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## Introduction

This Elementary 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 elementary school facility to be built in Long Beach as part of the Facility Master Plan. It is a City-wide statement, and will apply to all upcoming elementary school projects, but will be adjusted as appropriate to the needs of each individual school construction project.

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.

Although this Educational Specification is intended to guide elementary school construction for the next several decades, it should be regarded as a living document, in need of periodic update. For each separate school construction project, there is need and opportunity to adjust this document to apply to site specific circumstances. Additionally, specifics of the educational specifications should be updated every few years to address enrollment trends, construction costs, changes in programs offered, and staffing configurations.

This has been written to cover elementary needs across the entire city. It is without reference to any specific school site, and is applicable to both new construction and renovation projects. It does contain highly articulated ideas of critical components and organizational concepts for successful elementary school facilities. Some existing school buildings and certain components of others may not be able to be reasonably modified to continue in service. Overall judgments of appropriateness have been included in the recommendations of the Facility Master Plan, but each specific project will require further detailed consideration, and perhaps adjustment of the Educational Specification, as part of its design process.

## Document Overview

This Elementary 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.

**21<sup>st</sup> 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 considerations.

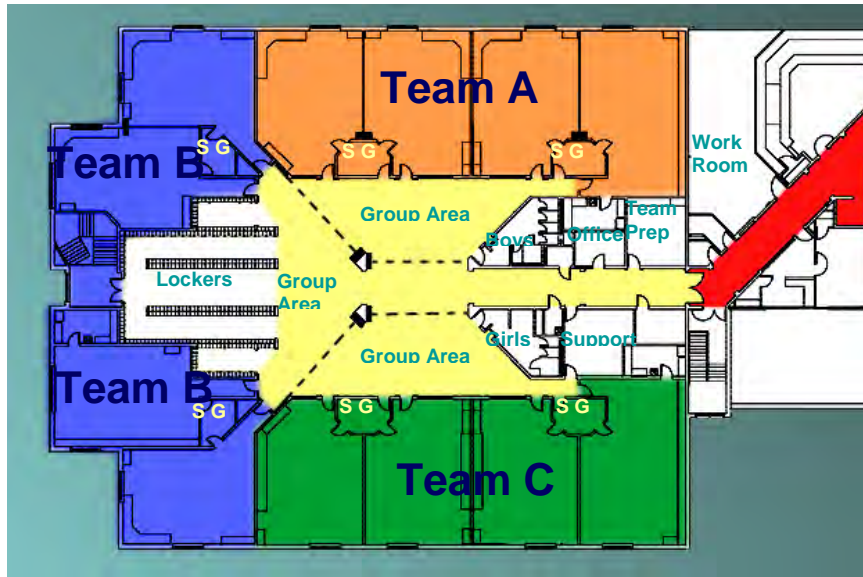
**Site Issues** – Any special circumstances or considerations are important when designing a school. The design, traffic flow, lighting, landscaping, and parking issues are all addressed in this section.

**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.

**Program Areas** – A summary of the types, number, and sizes of each instructional and support space (i.e. Space Requirements) is included with spatial relationship illustrations for each program area.





designed to create smaller communities or pods within the larger community. Flexibility was important in the planning of the elementary educational specification and is reflected in the space requirements. The space requirements chart provides space for a 400, 550, 700, 850, or 1,000 student school. The school administration has the ability to choose which capacity is appropriate for each elementary facility.

## Executive Summary

An elementary school facility should provide a nurturing but challenging learning environment, incorporating a multitude of teaching/learning styles, and encouraging respect for every individual. The ultimate goal is to create an active learning environment where students can develop the necessary skills and aptitude to become life-long learners and be technologically literate.

Long Beach Unified School District's Elementary School Educational Specifications represent the School District's guidelines and criteria for its new and newly renovated facilities. Elementary School Educational Specifications are



Elementary School Educational Specifications

## Elementary School Space Requirements

The space requirements chart below lists program area to be included in an elementary school facility of 400, 550, 700, 850, and 1,000 students.

Average Class Size	
PK	20
K	20
1	20
2	20
3	20
4	25
5	25
Average	21.4

Square Ft/Student		SF per student
# Students	Total SF	
436	48,048	110.2
572	63,888	111.6
730	78,732	107.8
867	94,392	108.9
1,024	109,212	106.6

Average Class Size	
PK	25
K	25
1	25
2	25
3	25
4	25
5	25
Average	25.0

Square Ft/Student		SF per student
# Students	Total SF	
508	48,048	94.6
666	63,888	95.9
849	78,732	92.7
1,007	94,392	93.7
1,190	109,212	91.8

Elementary School Spaces	Suggested Spaces for 400 Students		Suggested Spaces for 550 Students		Suggested Spaces for 700 Students		Suggested Spaces for 850 Students		Suggested Spaces for 1,000 Students	
	TS*	Total SF	TS	Total SF	TS	Total SF	TS	Total SF	TS	Total SF
Core Academics	20	23,650	26	31,650	33	41,400	39	49,200	46	58,350
Special Needs	1	2,130	2	3,310	3	4,490	4	5,670	5	6,850
Media Center	0	3,250	0	3,250	0	3,750	0	3,850	0	4,350
Visual Art/Wet Lab	0	0	1	1,200	1	1,200	1	1,200	2	2,400
Music	1	1,400	1	1,400	1	1,400	2	2,600	2	2,600
Tech Ed/Computer	1	1,200	1	1,200	1	1,200	2	2,400	2	2,400
Welcome Center	0	2,210	0	2,580	0	3,320	0	3,440	0	3,560
Food Service	0	4,800	0	7,050	0	7,050	0	8,100	0	8,100
Custodial	0	1,400	0	1,600	0	1,800	0	2,200	0	2,400
<b>Sub Total</b>		<b>40,040</b>		<b>53,240</b>		<b>65,610</b>		<b>78,660</b>		<b>91,010</b>
Building Services, Circulation, etc.	20.0%	8,008	20.0%	10,648	20.0%	13,122	20.0%	15,732	20.0%	18,202
<b>Total</b>	<b>23</b>	<b>48,048</b>	<b>31</b>	<b>63,888</b>	<b>39</b>	<b>78,732</b>	<b>48</b>	<b>94,392</b>	<b>57</b>	<b>109,212</b>

\*Teaching Station

### CAPACITY CALCULATIONS Based on Class Size Average of 21.4

Regular TS [Teaching Stations]	20	26	33	39	46
Students Per TS	21.4	21.4	21.4	21.4	21.4
<b>Sub Total Regular</b>	<b>428</b>	<b>556</b>	<b>706</b>	<b>835</b>	<b>984</b>
Special Needs TS	1	2	3	4	5
Students Per TS	8	8	8	8	8
<b>Sub Total Special Needs</b>	<b>8</b>	<b>16</b>	<b>24</b>	<b>32</b>	<b>40</b>
<b>Total</b>	<b>436</b>	<b>572</b>	<b>730</b>	<b>867</b>	<b>1,024</b>

### CAPACITY CALCULATIONS Base on Class Size Average of 25.0

Regular TS [Teaching Stations]	20	26	33	39	46
Students Per TS	25	25	25	25	25
<b>Sub Total Regular</b>	<b>500</b>	<b>650</b>	<b>825</b>	<b>975</b>	<b>1150</b>
Special Needs TS	1	2	3	4	5
Students Per TS	8	8	8	8	8
<b>Sub Total Special Needs</b>	<b>8</b>	<b>16</b>	<b>24</b>	<b>32</b>	<b>40</b>
<b>Total</b>	<b>508</b>	<b>666</b>	<b>849</b>	<b>1,007</b>	<b>1,190</b>

This overall drawing provides an idea of how the entire building might be configured. The drawing is a conceptual diagram, applicable to both new construction and existing buildings.

The pod concept might be interpreted as separate floors, or wings, within existing or as new construction, as existing conditions and site constraints determine. The pods can be clustered by grade (2-3) or in learning communities (K-5). Some schools may be configured as primary learning centers. (PreK-2)

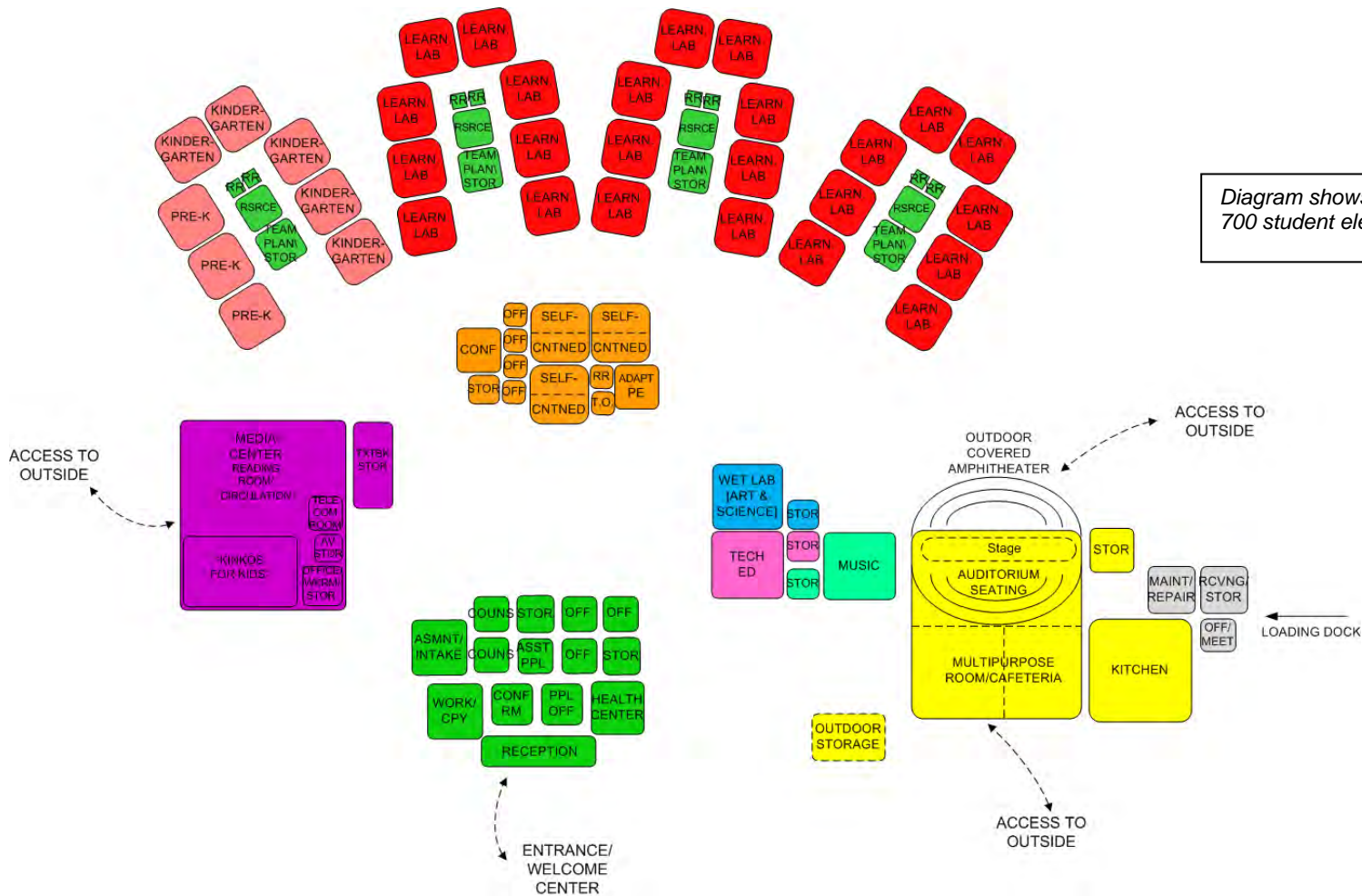


Diagram shows suggested spaces for a 700 student elementary school

## Program Area Overview

Listed below is an overview of each program area to be included in the Pre-K–5 facilities in Long Beach. Special features of the school, such as furniture, equipment, technology, and site are also described.

### ☀ 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.

### ☀ 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, and resource rooms.

The learning communities can be organized based individual grade level (i.e. a K, 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> grade community) or grade groupings (i.e. 2<sup>nd</sup> & 3<sup>rd</sup>,

4<sup>th</sup> & 5<sup>th</sup>, etc.). The learning communities should be located around the Media Center and away from noisy spaces like the Gymnasium and Cafetorium. 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 cafeteria/stage should be strategically placed within close proximity to the main entrance.

### ✿ Cafetorium / Student Dining

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

These spaces 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.

### ✿ Community Spaces

School buildings are often viewed as centers for the community. To facilitate community involvement, a PTO room is provided.

## Special Features

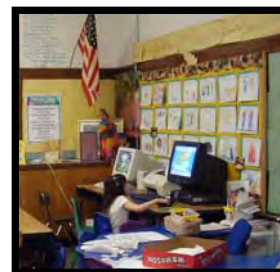
### ✿ Corridors and Commons Spaces

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 child-friendly. 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 and wireless 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 for learning. These include teacher team planning centers, multi-use rooms, and instructional materials storage rooms.

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. Consideration should also be given to serving students of various ages.

Learning lab/classroom spaces in the elementary schools have been planned for 25 students in general instruction, 12 in Pre-K, and 8 in low incident special education spaces.

