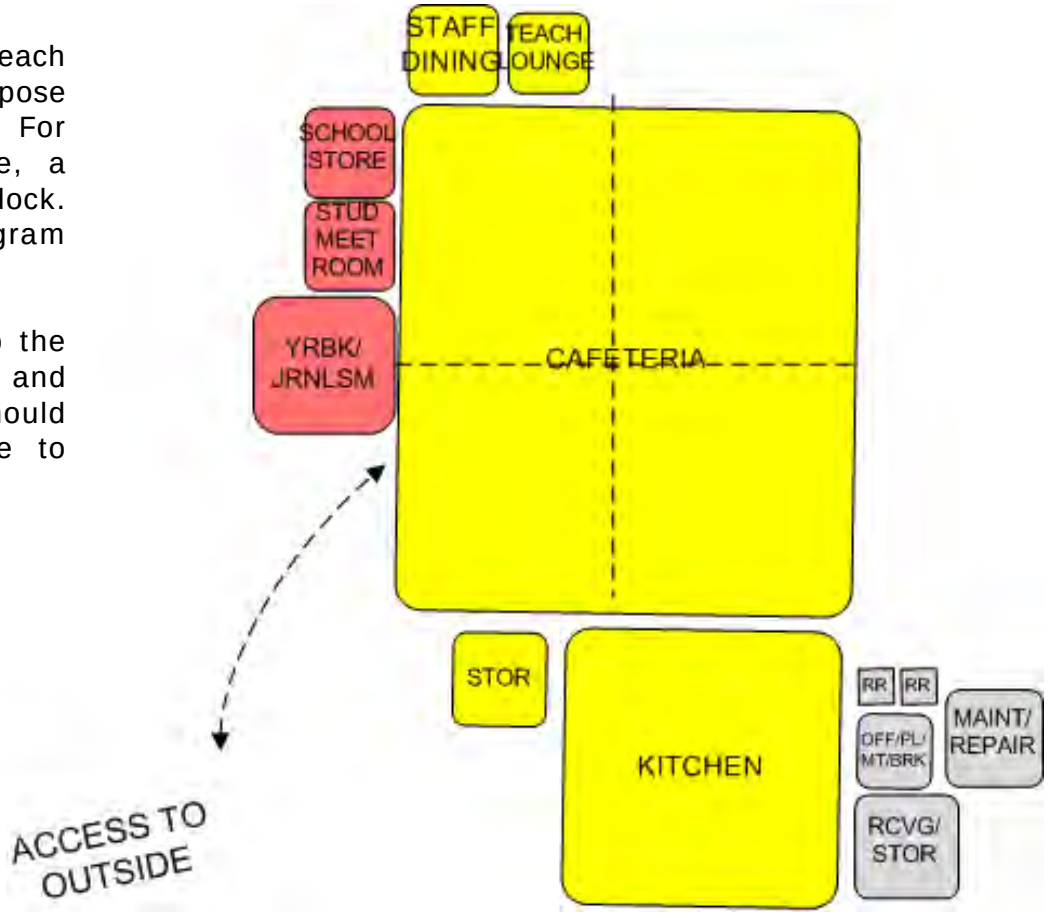
For Larger Schools, consideration should be given to multiple Cafeterias or Food venues

Spatial Relationships

Cafeteria/nutrition services spaces will be shared by each school. Members of the community will use the multipurpose room before, after, and possibly during school hours. For this reason, there should be access to the outside, a separate secured entry, and a location near the loading dock. The pages that follow describe in more detail each program area space listed in the space requirements table above.

The Student Dining Area should be located adjacent to the Food Service Area, the Custodial & Maintenance Area, and the Physical Education Area. The Student Dining Area should also be located in an area that is easily accessible to community members.





Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

STANDARDS FOR TYPICAL OFFICES

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Desk with return	1
Desk chair	1
Credenza in rooms > 200SF	1
Guest chairs, rooms < 150SF	2
Guest chairs, rooms 155-200SF	4
Conf chairs, rooms over 200SF	4
Conf table, rooms over 200SF	1
Bookshelves	18 LF
Marker board	4 LF
Laptop computer	1
Printer	1
File cabinet, 4 drawer	1 to 2
Bulletin board	4 LF
Clock	1

MECHANICAL	QTY
Air Conditioning	Yes

ELECTRICAL	QTY
Duplex outlet	each wall
Quad outlet @ ea. data port	1

PLUMBING	QTY
No special requirements	

TECHNOLOGY	QTY
Data port and/or access to wireless	1
Telephone	1
Video port	1
Intercom through phone handset	Yes

Satellite Kitchen / Food Preparation Area

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Warming food
- Cooking food

Persons

- Food service personnel
- Student workers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- 65 Degrees year round temperature
- MUA unit capable of heating and cooling [evap or A/C]
- Mechanical [cable operated]gas shut-off valve for hood fire suppression system
- Surface mounted gas manifold under hood for cooking equipment gas supply

Plumbing

- Trough drain at cook line
- Floor sinks and drains
- Garbage disposals & pre-rinse

Electrical & Lighting

- Duplex electrical outlets on each wall – dedicated circuits
- Electrical outlets sufficient in amperage and voltage to support kitchen equipment
- No electrical panels in storerooms or offices
- Cord drops from T-bar ceiling

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel
- Windows: none
- Security system
- Minimum one large, roll-up door for equipment

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Other special equipment needs for food preparation

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Quarry tile or sealed concrete flooring
- Locate near dock
- Adjacent to Serving Area

sample photo: may not represent LBUSD facilities

Serving Area

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Serving food
- Scramble serving concept
- Food court

Persons

- Food service personnel
- Student workers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- 65 Degrees year round temperature

Plumbing

- Floor drains

Electrical & Lighting

- Duplex electrical outlets on each wall
- Cord drops for serving/holding equipment
- Cord drops for all POS locations to power registers

Technology

- Multi-lane POS system
- Data drops from T-bar ceiling

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel
- Special serving windows with clear opening to exterior dining areas
- Security system

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Multi-lane point of sale cash register
- Wireless POS system for remote site serving areas
- Other special equipment needs for food serving

sample photo: may not represent LBUSD facilities

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Quarry tile or sealed concrete flooring
- Locate between Food Prep and Cafe

Dry Food Storage

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storage for dry food and paper

Persons

- Food service personnel
- Student workers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- 65 Degrees year round temperature

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel
- Windows: none
- Security system
- Locks keyed for food service personnel access only

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Rust resistant 24" deep shelving and dunnage racks
- Other special equipment needs for food storage

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Quarry tile or sealed concrete flooring
- Locate between dock and Food Prep, near supervisor's office

sample photo: may not represent LBUSD facilities

Cooler & Freezer

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storage

Persons

- Food service personnel

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Separate condensing units for each box [cooler and freezer]

Plumbing

- Freezer-heated condensate drain

Electrical & Lighting

- Duplex electrical outlets on each wall
- Coordinate power requirements with equipment manufacturer
- Fluorescent lighting
- Emergency lighting

Technology

- Temp alarm panel not flush mounted in box wall panel
- Locate remote, hard wired

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel
- Windows: none
- Gravity closing hinges
- Snubber-type door closer

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Walk-in freezer and cooler
- Rust-proof shelving, 24' deep with additional 24" deep dunnage racks in freezer and refrigerator
- Open wall space for utility racks

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Quarry tile or sealed concrete flooring
- Located next to delivery door, close to supervisor's office

sample photo: may not represent LBUSD facilities

Ware Washing

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Washing of preparation equipment
- Sanitizing

Persons

- Food service personnel
- Student workers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Exhaust fan over utensil sink