#### ✿ Staffing Patterns

The predominant staffing pattern in the School District consists of classroom teachers for most contact with

most students, supplemented by specialist teachers and professional 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.

#### ✿ 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.

### ✿ New vs. Existing Buildings

The concepts found herein can be applied to new construction as well as the renovation of existing facilities. It is important to point out that achieving the educational and facility concepts should be the primary goal, which may result in the need to modify some of the square footage guidelines. The final determination for modifications should be: Does the space meet the academic needs of the students?





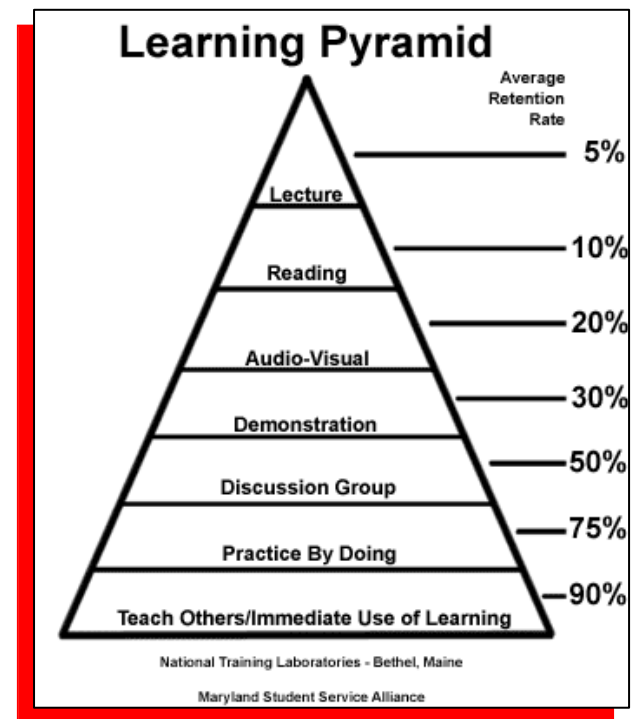
## Overview of 21<sup>st</sup> Century Best Practices

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.

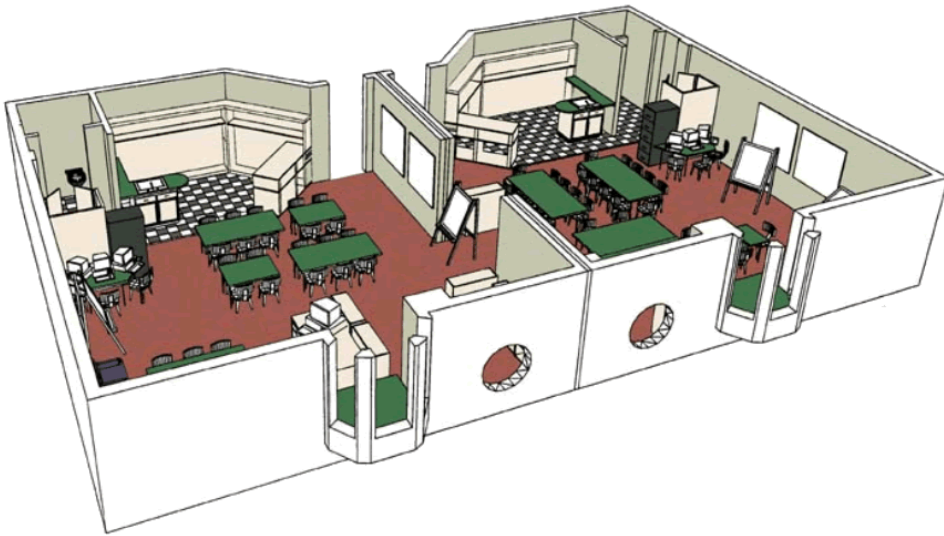
Investigations have resulted in “best practices” that suggest the following:

- ✿ Curriculum: Offer essential knowledge, integrate it, and make connections to real life
- ✿ Organizational Models: Provide student-centered pod 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.
- ✿ Student 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.



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## 21st Century Best Practices

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.

### Curriculum

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

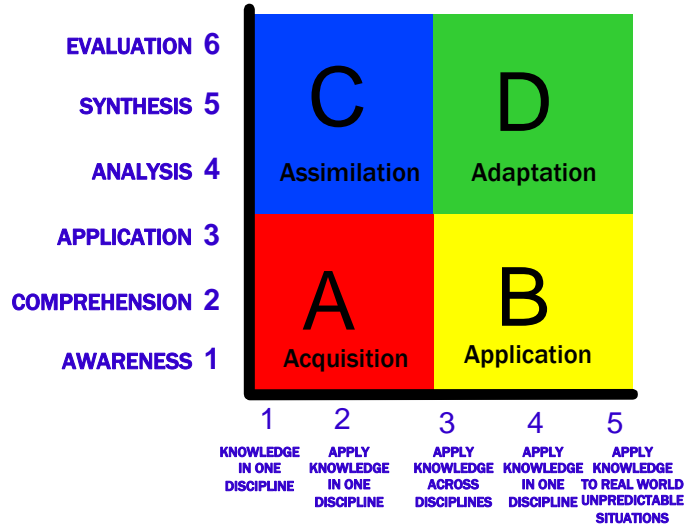
- ✿ Based on federal and state content standards
- ✿ Require content areas to be linked to one another
- ✿ Accommodate multiple-intelligences and learning styles
- ✿ Demand critical thinking and problem-solving
- ✿ Incorporate pervasive technology
- ✿ Utilize multiple performance assessments

**Best Practice:** “Best practices” suggest that the core of the elementary 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.”

**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.

## RIGOR/ RELEVANCE FRAMEWORK

Source: International Center for Leadership in Education



## 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 pods, 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.

✿ **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.

✿ **Looping:** Looping is based on teams of teachers staying with the same students for two years.

**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 elementary 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 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.

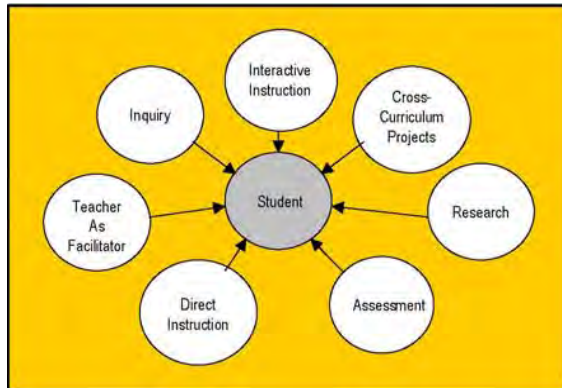
To take advantage of technology, schools will need comprehensive staff development programs and training; student access to technology applications; updated hardware and software in computer labs, classrooms, and media centers; updated school wiring and internet access; integration of technology into 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.

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.

It is important to note that all students demonstrate technology skills appropriate to their grade level. Students in will be expected to possess, as defined and assessed through authentic learning opportunities, applicable technology standards as outlined in the Providence Public School Department Technology Plan.



## Technology Components

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

**Video:** Video distribution and video streaming 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.



## 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.



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

## Technology & The Learning Environment

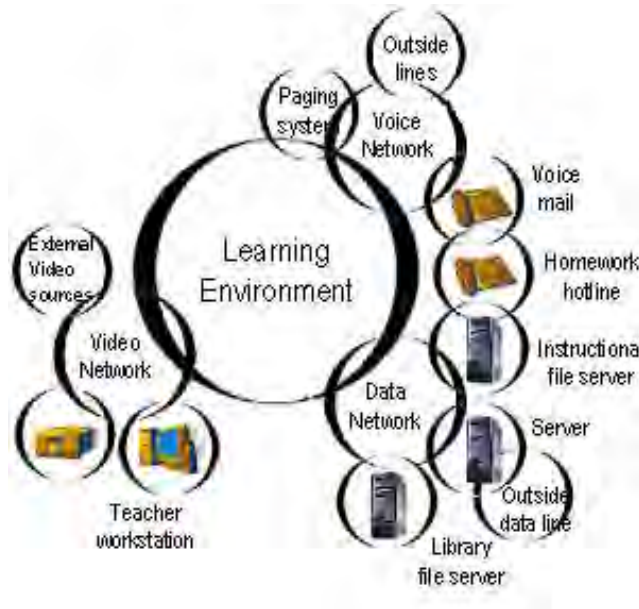
Technology greatly enhances the learning environment. Technology, in the typical classroom, can support multiple instructional designs.

**Whole Group Instruction** [20-36 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, WiFi, 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/LCD projector
- 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
- A/V plate on wall near teacher station
- Floor plate with power and data drop near teacher station

Careful attention should be given to furnishings, i.e., student desks, specialized or customized cabinetry, location of data ports, white boards, document cameras, 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-RW
- DVD players/recorders
- Mounted LCD/PVP (Portable Video Projectors)
- Laptops
- Data drops for LAN, WiFi, and Internet access and computer workstations
- Interactive Video Distance Learning (IVDL)
- Circulation system
- Media retrieval system
- Fiber pulled to media center for future expansion
- 2-36 stationed wireless notebook carts
- Multiple electrical outlets for laptop charging

## 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 data drops for LAN, WiFi, 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
- A/V plate
- Ceiling mounted LCD projector
- Video conferencing equipment

## Cafetorium / 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 (WiFi) 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 Cafetorium 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
- Annual software support agreements
- Audio system
- Annual hardware support agreements
- 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
- Textbook inventory
- Student Information System access

**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 cycle
- 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 students in 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 provide 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.



*Glazing (interior windows) provides opportunities for active and passive supervision.*



Monroe ES  
Richmond, IN



## 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, cafetorium, 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
- ✿ 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: use of glass windows
- ✿ Ability to partition unused portions of building
- ✿ Include elevator in two-story buildings
- ✿ Research on tsunami and schools that are at risk
- ✿ Minimize entry points into building and site
- ✿ Secure entrance to main office
- ✿ Separate entrance for students
- ✿ Enter staff restrooms through student restrooms
- ✿ Decentralization of staff work areas
- ✿ Visitor restroom at secure entrance to main office



*Santa Rita School, US, California, Gelfand Partners Architects*

## 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
- ✿ Decorative traffic barriers

## 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, auditorium, multi-purpose room, and classrooms
- ✿ 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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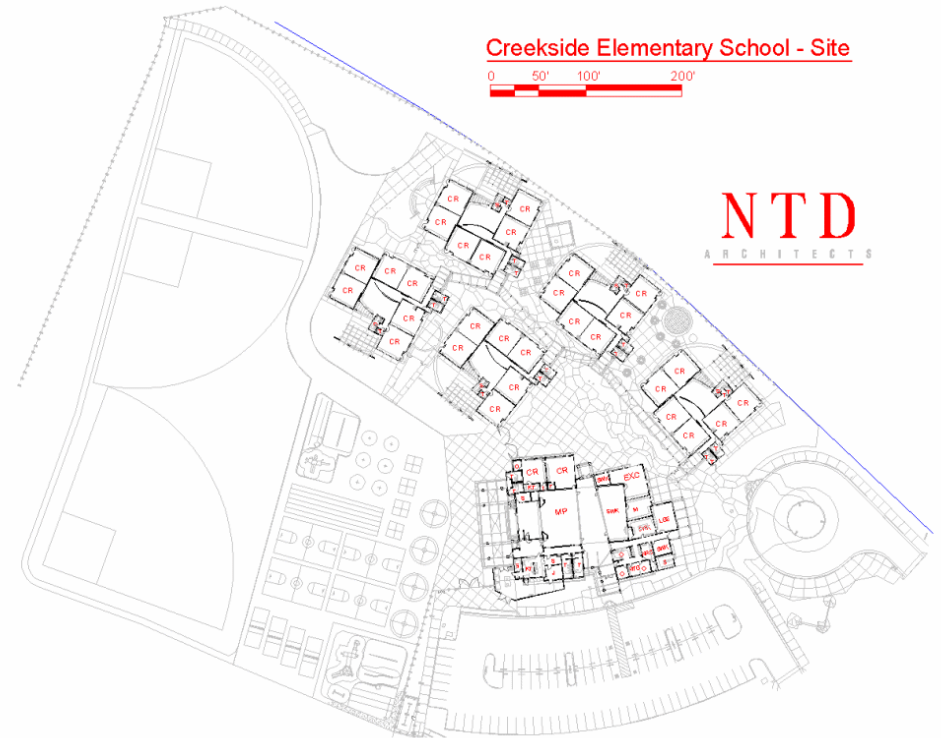
## Site Issues

In some instances, implementation of the Long Beach Unified School District Facility Master Plan will result in renovation, closure, or construction of new schools on new sites. The Architect of Record for each school will be responsible for location of school on the site as well as site issues including topography, drainage, pedestrian and vehicular traffic, bus drop off and pick up areas, service entry, and safety of playground areas. Since Long Beach Unified School District is an urban school department, creative solutions will be required to address the considerations stated in this section.

The Long Beach Unified School District offers the following considerations for each of its K-5 school sites.