Plumbing

- Large sinks and sprayers [pre-rinse]
- Garbage disposal

Electrical & Lighting

- Duplex electrical outlets on each wall
- Coordinate power requirements with equipment manufacturer
- Fluorescent lighting

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: no special requirements
- Windows: none

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Rust-proof shelving
- Metro drying racks

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Quarry tile or sealed concrete flooring

Kitchen Manager's Office

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Scheduling
- Staff evaluations/discipline/small meetings
- Customer service
- Ordering supplies

Persons

- Food service manager

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- A/C and heating

Plumbing

- No special requirements

Electrical & Lighting

- Quad electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port
- Cable access to IDF

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: large view panel
- Windows: operable with ½ glass looking into serving area, food prep area, and receiving/storage areas
- Door keyed for food service personnel access only
- Security system

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Desk and chair
- File cabinet
- Printer
- Safe
- Wall-mounted bin boxes above desk/work surface

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Located to view both delivery and production areas

Restroom

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Personal hygiene

Persons

- Food service staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Exhaust fan

Plumbing

- Sink with hot and cold water
- Toilet

Electrical & Lighting

- Duplex electrical lighting on each wall and adjacent to sink

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: no view panel
- Windows: none

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Cabinet with mirrors

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Adjacent to locker room

Locker Room

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Food service personnel storage

Persons

- Food service personnel

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Ventilation

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: no special requirements
- Windows: no special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Lockers – sloped tops
- Bench
- Locking storage cabinet

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Adjacent to food service restroom
- Separate storage for student workers' backpacks, bags, etc.

Cafeteria / Multipurpose Room / Commons

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Student dining
- School and community program, meetings, and activities.
- Performances

Persons

- Staff members
- Students
- Community – primarily after school hours

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Drinking fountain

Electrical & Lighting

- Duplex electrical outlets on each wall
- Banked switching to allow for adjustable lighting levels
- Special electrical outlets for refrigeration units

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port
- Overhead LCD projector with drop down screen
- Audio enhancement system

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: double doors with access to outside courtyard/dining area
- Windows: operable, blinds between panes, allow maximum natural lighting,

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Round, fold up tables
- Stackable, free standing chairs and chair dolly
- CD/DVD player
- Equipment rack in control closet
- LCD projector and mounted screen

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Good sight lines to all areas of the room for supervision
- Acoustic sound panels
- Control closet with light and sound control box
- Vinyl tile flooring with various colors to show table placement

Stage Area

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Area for drama and music performance
- Meeting location for school and community

Persons

- Students
- Parents
- Community members
- Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Consider heat from performance lights and equipment

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead stage lighting with rigging [2 rows]
- Front and side lights
- One follow spotlight

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Data port for teacher
- Computerized light board
- Sound system for performances

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Doors: View panel
- Windows: No special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Projection screen
- Stage curtains
- Sound system

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Retractable curtain at the front of stage
- Pine wood flooring or other suitable flooring
- Proscenium wall to frame stage
- Retractable risers

Table & Chair Storage

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Storage

Persons

- Custodial/Maintenance staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: solid
- Windows: none

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Table and chair racks

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- No special requirements

School Store

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Fundraising (LEBO Gear, Snacks)
- Storage of Graduation Materials
- Decorations for Dances/Spirit Assemblies/Prom
- Ticket sales and distribution

Persons

- Staff
- Student Volunteers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Locked Door

Plumbing

- No special considerations

Electrical & Lighting

- Fluorescent lighting

Technology

- Electronic Payment

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Dutch-style double doors

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Shelving and storage cabinets
- 4 8' tables
- Display space
- Counter space

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Secure area

Journalism / Yearbook Office

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Publish Yearbook
- Newspaper activities

Persons

- Advisor
- Students

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special considerations

Plumbing

- No special considerations

Electrical & Lighting

- Duplex outlets on each wall
- Overhead lighting

Technology

- Access to voice, video, data ports, and electrical outlets
- Computers

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door
- Glass to corridor

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Desk
- 2 Computers
- Conference tables
- Work tables
- 12 Chairs