### 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
- Covered walkways between buildings
- Fencing should allow secure building but access to playground, courts, and fields to the community
- Restrooms next to playground for before/after school activities and community events





### 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
- Separate drop-off for special education buses
- Sufficient length in drop-off for bus stacking
- Separate parent drop-off area with covered walkway
- Sufficient length in drop-off for parents' car stacking

### 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 shared between school and community uses

### 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
- Student-friendly
- Places to rest and read
- Trees for shade
- Benches around trees
- Sufficient green space

**Parking Spaces Based on  
Percentage of School Population**

	Elementary	Middle	High
<b>Staff</b>	10%	10%	10%
<b>Visitor</b>	3%	3%	3%
<b>Student</b>	20%	20%	20%

### Sheltered Areas

- For inclement weather
- Eating lunch
- Outdoor classwork
- Waiting for parents
- Before/after school activities
- Walkways between buildings
- Away from noise

### Covered Play Areas

- Games/PE
- Before/after school activities
- Hanging basketballs
- "Outdoor gymnasium"
- 2,000 SF
- High ceiling over asphalt
- Multipurpose covered area: lunch, etc.

### Playing Fields

- Secure and safe playing fields for students with direct access from the building
- Multi-purpose grass: softball, soccer, etc.
- Paved areas: circles/games, volleyball, basketball, track lanes
- Equipment: small goals, small baskets, safe playground equipment
- Drinking fountains located throughout playing fields
- Playground equipment: ropes, mats, cones

### Storage for Equipment

- For recess
- After lunch
- Close to recess/after lunch recess area
- Attach to building
- Multiple, easy access

### Storage for Equipment

- For recess
- After lunch
- Close to recess/after lunch recess area
- Attach to building
- Multiple, easy access

### Kindergarten Play Areas

- Hose hook-up
- Grassy area with shade
- Easy access to restrooms
- Portable water table/sand table
- Eating area with awning
- Outside intercom to reach office
- Storage for equipment and supplies
- Equipment that has climbing, sliding, walking, hanging,
- Crawling pretend play all loco-motor/balance, tricycles, tunnels
- Track to ride tricycles
- Hoop, hopscotch, circles, numbers, alphabet on pavement
- Jump rope area
- Garden area with sprinklers
- Drinking fountain
- Benches for eating and sitting

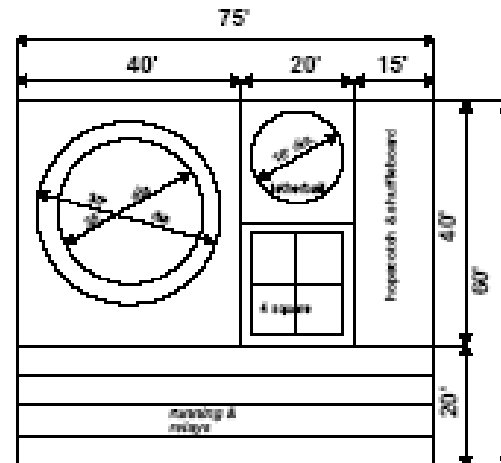
The following site guidelines for play fields are taken from the California Department of Education's ***Guide to School Site Analysis and Development: 2000 Edition***.

Kindergarten	Number of classrooms	
	1	2
<i>Type of outdoor facility (in square feet)</i>		
Turfed area	3,000	5,500
Paved area	2,000	4,000
Apparatus area	2,000	2,500
<i>Land required for buildings and grounds</i>	2,800	4,000
<i>Total square feet required</i>	9,800	16,000
<i>Percentage factor for layout</i>	20	20

	Grades one through three					Grades four through six				
	Enrollment					Enrollment				
	Up to 75	76 to 150	151 to 300	301 to 450	451 to 600	Up to 75	76 to 150	151 to 300	301 to 450	451 to 600
<i>Type of outdoor facility</i>	<i>Number of facilities required</i>					<i>Number of facilities required</i>				
<b>A</b> Field area 90' x 120'	1	1	2	2	4					
<b>B</b> Hardcourt area 60' x 75'	1	2	4	6	8					
<b>C</b> Apparatus area (3,200 sq. ft.)	1	2	3	4	5	1	2	3	4	4
<b>D</b> Field area 180' x 180'						1	2	4	4	4
<b>E</b> Field area 120' x 180'									2	4
<b>F</b> Hardcourt area 80' x 100'						1	2	4	6	8
<i>Percentage factor for layout</i>	15	15	10	10	10	20	15	10	10	10





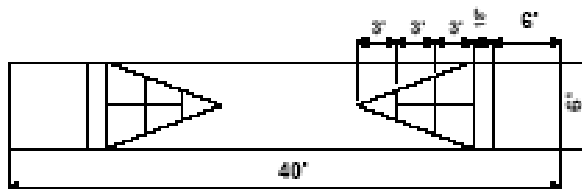


### BASIC UNIT B

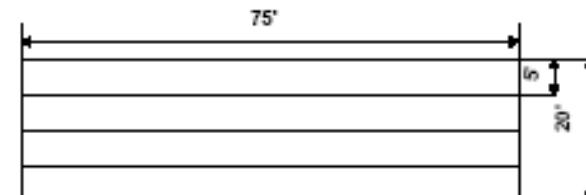
SPACE MODULE 60' x 75'

Showing typical activities  
for 75 children

LAYOUT WILL VARY

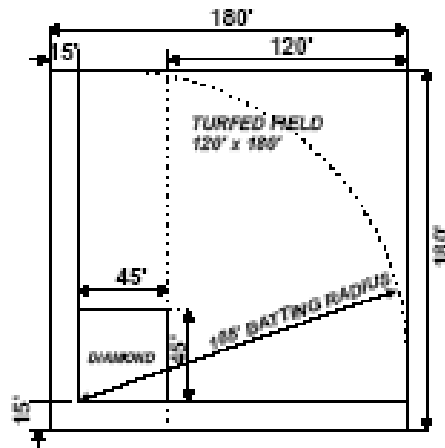


SHUFFLEBOARD



RUNNING AND RELAYS

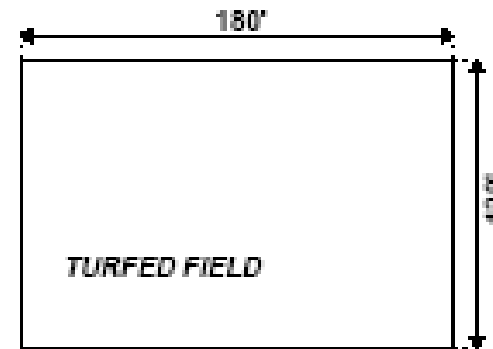
Basic Unit C, an apparatus area, is a space module of 3,200 square feet. The architect may design the area according to the dimensions of the particular type of apparatus to be installed as long as the total area does not exceed 3,200 square feet. Basic Unit C provides space for up to 75 students in grades one through six. (See Table 3 for additional basic units needed for enrollments beyond 75 in those grades.)



### **BASIC UNIT D**

*SPACE MODULE 180' x 180'*

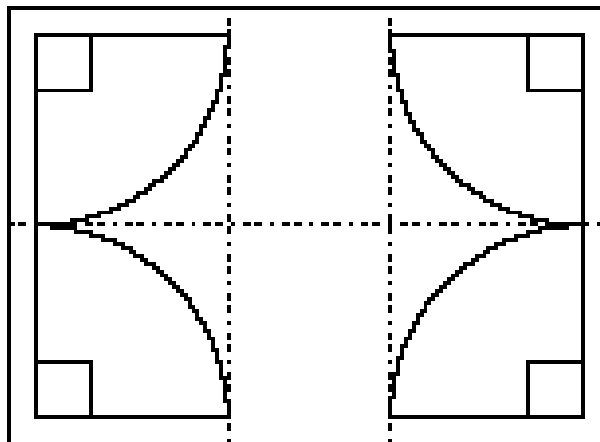
*Combined use for softball  
or field areas*



### **BASIC UNIT E**

*SPACE MODULE 120' x 180'*

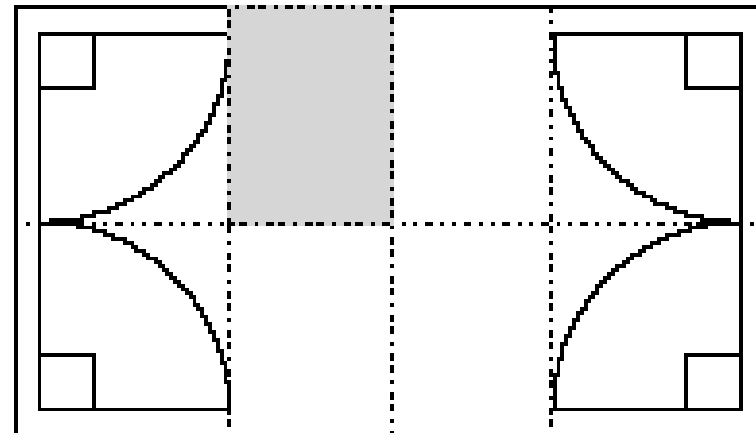
### **4 UNITS OF D PLUS 2 UNITS OF E**



**450 MAXIMUM ENROLLMENT**

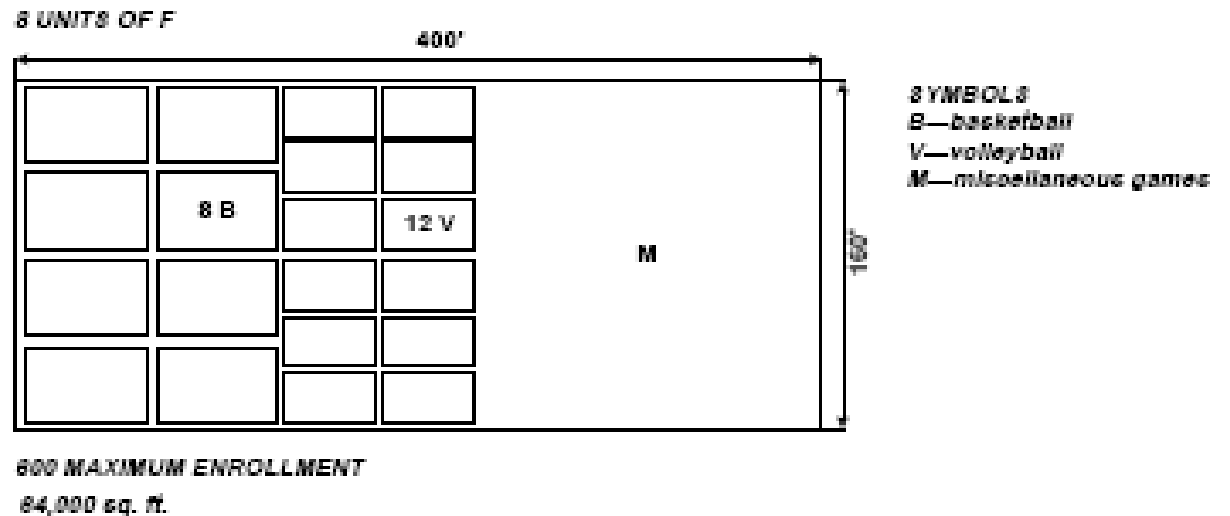
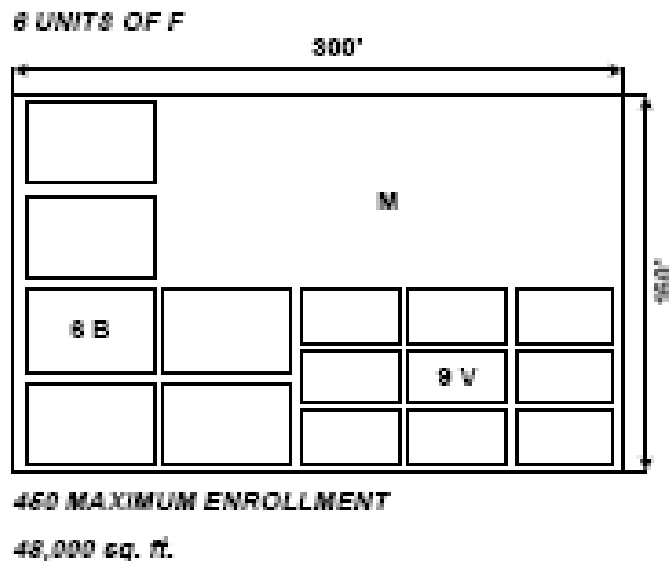
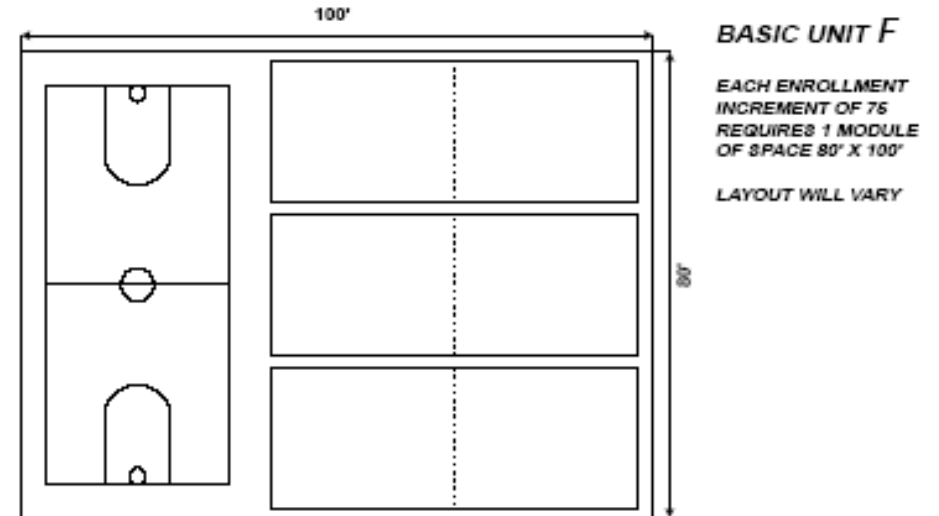
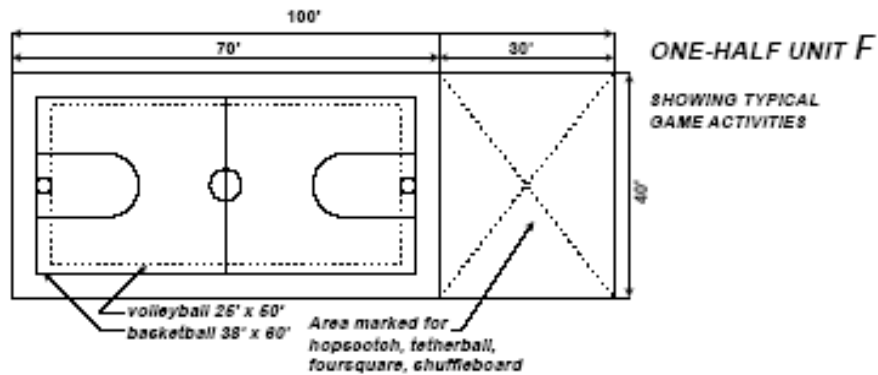
*172,800 sq. ft.*