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- None

Student Meeting Room

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Community, parent, and student activity planning and collaboration
- Meetings
- Scheduling of appointments
- Preparation of materials
- Storage of materials

Persons

- Students
- Coaches
- Advisors
- Teachers
- Parents
- Community Members
- Volunteers

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall
- Overhead lighting
- Controlled day lighting

Technology

- Access to voice, video, data ports, and electrical outlets

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Visual access to commons area

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space

Furniture & Equipment

- Lockable storage cabinets
- Flexible surfaces
- Portable work stations

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Acoustical privacy
- Access to student commons area

Staff Dining

sample photo: may not represent LBUSD facilities

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Staff dining

Persons

- Faculty and Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Counter & Sink

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel
- Windows: operable, allow controlled natural lighting

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Countertop with sink, base and wall cabinets
- Microwave oven
- Table and chairs
- Magnetic marker board
- Tackboard

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Carpet and partial Vinyl tile flooring
- Vending machines

Teacher Lounge with Kitchenette

sample photo: may not represent LBUSD facilities

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Staff dining
- Food preparation

Persons

- Faculty and Staff

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Counter & Sink
- Refrigerator with icemaker

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel
- Windows: operable, allow controlled natural lighting

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Countertop with sink, base and wall cabinets
- Microwave oven
- Refrigerator with icemaker
- Table and chairs
- Magnetic marker board
- Tackboard

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Carpet and partial Vinyl tile flooring

sample photo: may not represent LBUSD facilities

Custodial / Maintenance

Introduction

The Custodial/Maintenance operations are two distinct units. The custodial staff will provide a quality, cost-effective service to ensure a safe and clean environment that promotes the educational process. Custodians will be responsible for the care, cleaning, and light maintenance of the facility; provide daily cleaning of facility; and coordinate with all building users, administration, teaching staff, and community users to ensure a safe and climate controlled environment that will allow uninterrupted use of the facility. Custodians will maintain storage of materials to readily service the operation of the school and maintain necessary janitorial equipment and supplies to ensure that occupants' needs are met. They will also inspect, report, and correct safety-related issues and maintain trained personnel on site to insure that proper inspection, maintenance, and corrective measures are implemented so facility users are aware of the district's commitment to safety.

The maintenance staff will, at the request of the district coordinator, provide the "heavy maintenance" service to ensure that the school is safe, operational, and properly maintained in order to promote the learning environment. The maintenance staff will conduct routine maintenance and perform repair of major physical systems within the school.

The pages that follow contain a list of spaces and drawings illustrating the relationship between various program areas, and the individual spaces within the program area. Additionally, a description of the activities, persons to accommodate, and items to be considered is included.

Overview

Facility Considerations

Listed below are various items that should be considered during the design of the new facility.

Exterior:

- Outside hose bibbs every 200 feet around perimeter of building and on roof [to clean rooftop units]
- Concrete pad sized for dumpster storage with outside trash compactor and recycling dumpster, including sewer drain and hose bibb [hot and cold water] near trash area; trash compactor accessible from inside building if not inside
- Road access [separate from vehicular and student traffic and from play areas]
- Outside storage to have electricity
- Direct access from building near dumpsters only
- Centralized delivery for food service and supply deliveries/ share loading dock space
- Mini loading dock connected to building

Interior:

- Electrical outlets in corridors 12' max separation
- Chemical dispensing system–area on wall for rack
- Service closets spread throughout the building with floor drain, recessed mop sink, and storage shelving; dam 6-8" high + floor drain
- All restrooms to have floor drains, outlets and hose bibs
- Electrical and lighting for science and art and any location with a sink shall have GFCI protected circuits
- Storage

Dock:

- Dock area height to match District delivery truck lift height
- Hand dolly ramp with adjustable dock plate
- Dock shared by food service – near food service area
- Lockable doorways that separate dock area from hallways
- Staging area for deliveries
- Outside lighting for early/late deliveries
- Sealed concrete
- Recessed docks shall have pumps and drains

Space Requirements

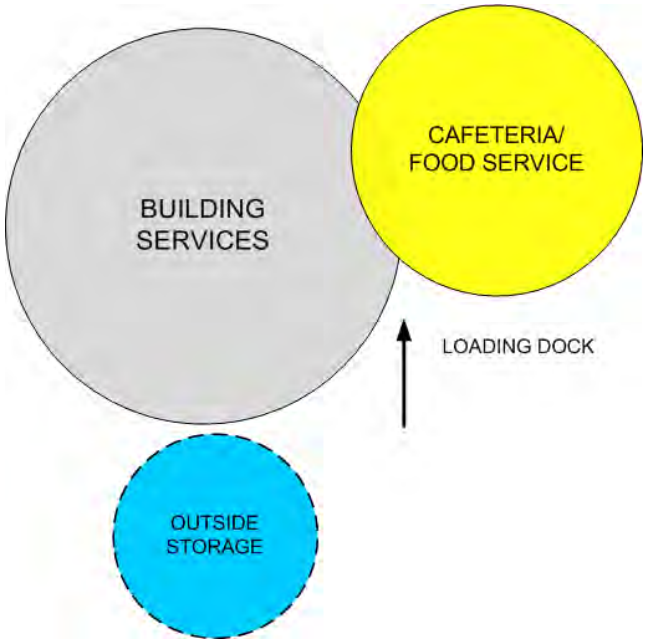
Custodial/Building Services	600 Students				1200 Students				1800 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Receiving/Storage		1	500	500		1	750	750		1	900	900
Maintenance/Repair Area		1	500	500		1	750	750		1	900	900
Office/Planning/Meeting Area/Break Room		1	200	200		1	300	300		1	400	400
Locker Room/Toilets		2	100	200		2	150	300		2	150	300
Custodial Hopper Room [throughout school]		4	100	400		8	100	800		12	100	1,200
Mechanical Rooms & Restrooms	See Building Service in Sum Chart				See Building Service in Sum Chart				See Building Service in Sum Chart			
Loading Area			outside				outside				outside	
Custodial Sub-Total	**0**			**1,800**	**0**			**2,900**	**0**			**3,700**