### **4 UNITS OF D PLUS 4 UNITS OF E**



**600 MAXIMUM ENROLLMENT**

*216,000 sq. ft.*



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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 pro-active 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 elementary 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

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
- ✿ Pageants
- ✿ Child care (staff, students, community)
- ✿ Recreation Programs

- ✿ Outdoor Festivals
- ✿ Intramural Sports Programs
- ✿ Dance Recitals
- ✿ Open House Activities
- ✿ Parental Involvement
- ✿ Adult Education / ESL
- ✿ Senior Citizens Programs
- ✿ Community Meetings
- ✿ Board of Education Meetings
- ✿ School/Community Partnerships
- ✿ Church-Related Activities
- ✿ Health Screening
- ✿ 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:

- ✿ PTA Room
- ✿ Parent Room/Center
- ✿ Library/Media Center
- ✿ Conference Rooms
- ✿ Small Group Rooms
- ✿ Cafetorium and Stage
- ✿ 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.

✿ **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 the City and is operated through a joint governance structure, which includes shared maintenance and operating costs.

The following are suggestions regarding use of Long Beach Unified School District facilities:

- A media center with flexibility to support small groups.
- A cafetorium 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 and recreation areas for staff and volunteers.
- Emergency space for natural disasters for community use if necessary.
- Community room area close to cafetorium/gymnasium with storage space, table, file cabinets, telephone, computer, and copier access.

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## Total Building Space Requirements

The following table lists the total teaching spaces and square footage for three different sizes of schools.

K-8 School Spaces	Proposed Spaces for 600 Students		Proposed Spaces for 900 Students		Proposed Spaces for 1,200 Students	
	TS*	Total SF	TS	Total SF	TS	Total SF
Core Academics	29	36,090	42	52,410	55	68,970
Special Needs	1	1,810	2	2,870	3	3,930
Media Center	0	3,700	0	4,000	0	4,500
Visual Arts	1	1,575	1	1,575	2	3,150
Music	1	1,500	2	3,100	2	3,500
Tech Ed	1	1,400	1	1,400	2	2,800
Physical Education	1	11,250	2	12,500	3	13,900
Administration	0	3,430	0	3,990	0	5,360
Food Service	0	6,350	0	8,350	0	9,550
Custodial	0	1,800	0	2,000	0	2,200
<b>Sub Total</b>		<b>68,905</b>		<b>92,195</b>		<b>117,860</b>
Building Services, Circulation, etc.	20.0%	13,781	20.0%	18,439	20.0%	23,572
<b>Total</b>	<b>34</b>	<b>82,686</b>	<b>50</b>	<b>110,634</b>	<b>67</b>	<b>141,432</b>

\*Teaching Station

### CAPACITY CALCULATIONS based on 23.1 students per classroom]

Regular TS [Teaching Stations]	29	42	55
Students Per TS	23.1	23.1	23.1
<b>Sub Total Regular</b>	<b>669.9</b>	<b>970.2</b>	<b>1270.5</b>
Special Needs TS	1	2	3
Students Per TS	11	11	11
<b>Sub Total Special Needs</b>	<b>11</b>	<b>22</b>	<b>33</b>
<b>Total</b>	<b>681</b>	<b>992</b>	<b>1,304</b>

Class Size = 23.1

# Students	Total SF	SF per student
681	82,686	121.4
992	110,634	111.5
1,304	141,432	108.5

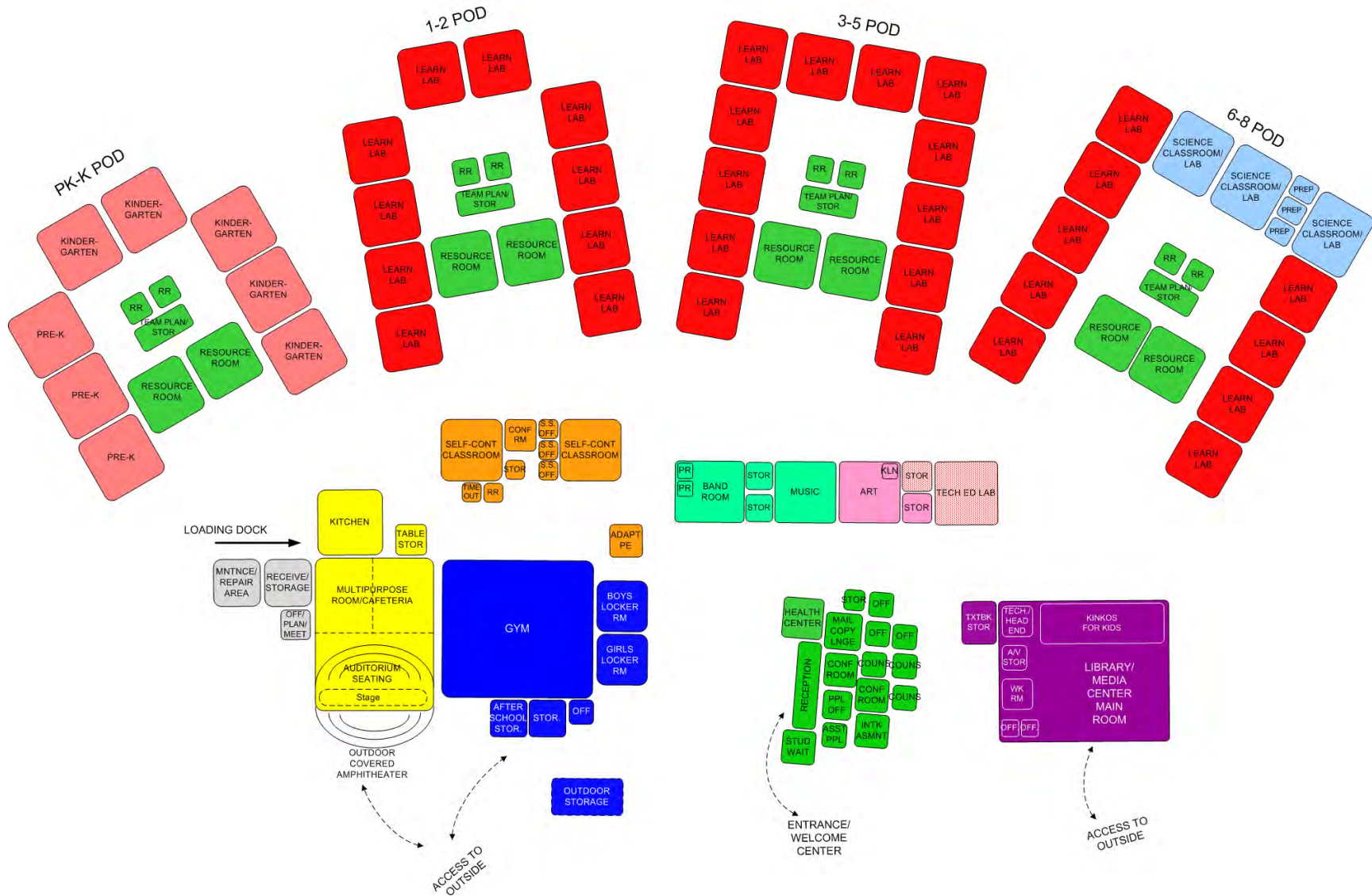
### CAPACITY CALCULATIONS based on 26.5 per classroom]

Regular TS [Teaching Stations]	29	42	55
Students Per TS	26.5	26.5	26.5
<b>Sub Total Regular</b>	<b>768.5</b>	<b>1113</b>	<b>1457.5</b>
Special Needs TS	1	2	3
Students Per TS	11	11	11
<b>Sub Total Special Needs</b>	<b>11</b>	<b>22</b>	<b>33</b>
<b>Total</b>	<b>780</b>	<b>1,135</b>	<b>1,491</b>

Class Size = 26.5

# Students	Total SF	SF per student
780	82,686	106.1
1,135	110,634	97.5
1,491	141,432	94.9

## Overall Building Drawing: 900 Students





## Program Area Space Requirements

### Core Academics Space Requirements

#### PreK-Grade 2 Pods

Space	Pod/Cluster				Pod/Cluster				Pod/Cluster			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
PreK Classroom	2	2	1,350	2,700	3	3	1,350	4,050	4	4	1,350	5,400
Kindergarten Classroom	3	3	1,350	4,050	5	5	1,350	6,750	7	7	1,350	9,450
Learning Lab/Storage		2	200	400		3	200	600		4	200	800
Learning Lab/Classroom	6	6	960	5,760	10	10	960	9,600	13	13	960	12,480
Small Group Room		1	150	150		2	150	300		3	150	450
Team Planning Areas/Faculty Lounge		1	300	300		1	500	500		1	700	700
Resource Room		1	960	960		1	960	960		1	960	960
Restrooms		1	250	250		1	250	250		1	250	250
<b>Sub Total</b>	<b>11</b>			<b>14,570</b>	<b>18</b>			<b>23,010</b>	<b>24</b>			<b>30,490</b>

#### Grades 3-5 Pods

Space	Pod/Cluster				Pod/Cluster				Pod/Cluster			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Learning Lab/Classroom	9	9	960	8,640	12	12	960	11,520	15	15	960	14,400
Small Group Room		3	150	450		3	150	450		3	150	450
Team Planning Areas/Faculty Lounge		1	300	300		1	500	500		1	700	700
Resource Room		1	960	960		2	960	1,920		3	960	2,880
Restrooms		1	250	250		1	250	250		1	250	250
<b>Total</b>	<b>9</b>			<b>10,600</b>	<b>12</b>			<b>14,640</b>	<b>15</b>			<b>18,680</b>

#### Grades 6-8 Pods

Space	Pod/Cluster				Pod/Cluster				Pod/Cluster			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Learning Lab/Classroom	6	6	960	5,760	9	9	960	8,640	12	12	960	11,520
Science Classroom & Storage	3	3	1,200	3,600	3	3	1,200	3,600	4	4	1,200	4,800
Small Group Room		3	150	450		3	150	450		3	150	450
Team Planning Areas/Faculty Lounge		1	300	300		1	500	500		1	700	700
Resource Room		1	960	960		2	960	1,920		3	960	2,880
Restrooms		1	250	250		1	250	250		1	250	250
<b>Total</b>	<b>9</b>			<b>11,320</b>	<b>12</b>			<b>15,360</b>	<b>16</b>			<b>20,600</b>

#### Total Core Academic Area

Total Space for Core Academic Two Tables above Added Together	Proposed Spaces for 600 Students				Proposed Spaces for 900 Students				Proposed Spaces for 1,200 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
PreK-K Learning Lab/Classroom	5	5	1,350	6,750	8	8	1,350	10,800	11	11	1,350	14,850
Learning Lab/Classroom	21	21	960	20,160	31	31	960	29,760	40	40	960	38,400
Science Classroom & Storage	3	3	1,200	3,600	3	3	1,200	3,600	4	4	1,200	4,800
Small Group Room		7	150	1,050		8	150	1,200		9	150	1,350
Team Planning Areas/Faculty Lounge		3	300	900		3	500	1,500		3	700	2,100
Resource Room		3	960	2,880		5	960	4,800		7	960	6,720
Restrooms		3	250	750		3	250	750		3	250	750
<b>Core Academic Sub-Total</b>	<b>29</b>			<b>36,090</b>	<b>42</b>			<b>52,410</b>	<b>55</b>			<b>68,970</b>



## Special Needs Space Requirements

Special Needs Spaces	Proposed Spaces for 600 Students				Proposed Spaces for 900 Students				Proposed Spaces for 1,200 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Self-Contained Classroom [SDC: MS, M, OI] *	1	1	960	960	2	2	960	1,920	3	3	960	2,880
Time-Out Room/Additional Storage		1	100	100		1	100	100		1	100	100
Restroom/Shower		1	200	200		1	200	200		1	200	200
Student Services Offices		2	100	200		3	100	300		4	100	400
Resource/Tutorial Room [RSP, SDC: ED, MM, DHH]	See Core Academic Area				See Core Academic Area				See Core Academic Area			
Conference Room		1	250	250		1	250	250		1	250	250
Storage		1	100	100		1	100	100		1	100	100
Adaptive PE	See PE				See PE				See PE			
<b>Special Needs Sub-Total</b>	<b>1</b>			<b>1,810</b>	<b>2</b>			<b>2,870</b>	<b>3</b>			<b>3,930</b>