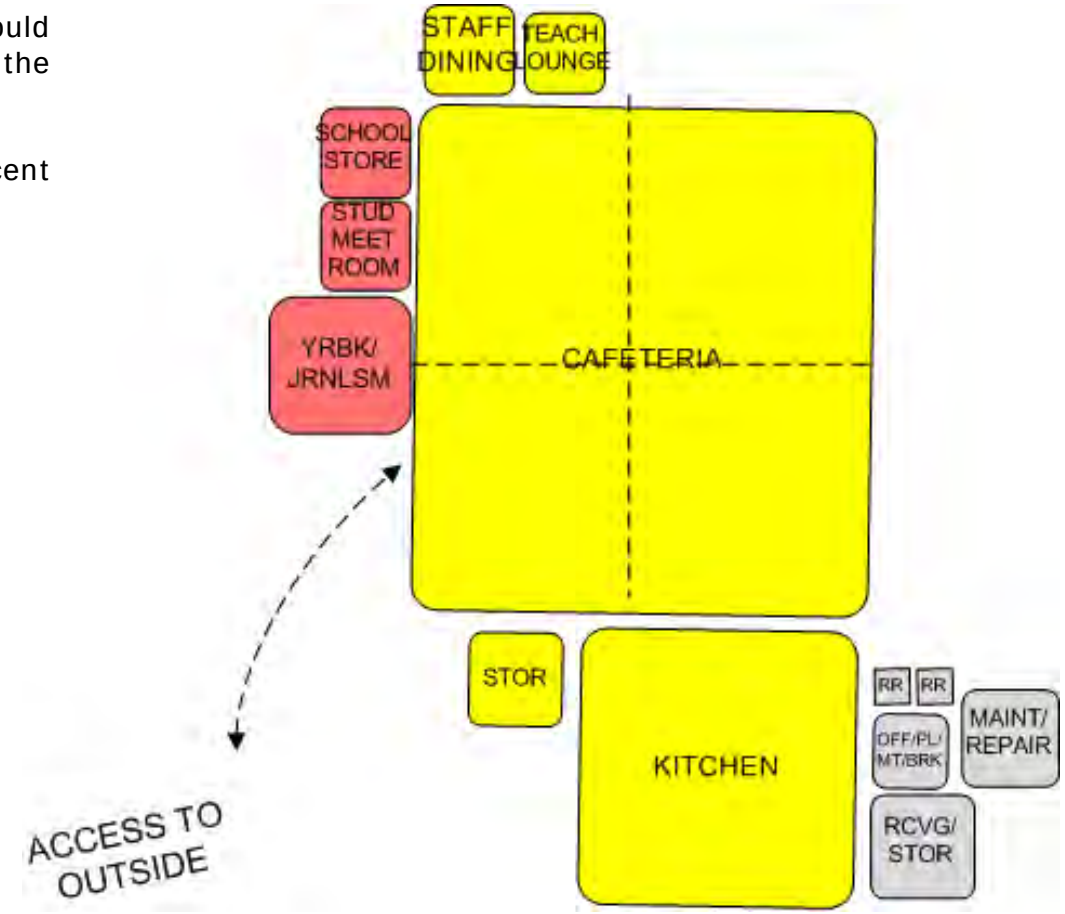
Custodial/Building Services	2400 Students				3000 Students				3600 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Receiving/Storage		1	1,000	1,000		1	1,000	1,000		1	1,000	1,000
Maintenance/Repair Area		1	900	900		1	900	900		1	900	900
Office/Planning/Meeting Area/Break Room		1	400	400		1	400	400		1	400	400
Locker Room/Toilets		2	150	300		2	150	300		2	150	300
Custodial Hopper Room [throughout school]		16	100	1,600		20	100	2,000		24	100	2,400
Mechanical Rooms	See Building Service in Sum Chart				See Building Service in Sum Chart				See Building Service in Sum Chart			
Loading Area			outside				outside				outside	
Custodial Sub-Total	**0**			**4,200**	**0**			**4,600**	**0**			**5,000**

Spatial Relationships

Building Services will be utilized by each school and should be located near the Cafeteria/Nutrition Services area and the loading dock.

The Custodial & Maintenance Area should be located adjacent to Food Services, Student Dining, and the Loading Dock.





Note: The functional relationships are diagrammatic only. Further interpretation of these relationships shall be implemented by the design professional.

STANDARDS FOR TYPICAL OFFICES

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Desk with return	1
Desk chair	1
Credenza in rooms > 200SF	1
Guest chairs, rooms < 150SF	2
Guest chairs, rooms 155-200SF	4
Conf chairs, rooms over 200SF	4
Conf table, rooms over 200SF	1
Bookshelves	18 LF
Marker board	4 LF
Laptop computer	1
Printer	1
File cabinet, 4 drawer	1 to 2
Bulletin board	4 LF
Clock	1

MECHANICAL	QTY
Air Conditioning	Yes

ELECTRICAL	QTY
Duplex outlet	each wall
Quad outlet @ ea. data port	1

PLUMBING	QTY
No special requirements	

TECHNOLOGY	QTY
Data port and/or access to wireless	1
Telephone	1
Video port	1
Intercom through phone handset	Yes

Receiving/Storage Area

Activities and Persons

The following list reflects the anticipated activities to be conducted in the Loading/Receiving area and the persons making use of the space.