\*classrooms divided by moveable walls; can be turned into smaller room

## Media Center Space Requirements

Media Center Spaces	Proposed Spaces for 600 Students				Proposed Spaces for 900 Students				Proposed Spaces for 1,200 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Library/Media Center Main Room		1	1,500	1,500		1	1,500	1,500		1	2,000	2,000
Multi Media Workroom/Kinkos		1	800	800		1	800	800		1	800	800
Media Specialist/Clerk Office		1	200	200		2	150	300		2	150	300
Workroom		1	300	300		1	400	400		1	400	400
Textbook Storage		1	500	500		1	600	600		1	600	600
Telecommunications Room		1	200	200		1	200	200		1	200	200
A/V Storage		1	200	200		1	200	200		1	200	200
<b>Media Center Sub-Total</b>	<b>0</b>			<b>3,700</b>	<b>0</b>			<b>4,000</b>	<b>0</b>			<b>4,500</b>

## Visual Arts Space Requirements

Visual Art Spaces	Proposed Spaces for 600 Students				Proposed Spaces for 900 Students				Proposed Spaces for 1,200 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Art Room	1	1	1,200	1,200	1	1	1,200	1,200	2	2	1,200	2,400
Kiln Room		1	75	75		1	75	75		2	75	150
Storage		1	300	300		1	300	300		2	300	600
<b>Visual Arts Sub-Total</b>	<b>1</b>			<b>1,575</b>	<b>1</b>			<b>1,575</b>	<b>2</b>			<b>3,150</b>

### Music Space Requirements

Music Spaces	Proposed Spaces for 600 Students				Proposed Spaces for 900 Students				Proposed Spaces for 1,200 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	1	1	1,200	1,200
Storage		1	300	300		1	300	300		1	300	300
Band Room					1	1	1,200	1,200	1	1	1,500	1,500
Storage						1	200	200		1	300	300
Practice Rooms						2	100	200		2	100	200
Auditorium	See Food Service Area				See Food Service Area				See Food Service Area			
<b>Music</b>	<b>1</b>			<b>1,500</b>	<b>2</b>			<b>3,100</b>	<b>2</b>			<b>3,500</b>

### Technology Education Space Requirements

Tech Ed Spaces	Proposed Spaces for 600 Students				Proposed Spaces for 900 Students				Proposed Spaces for 1,200 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Tech Ed Lab	1	1	1,200	1,200	1	1	1,200	1,200	2	2	1,200	2,400
Storage		1	200	200		1	200	200		2	200	400
<b>Tech Ed Sub-Total</b>	<b>1</b>			<b>1,400</b>	<b>1</b>			<b>1,400</b>	<b>2</b>			<b>2,800</b>

### Physical Education Space Requirements

Physical Education Spaces	Proposed Spaces for 600 Students				Proposed Spaces for 900 Students				Proposed Spaces for 1,200 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Gym	1	1	7,500	7,500	2	1	8,500	8,500	2	1	8,500	8,500
Storage		1	300	300		1	300	300		1	300	300
Shower/Locker Room		2	1,000	2,000		2	1,000	2,000		2	1,200	2,400
Fitness Lab/Classroom									1	1	1,000	1,000
Adaptive PE		1	400	400		1	400	400		1	400	400
After School Storage		1	300	300		1	300	300		1	300	300
Outdoor Athletic Equipment Storage		1	750	750		1	1,000	1,000		1	1,000	1,000
<b>Physical Education Sub-Total</b>	<b>1</b>			<b>11,250</b>	<b>2</b>			<b>12,500</b>	<b>3</b>			<b>13,900</b>



## Administration Space Requirements

Welcome Center Spaces	Proposed Spaces for 600 Students				Proposed Spaces for 900 Students				Proposed Spaces for 1,200 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
<b>Welcome Center/Admin</b>												
Reception Area		1	500	500		1	500	500		1	500	500
Secretarial Area (Combined w/ reception)		0	80	0		1	120	120		0	80	0
Student Waiting Area		1	250	250		1	250	250		1	250	250
Principal's Office		1	200	200		1	200	200		1	200	200
Asst. Principal's Office		1	150	150		1	150	150				
Conference Room		2	300	600		2	300	600		1	300	300
Counselor's Office		2	120	240		3	120	360				
Intake/Pre-Assessment Room		1	250	250		1	250	250		1	250	250
Mail/Work/Copy/Lounge Room		1	400	400		1	600	600		1	800	800
Administrative Storage		1	150	150		1	150	150		1	150	150
Health Clinic		1	450	450		1	450	450		1	450	450
Additional Offices		2	120	240		3	120	360				
<b>Sub Total</b>	<b>0</b>			<b>3,430</b>	<b>0</b>			<b>3,990</b>	<b>0</b>			<b>2,900</b>
<b>House Plan- Decentralized Administration</b>												
Secretarial Area										1	80	80
Asst. Principal's Office										1	150	150
Conference Room										1	200	200
Counselor's Office										1	120	120
Storage/Work Area										1	150	150
Additional Offices										1	120	120
<b>Sub Total</b>	<b>0</b>			<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>			<b>820</b>
Number of House Decentralized Office Areas				0				0				3
<b>Sub Total Decentralized/Houses</b>				<b>0</b>				<b>0</b>				<b>2,460</b>
<b>Total Administration</b>				<b>3,430</b>				<b>3,990</b>				<b>5,360</b>





## Food Service Space Requirements

Cafeteria/Food Service Spaces	Proposed Spaces for 600 Students				Proposed Spaces for 900 Students				Proposed Spaces for 1,200 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Kitchen, warming/serving only												
Preparation Area												
Serving Area												
Dry Food Storage												
Cooler/Freezer		1	2,000	2,000		1	2,500	2,500		1	2,500	2,500
Ware Washing												
Kitchen Mgr Office												
Restroom												
Lockers												
Multipurpose Room (with dividers) *		1	2,000	2,000		1	3,000	3,000		1	3,500	3,500
Table & Chair Storage		1	250	250		1	250	250		1	250	250
Stage Area		1	600	600		1	600	600		1	800	800
Auditorium Seating		1	1,500	1,500		1	2,000	2,000		1	2,500	2,500
Exterior Patio/Covered Eating Area		1	2,000	Outside		1	3,000	Outside		1	3,000	Outside
<b>Food Service Sub-Total</b>	<b>0</b>			<b>6,350</b>	<b>0</b>			<b>8,350</b>	<b>0</b>			<b>9,550</b>

\* Suggest a layout which there is divider wall between the auditorium and multipurpose room to allow for more seating in the auditorium

## Custodial / Maintenance Space Requirements

Custodial Spaces	Proposed Spaces for 600 Students				Proposed Spaces for 900 Students				Proposed Spaces for 1,200 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Receiving/Storage		1	500	500		1	500	500		1	500	500
Maintenance/Repair Area		1	500	500		1	500	500		1	500	500
Office/Planning/Meeting Area		1	200	200		1	200	200		1	200	200
Custodial Hopper Room [throughout school]		6	100	600		8	100	800		10	100	1,000
Mechanical Rooms & Restrooms		See Building Service in Sum Chart				See Building Service in Sum Chart				See Building Service in Sum Chart		
Loading Dock			outside				outside				outside	
<b>Custodial Sub-Total</b>	<b>0</b>			<b>1,800</b>	<b>0</b>			<b>2,000</b>	<b>0</b>			<b>2,200</b>

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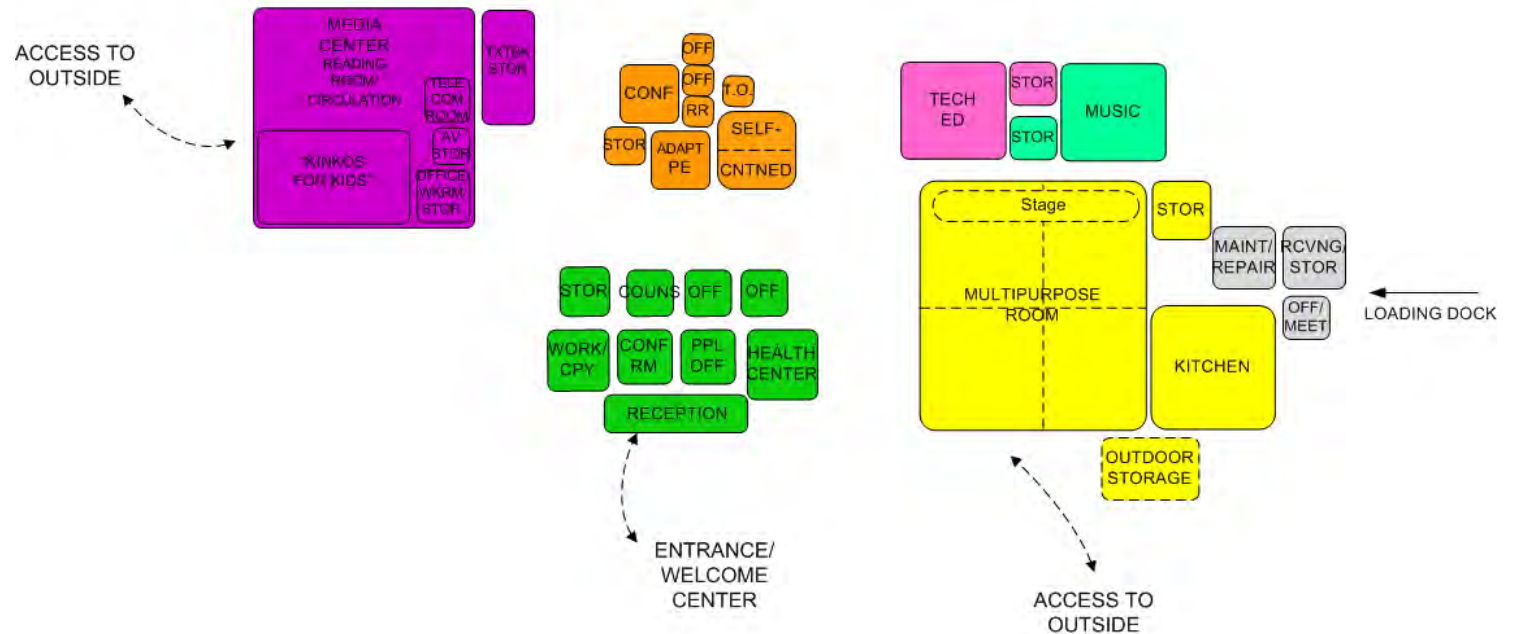
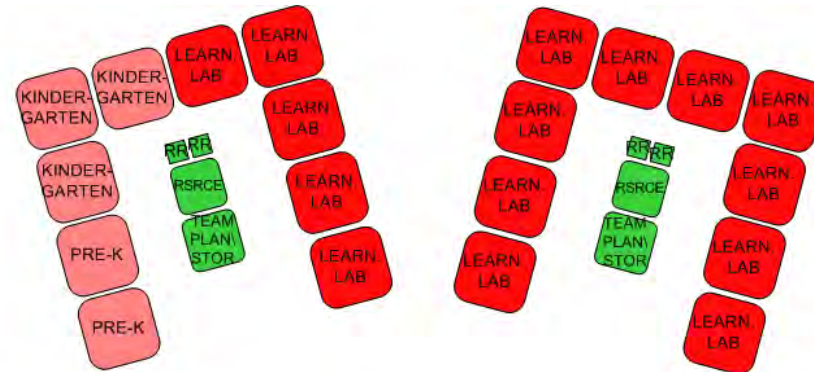
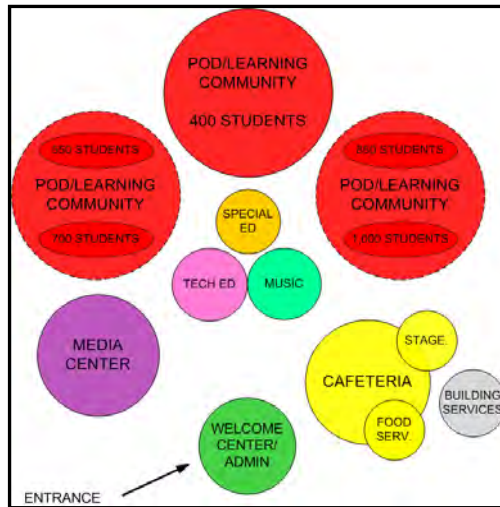
## Total Building Space Requirements

The following table lists the total teaching spaces and square footage from the entire building.

Elementary School Spaces	Suggested Spaces for 400 Students		Suggested Spaces for 550 Students		Suggested Spaces for 700 Students		Suggested Spaces for 850 Students		Suggested Spaces for 1,000 Students	
	TS*	Total SF	TS	Total SF	TS	Total SF	TS	Total SF	TS	Total SF
Core Academics	20	23,650	26	31,650	33	41,400	39	49,200	46	58,350
Special Needs	1	2,130	2	3,310	3	4,490	4	5,670	5	6,850
Media Center	0	3,250	0	3,250	0	3,750	0	3,850	0	4,350
Visual Art/Wet Lab	0	0	1	1,200	1	1,200	1	1,200	2	2,400
Music	1	1,400	1	1,400	1	1,400	2	2,600	2	2,600
Tech Ed/Computer	1	1,200	1	1,200	1	1,200	2	2,400	2	2,400
Welcome Center	0	2,210	0	2,580	0	3,320	0	3,440	0	3,560
Food Service	0	4,800	0	7,050	0	7,050	0	8,100	0	8,100
Custodial	0	1,400	0	1,600	0	1,800	0	2,200	0	2,400
<b>Sub Total</b>		<b>40,040</b>		<b>53,240</b>		<b>65,610</b>		<b>78,660</b>		<b>91,010</b>
Building Services, Circulation, etc.	20.0%	8,008	20.0%	10,648	20.0%	13,122	20.0%	15,732	20.0%	18,202
<b>Total</b>	<b>23</b>	<b>48,048</b>	<b>31</b>	<b>63,888</b>	<b>39</b>	<b>78,732</b>	<b>48</b>	<b>94,392</b>	<b>57</b>	<b>109,212</b>

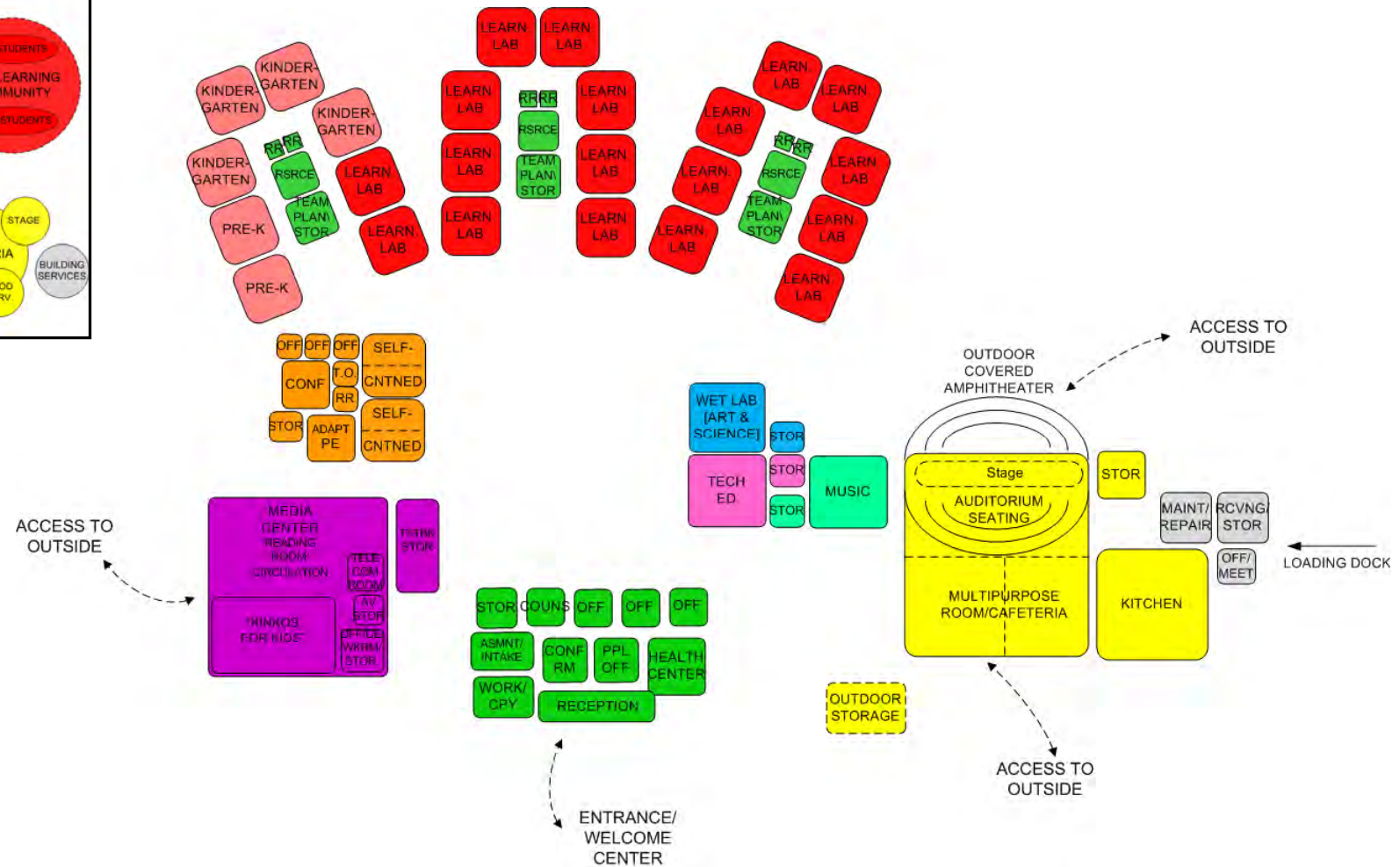
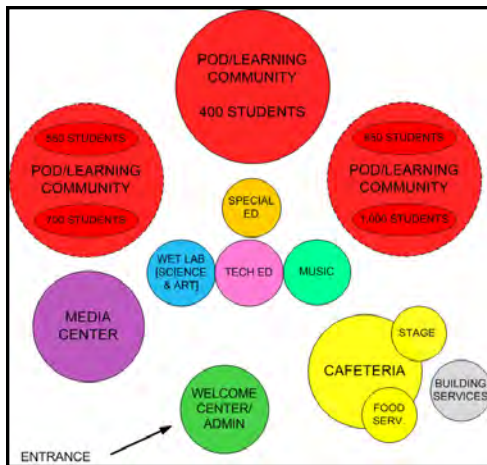
\*Teaching Station

## Overall Building Drawing: 400 Students

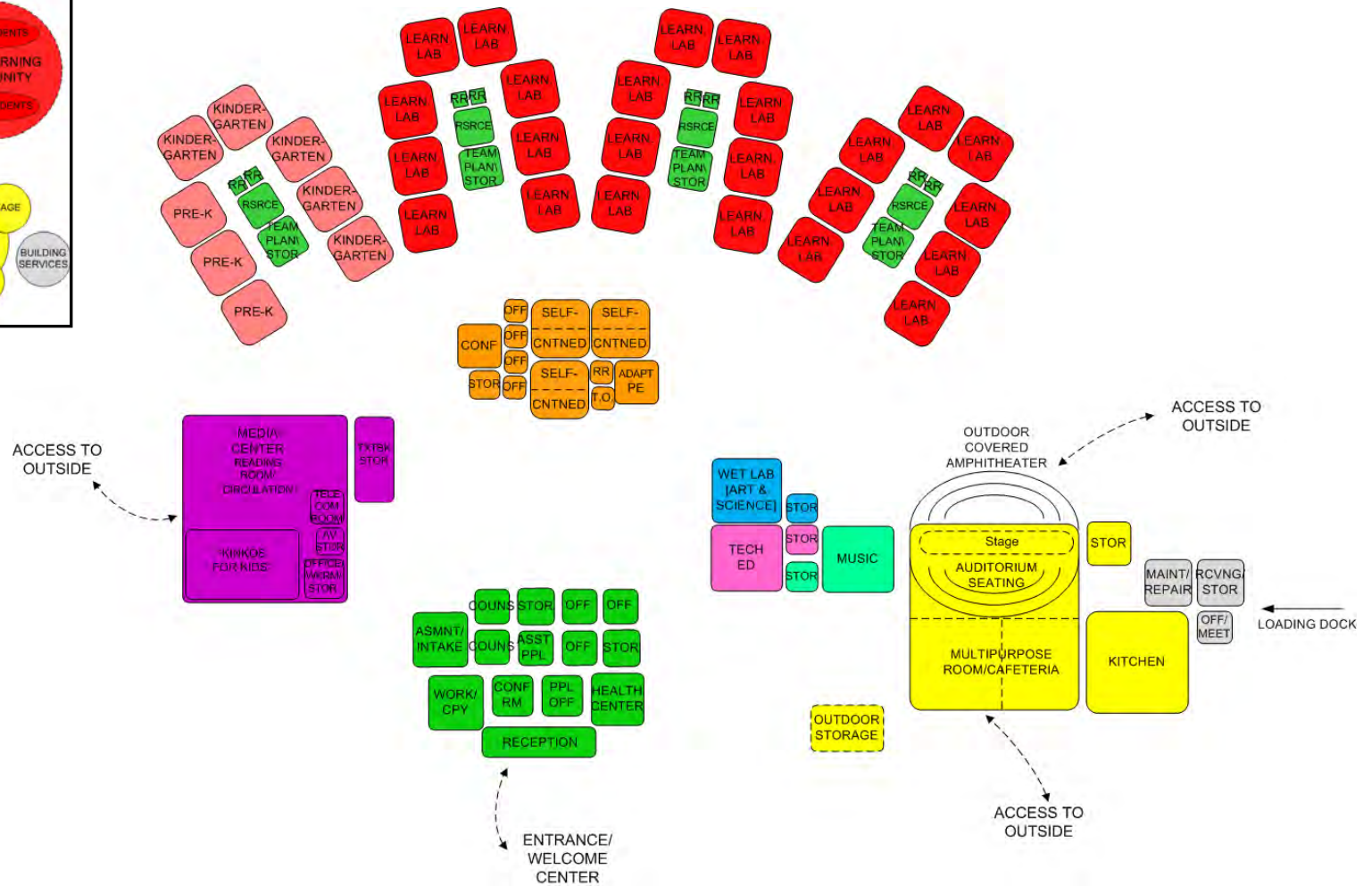
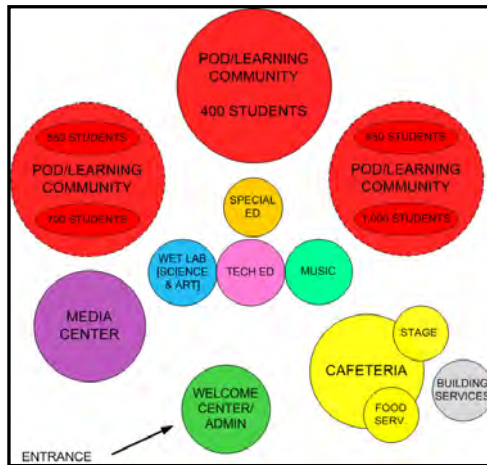




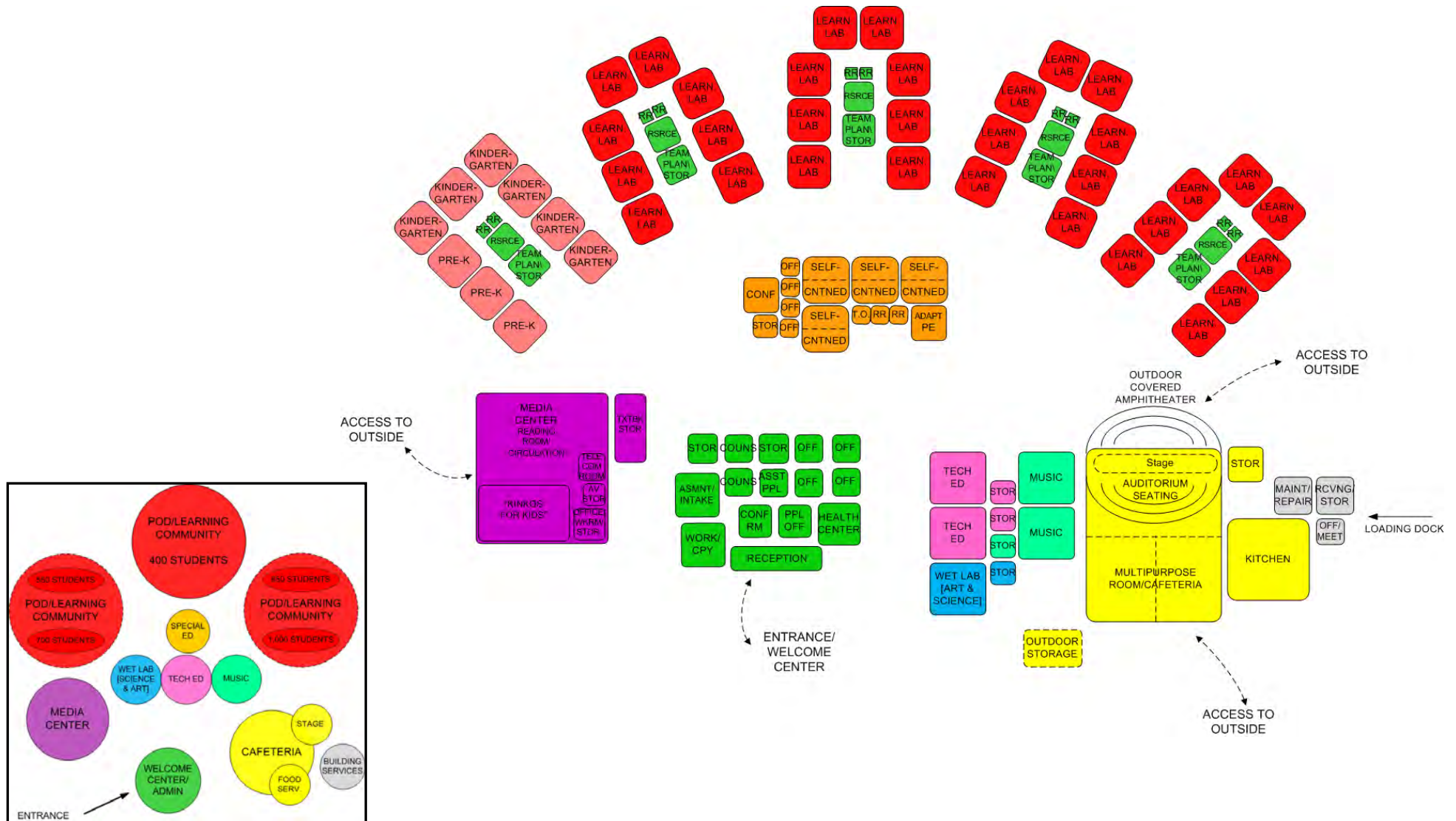
## Overall Building Drawing: 550 Students