Activities

- Delivery area for bulk commodities, supplies, materials, and equipment
- Loading and unloading
- Storage connected to building and secure

Persons

- Custodial and maintenance personnel
- Food service personnel

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- Area drain and pump if dock is recessed

Electrical & Lighting

- Wiring for roll up door
- Wiring for control and power for adjustable dock plate

Technology

- Voice/video/data

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: electric roll-up door to loading dock
- Double doors with removable mullions to hallway
- Windows: operable
- Access doors adjacent to roll-up doors

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Step ladders
- Dollies
- Lifts
- Pallet jack
- Storage shelving

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Located adjacent to the Custodial and maintenance area and Food Service area
- Proper lighting and ventilation
- High ceiling spaces

Maintenance/Repair Area

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- General maintenance
- Painting
- Repair and assembly of small electrical items, equipment, furniture, doors, blinds, fixtures, etc
- Preventative maintenance

Persons

- Custodial/ maintenance personnel

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Exhaust fan
- HVAC

Plumbing

- Sink with hot and cold water
- Hot and cold water hose bibb
- Floor drains

Electrical & Lighting

- Duplex electrical outlets on each wall, spaced 12' max
- 20 amp outlets in workroom

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: for moving large equipment
- Windows: operable

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Work bench with built-in electrical outlets
- Peg boards for bench work
- Hazmat storage
- Locking shelving for tools
- Compressor
- Eye wash
- Soap dispenser
- Paper towel holder
- Built-in vise
- Storage shelving

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Soundproofing between Maintenance/Repair and instruction areas
- Adjacent to loading dock
- Concrete floor
- High ceiling space
- Storage for cleaning equipment [vacuum cleaners, floor scrubbers, etc.]

Office / Planning & Meeting Area / Break Room

Activities and Persons

The following tables reflect the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Telephone calls
- Paperwork
- Scheduling
- Training

Persons

- Maintenance and Custodial personnel

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor
- Data ports
- Quad outlet adjacent to each data port
- HVAC controls
- Data ports or e-mail (hand held) access and charging ports in custodial office

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: view panel
- Windows: window with a view of workroom and loading dock

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Casework to include:
  - Filing cabinet
  - Bookcase
- Tack board
- Desk and chair
- Ergonomic task chairs
- Networked computer
- Printer

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Vinyl tile

Locker Room

Activities and Persons

The following table reflects the anticipated activities to be conducted in the space and the persons making use of the space.

Activities

- Custodial personnel storage

Persons

- Custodial personnel

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- Ventilation

Plumbing

- Toilet

Electrical & Lighting

- Duplex electrical outlets on each wall

Technology

- Telephone/intercom/voicemail port
- Video port and monitor

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: no special requirements
- Windows: no special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Lockers
- Bench
- Locking storage cabinet

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Should be combined with receiving and storage area

Loading Area

Activities and Persons

The following list reflects the anticipated activities to be conducted in the Loading/Receiving area and the persons making use of the space.

Activities

- Delivery area for bulk commodities, supplies, materials, and equipment
- Loading and unloading

Persons

- Custodial and maintenance personnel
- Food service personnel

Building System Requirements

The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical & Lighting, and Technology.

Mechanical

- No special requirements

Plumbing

- No special requirements

Electrical & Lighting

- Wiring for roll up door

Technology

- No special requirements

Doors & Windows

The following table reflects the considerations for the doors and windows to be used in the space.

Doors & Windows

- Door: electric roll-up door to loading dock
- Double doors with removable mullions to hallway
- Windows: no special requirements

Furniture & Equipment

The following table reflects the considerations for furniture and other equipment needed within the space.

Furniture & Equipment

- Step ladders
- Dollies
- Lifts

Special Considerations

The following table reflects design considerations for the space.

Special Considerations

- Located adjacent to the Custodial and maintenance area and Food Service area
- Proper lighting and ventilation

Concrete floor