## Overall Building Drawing: 700 Students

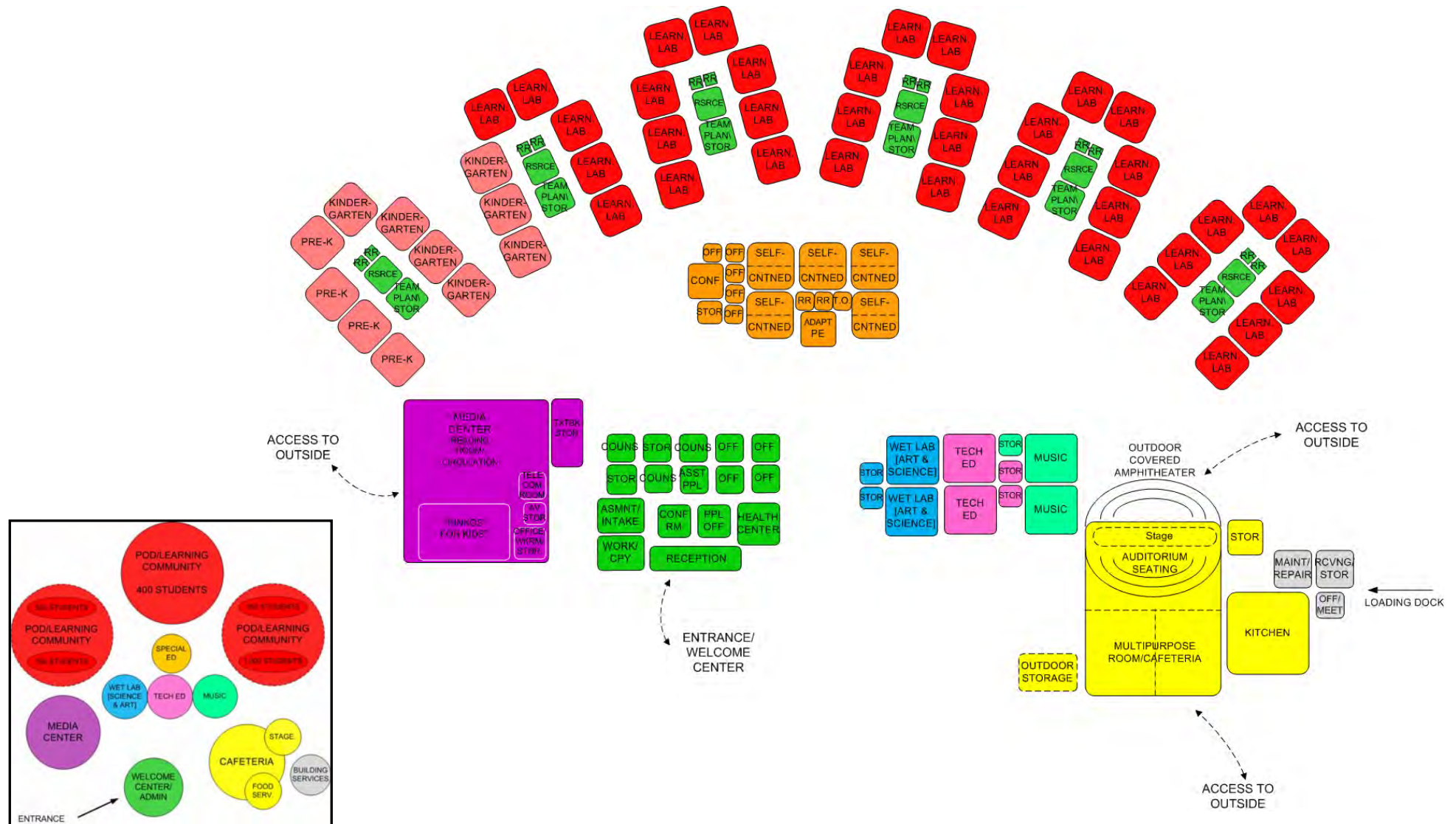


## Overall Building Drawing: 850 Students





## Overall Building Drawing: 1,000 Students





## Program Area Space Requirements

### Core Academics Space Requirements

#### PreK-Kindergarten Pod/Cluster

Space	Pod/Cluster				Pod/Cluster				Pod/Cluster				Pod/Cluster				Pod/Cluster			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Pre-Kindergarten Learning Lab/Classroom w/ Toilet	2	2	1,350	2,700	2	2	1,350	2,700	3	3	1,350	4,050	3	3	1,350	4,050	4	4	1,350	5,400
Kindergarten Learning Lab/Classroom w/ Toilet	3	3	1,350	4,050	4	4	1,350	5,400	5	5	1,350	6,750	6	6	1,350	8,100	7	7	1,350	9,450
<b>Sub Total</b>	<b>5</b>			<b>6,750</b>	<b>6</b>			<b>8,100</b>	<b>8</b>			<b>10,800</b>	<b>9</b>			<b>12,150</b>	<b>11</b>			<b>14,850</b>

#### Core Academic Grade Level Cluster/House Plan: Spaces per Pod/Cluster

Space	Pod/Cluster				Pod/Cluster				Pod/Cluster				Pod/Cluster				Pod/Cluster			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Learning Lab/Classroom	3	3	960	2,880	4	4	960	3,840	5	5	960	4,800	6	6	960	5,760	7	7	960	6,720
<b>Sub Total</b>	<b>3</b>			<b>2,880</b>	<b>4</b>			<b>3,840</b>	<b>5</b>			<b>4,800</b>	<b>6</b>			<b>5,760</b>	<b>7</b>			<b>6,720</b>
<b>Number of Pods/Clusters</b>				<b>5</b>				<b>5</b>				<b>5</b>				<b>5</b>				<b>5</b>
<b>Total</b>	<b>15</b>			<b>14,400</b>	<b>20</b>			<b>19,200</b>	<b>25</b>			<b>24,000</b>	<b>30</b>			<b>28,800</b>	<b>35</b>			<b>33,600</b>

#### Shared Between Each Grade Level Pod/Cluster

Space	Pod/Cluster				Pod/Cluster				Pod/Cluster				Pod/Cluster				Pod/Cluster			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Team Planning Areas		1	300	300		1	500	500		1	700	700		1	700	700		1	700	700
Resource Room [RSP, SDC: ED, MM, DHH]		1	450	450		1	450	450		1	450	450		1	450	450		1	450	450
Restrooms		2	250	500		2	250	500		2	250	500		2	250	500		2	250	500
<b>Sub Total</b>				<b>1,250</b>				<b>1,450</b>				<b>1,650</b>				<b>1,650</b>				<b>1,650</b>
<b>Number of Pods/Clusters</b>				<b>2</b>				<b>3</b>				<b>4</b>				<b>5</b>				<b>6</b>
<b>Total</b>				<b>2,500</b>				<b>4,350</b>				<b>6,600</b>				<b>8,250</b>				<b>9,900</b>

#### Total Core Academic Area

Total Space for Core Academic Tables Above Added Together	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
PreK-K Learning Lab/Classroom w/ Toilet	5	5	1,350	6,750	6	6	1,350	8,100	8	8	1,350	10,800	9	9	1,350	12,150	11	11	1,350	14,850
Learning Lab/Classroom	15	15	960	14,400	20	20	960	19,200	25	25	960	24,000	30	30	960	28,800	35	35	960	33,600
Team Planning Areas & Storage		2	300	600		3	500	1,500		4	700	2,800		5	700	3,500		6	700	4,200
Resource Room [RSP, SDC: ED, MM, DHH]		2	450	900		3	450	1,350		4	450	1,800		5	450	2,250		6	450	2,700
Restrooms		4	250	1,000		6	250	1,500		8	250	2,000		10	250	2,500		12	250	3,000
<b>Core Academic Sub-Total</b>	<b>20</b>			<b>23,650</b>	<b>26</b>			<b>31,650</b>	<b>33</b>			<b>41,400</b>	<b>39</b>			<b>49,200</b>	<b>46</b>			<b>58,350</b>



## Core Academics Space Requirements [continued]

**Suggested Alternate: Uniform size Pods/Clusters**

Each Pod is basically the same, the only variation would be the number of Pods based on Enrollment

Sample Pod	Pod/Cluster			
	TS	Quantity	SF	Total
Learning Lab/Classroom	4	4	960	3,840
<b>Sub Total</b>	<b>4</b>			<b>3,840</b>
<b>Number of Pods</b>				<b>2</b>
<b>Total for 2 Pods</b>	<b>8</b>			<b>7,680</b>
Each Pod would support approx 90 Students				
<b>Shared Between Each Grade Level Pod/Cluster</b>				
Sample Area Shared Between 2 Pods	Pod/Cluster			
	TS	Quantity	SF	Total
Team Planning Areas & Storage		1	500	500
Resource Room [RSP, SDC: ED, MM, DHH]		1	450	450
Restrooms		2	250	500
<b>Sub Total</b>				<b>950</b>
Total Space for 1 Cluster [two pods]	Suggested Spaces			
	TS	Quantity	SF	Total
Learning Lab/Classroom	8	8	960	7,680
Team Planning Areas & Storage		1	500	500
Resource Room [RSP, SDC: ED, MM, DHH]		1	450	450
Rest Rooms		2	250	500
<b>Cluster Total</b>	<b>8</b>			<b>8,630</b>
Each Cluster would support approximately 180 students				

## Special Needs Space Requirements

Special Needs Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Self-Contained Classroom* [SDC: MS, M, OI]	1	1	1,080	1,080	2	2	1,080	2,160	3	3	1,080	3,240	4	4	1,080	4,320	5	5	1,080	5,400
Restroom/Shower		1	100	100		1	100	100		1	100	100		2	100	200		2	100	200
Time-Out Room/Additional Storage		1	100	100		1	100	100		1	100	100		1	100	100		1	100	100
Student Services Offices		2	100	200		3	100	300		4	100	400		4	100	400		5	100	500
Resource/Tutorial Room [RSP, SDC: ED, MM, DHH]	See Core Academic Area				See Core Academic Area				See Core Academic Area				See Core Academic Area				See Core Academic Area			
Conference Room		1	250	250		1	250	250		1	250	250		1	250	250		1	250	250
Storage		1	100	100		1	100	100		1	100	100		1	100	100		1	100	100
Adaptive PE		1	300	300		1	300	300		1	300	300		1	300	300		1	300	300
<b>Special Needs Sub-Total</b>	<b>1</b>			<b>2,130</b>	<b>2</b>			<b>3,310</b>	<b>3</b>			<b>4,490</b>	<b>4</b>			<b>5,670</b>	<b>5</b>			<b>6,850</b>

\*classrooms divided by moveable walls; can be turned into larger room so two rooms can be combined





## Media Center Space Requirements

Media Center Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Library/Media Center Main Room		1	1,500	1,500		1	1,500	1,500		1	2,000	2,000		1	2,000	2,000		1	2,500	2,500
Multi-Media Workroom/"Kinko's for Kids"		1	750	750		1	750	750		1	750	750		1	750	750		1	750	750
Media Specialist/Clerk Office		1	200	200		1	200	200		1	200	200		1	300	300		1	300	300
Textbook Storage		1	400	400		1	400	400		1	400	400		1	400	400		1	400	400
Telecommunications Room		1	200	200		1	200	200		1	200	200		1	200	200		1	200	200
A/V Storage		1	200	200		1	200	200		1	200	200		1	200	200		1	200	200
<b>Media Center Sub-Total</b>	<b>0</b>			<b>3,250</b>	<b>0</b>			<b>3,250</b>	<b>0</b>			<b>3,750</b>	<b>0</b>			<b>3,850</b>	<b>0</b>			<b>4,350</b>

## Wet Lab [Science & Art] Space Requirements

Wet Lab[Art & Science] Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Wet Lab [Art & Science]	0	0	1,100	0	1	1	1,100	1,100	1	1	1,100	1,100	1	1	1,100	1,100	2	2	1,100	2,200
Storage		0	100	0		1	100	100		1	100	100		1	100	100		2	100	200
<b>Visual Art/Wet Lab Sub-Total</b>	<b>0</b>			<b>0</b>	<b>1</b>			<b>1,200</b>	<b>1</b>			<b>1,200</b>	<b>1</b>			<b>1,200</b>	<b>2</b>			<b>2,400</b>

## Music Space Requirements

Music Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	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	1	1	1,200	1,200	2	2	1,200	2,400	2	2	1,200	2,400
Storage		1	200	200		1	200	200		1	200	200		1	200	200		1	200	200
Auditorium	See Food Service Area				See Food Service Area				See Food Service Area				See Food Service Area				See Food Service Area			
<b>Music</b>	<b>1</b>			<b>1,400</b>	<b>1</b>			<b>1,400</b>	<b>1</b>			<b>1,400</b>	<b>2</b>			<b>2,600</b>	<b>2</b>			<b>2,600</b>

## Technology Education Space Requirements

Tech Ed/Computer Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Tech Ed Lab	1	1	1,100	1,100	1	1	1,100	1,100	1	1	1,100	1,100	2	2	1,100	2,200	2	2	1,100	2,200
Storage		1	100	100		1	100	100		1	100	100		2	100	200		2	100	200
<b>Tech Ed Sub-Total</b>	<b>1</b>			<b>1,200</b>	<b>1</b>			<b>1,200</b>	<b>1</b>			<b>1,200</b>	<b>2</b>			<b>2,400</b>	<b>2</b>			<b>2,400</b>



## Administration Space Requirements

Welcome Center Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
<b>Welcome Center/Admin</b>																				
Reception Area		1	500	500		1	500	500		1	700	700		1	700	700		1	700	700
Secretarial Area (Combined w/ reception)		0	80	0		0	80	0		0	80	0		0	80	0		0	80	0
Principal's Office		1	200	200		1	200	200		1	200	200		1	200	200		1	200	200
Asst. Principal's Office		0	120	0		0	120	0		1	120	120		1	120	120		1	120	120
Conference Room		1	300	300		1	300	300		1	300	300		1	300	300		1	300	300
Counselor's Office		1	120	120		1	120	120		2	120	240		2	120	240		3	120	360
Intake/Pre-Assessment Room		0	250	0		1	250	250		1	250	250		1	250	250		1	250	250
Mail/Work/Copy Room		1	250	250		1	250	250		1	400	400		1	400	400		1	400	400
Administrative Storage		1	150	150		1	150	150		2	150	300		2	150	300		2	150	300
Health Clinic		1	450	450		1	450	450		1	450	450		1	450	450		1	450	450
Additional Offices		2	120	240		3	120	360		3	120	360		4	120	480		4	120	480
<b>Total</b>	<b>0</b>			<b>2,210</b>	<b>0</b>			<b>2,580</b>	<b>0</b>			<b>3,320</b>	<b>0</b>			<b>3,440</b>	<b>0</b>			<b>3,560</b>

## Food Service Space Requirements

Cafeteria/Food Service Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Kitchen, warming/serving only																				
Preparation Area																				
Serving Area																				
Dry Food Storage																				
Cooler/Freezer																				
Ware Washing																				
Kitchen Mgr Office																				
Restroom																				
Lockers																				
Multipurpose Room (with dividers)*		1	2,000	2,000		1	2,000	2,000		1	2,000	2,000		1	2,500	2,500		1	2,500	2,500
Table & Chair Storage		1	200	200		1	200	200		1	200	200		1	250	250		1	250	250
Stage Area		1	600	600		1	600	600		1	600	600		1	600	600		1	600	600
Auditorium Seating						1	1,500	1,500		1	1,500	1,500		1	1,500	1,500		1	1,500	1,500
Exterior Patio/Covered Eating Area		1	2,000	Outside		1	2,000	Outside		1	2,000	Outside		1	2,000	Outside		1	2,000	Outside
Outdoor Athletic Equipment Storage		1	500	500		1	750	750		1	750	750		1	750	750		1	750	750
<b>Food Service Sub-Total</b>	<b>0</b>			<b>4,800</b>	<b>0</b>			<b>7,050</b>	<b>0</b>			<b>7,050</b>	<b>0</b>			<b>8,100</b>	<b>0</b>			<b>8,100</b>

\* Suggest a layout which there is divider wall between the auditorium and multipurpose room

## Custodial / Maintenance Space Requirements

Custodial Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Receiving/Storage		1	500	500		1	500	500		1	500	500		1	700	700		1	700	700
Maintenance/Repair Area		1	500	500		1	500	500		1	500	500		1	500	500		1	500	500
Office/Planning/Meeting Area		1	200	200		1	200	200		1	200	200		1	200	200		1	200	200
Custodial Hopper Room [throughout school]		2	100	200		4	100	400		6	100	600		8	100	800		10	100	1,000
Mechanical Rooms & Restrooms		See Building Service in Sum Chart				See Building Service in Sum Chart				See Building Service in Sum Chart				See Building Service in Sum Chart				See Building Service in Sum Chart		
Loading Dock			outside				outside				outside				outside				outside	
<b>Custodial Sub-Total</b>	<b>0</b>			<b>1,400</b>	<b>0</b>			<b>1,600</b>	<b>0</b>			<b>1,800</b>	<b>0</b>			<b>2,200</b>	<b>0</b>			<b>2,400</b>

## Quantity Standards for Typical Spaces

The following tables list standards for typical spaces in an elementary school building. These tables give standard quantities for typical offices, conference rooms, mail/work/copy rooms, as well as typical learning labs/classrooms and kindergarten and pre-kindergarten rooms. 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, ELEMENTARY

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY	MECHANICAL	QTY
Student work tables, 2 students each	13	Air-conditioning	
Student chairs	26	Operable windows	
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		
Elevated pull down screen	1		
Maximize bulletin board surfaces			
TECHNOLOGY	QTY	ELECTRICAL	QTY
Voice, data, video outlets at teacher desk	1	Duplex outlet	1 per wall
6 data drops with double, triple, or quad CNOs (Communications Network Outlets)	6	Quad outlet @ ea. data port	1
2 data drops at teacher desk area	2	Front row of light, dimmable	
Data drop dedicated to wireless, high on wall	1		
Wireless Internet access	Yes		
TECHNOLOGY	QTY	PLUMBING	QTY
Analog telephone	1	Hot & cold water for sink	1
Intercom	Yes		
Smartboard w/ integral LCD projector	1		
Audio Enhancement	1 system		
Laptop computers with carts, shared	26		

### STANDARDS FOR TYPICAL KINDERGARTEN, PRE-KINDER, SELF-CONTAINED

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY	MECHANICAL	QTY
Student work tables, 24 students each	13	Air-conditioning	
Student chairs	26	Operable windows	
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		
Pull down screen	1		
Elevated pull down screen	1		
Maximize bulletin board surfaces			
TECHNOLOGY	QTY	ELECTRICAL	QTY
Voice, data, video outlets at teacher desk	1	Duplex outlet	1 per wall
6 data drops with double, triple, or quad CNOs (Communications Network Outlets)	6	Quad outlet @ ea. data port	1
2 data drops at teacher desk area	2	Front row of light, dimmable	
Data drop dedicated to wireless, high on wall	1		
Wireless Internet access	Yes		
TECHNOLOGY	QTY	PLUMBING	QTY
Analog telephone	1	Hot & cold water for sink	1
Intercom	Yes	Drinking fountain	1
Smartboard w/ integral LCD projector	1	Restroom in each classroom	1
Audio Enhancement	1 system		
Laptop computers with carts, shared	K:26; PK: 16		



## Core Academics Introduction

It is the goal of the Core Academic Area to provide opportunities to students to foster mastery of basic skills in reading, writing, mathematics, science, citizenship, health, technology, and other content areas; to experience and enhance their awareness and understanding of multi-cultural values, beliefs, and other aspects of society; and to become involved in inquiry-based learning expressed by hands-on, minds-on, experiences.

The Core Academic Area is composed of spaces associated with typical academic content areas such as English, Mathematics, World Language, Science, and Social Studies. Spaces include classrooms, teacher preparation areas, restrooms, and material storage.

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

The Core Academic Area concept will 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, adaptable to change and supportive of different program delivery and organizational patterns including adequate space to support the work of teams and production of student work, and to encourage 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

**English Goals:** To accommodate the special needs and abilities of all students, the English program will provide an interesting and challenging interdisciplinary approach to:

- Lifelong reading
- Oral communication skills
- Written competency

**Mathematics Goals:** The goal of the math curriculum is to ensure that all students will:

- Learn to use technology efficiently and effectively
- Learn beginning problem solving and critical thinking skills
- Incorporate teamwork skills
- Communicate basic math concepts
- Learn to relate basic math concepts to real world situations

**Science Goals:** The goal of the science curriculum is to ensure that all students:

- Have a concern for their environment
- Learn problem-solving skills
- Learn through hands-on experiments, inquiry, observations and comparisons

**Social Studies Goals:** The goal of the social studies curriculum is to ensure that all students:

- Have a concern for their community
- Will have a multi-cultural awareness

- Begin to learn critical thinking skills

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

- Writing/composing
- Reading
- 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



## Space Requirements

The chart below lays out each space in the Core Academic area for each size school.

### PreK-Kindergarten Pod/Cluster

Space	Pod/Cluster				Pod/Cluster				Pod/Cluster				Pod/Cluster				Pod/Cluster			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Pre-Kindergarten Learning Lab/Classroom w/ Toilet	2	2	1,350	2,700	2	2	1,350	2,700	3	3	1,350	4,050	3	3	1,350	4,050	4	4	1,350	5,400
Kindergarten Learning Lab/Classroom w/ Toilet	3	3	1,350	4,050	4	4	1,350	5,400	5	5	1,350	6,750	6	6	1,350	8,100	7	7	1,350	9,450
<b>Sub Total</b>	<b>5</b>			<b>6,750</b>	<b>6</b>			<b>8,100</b>	<b>8</b>			<b>10,800</b>	<b>9</b>			<b>12,150</b>	<b>11</b>			<b>14,850</b>

### Core Academic Grade Level Cluster/House Plan: Spaces per Pod/Cluster

Space	Pod/Cluster				Pod/Cluster				Pod/Cluster				Pod/Cluster				Pod/Cluster			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Learning Lab/Classroom	3	3	960	2,880	4	4	960	3,840	5	5	960	4,800	6	6	960	5,760	7	7	960	6,720
<b>Sub Total</b>	<b>3</b>			<b>2,880</b>	<b>4</b>			<b>3,840</b>	<b>5</b>			<b>4,800</b>	<b>6</b>			<b>5,760</b>	<b>7</b>			<b>6,720</b>
<b>Number of Pods/Clusters</b>				<b>5</b>				<b>5</b>				<b>5</b>				<b>5</b>				<b>5</b>
<b>Total</b>	<b>15</b>			<b>14,400</b>	<b>20</b>			<b>19,200</b>	<b>25</b>			<b>24,000</b>	<b>30</b>			<b>28,800</b>	<b>35</b>			<b>33,600</b>

### Shared Between Each Grade Level Pod/Cluster

Space	Pod/Cluster				Pod/Cluster				Pod/Cluster				Pod/Cluster				Pod/Cluster			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Team Planning Areas		1	300	300		1	500	500		1	700	700		1	700	700		1	700	700
Resource Room [RSP, SDC: ED, MM, DHH]		1	450	450		1	450	450		1	450	450		1	450	450		1	450	450
Restrooms		2	250	500		2	250	500		2	250	500		2	250	500		2	250	500
<b>Sub Total</b>				<b>1,250</b>				<b>1,450</b>				<b>1,650</b>				<b>1,650</b>				<b>1,650</b>
<b>Number of Pods/Clusters</b>				<b>2</b>				<b>3</b>				<b>4</b>				<b>5</b>				<b>6</b>
<b>Total</b>				<b>2,500</b>				<b>4,350</b>				<b>6,600</b>				<b>8,250</b>				<b>9,900</b>

### Total Core Academic Area

Total Space for Core Academic Tables Above Added Together	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
PreK-K Learning Lab/Classroom w/ Toilet	5	5	1,350	6,750	6	6	1,350	8,100	8	8	1,350	10,800	9	9	1,350	12,150	11	11	1,350	14,850
Learning Lab/Classroom	15	15	960	14,400	20	20	960	19,200	25	25	960	24,000	30	30	960	28,800	35	35	960	33,600
Team Planning Areas & Storage		2	300	600		3	500	1,500		4	700	2,800		5	700	3,500		6	700	4,200
Resource Room [RSP, SDC: ED, MM, DHH]		2	450	900		3	450	1,350		4	450	1,800		5	450	2,250		6	450	2,700
Restrooms		4	250	1,000		6	250	1,500		8	250	2,000		10	250	2,500		12	250	3,000
<b>Core Academic Sub-Total</b>	<b>20</b>			<b>23,650</b>	<b>26</b>			<b>31,650</b>	<b>33</b>			<b>41,400</b>	<b>39</b>			<b>49,200</b>	<b>46</b>			<b>58,350</b>





## Core Academics Space Requirements [continued]

### Suggested Alternate: Uniform size Pods/Clusters

Each Pod is basically the same, the only variation would be the number of Pods based on Enrollment

Sample Pod	Pod/Cluster			
	TS	Quantity	SF	Total
Learning Lab/Classroom	4	4	960	3,840
<b>Sub Total</b>	<b>4</b>			<b>3,840</b>
<b>Number of Pods</b>				<b>2</b>
<b>Total for 2 Pods</b>	<b>8</b>			<b>7,680</b>

Each Pod would support approx 90 Students

### Shared Between Each Grade Level Pod/Cluster

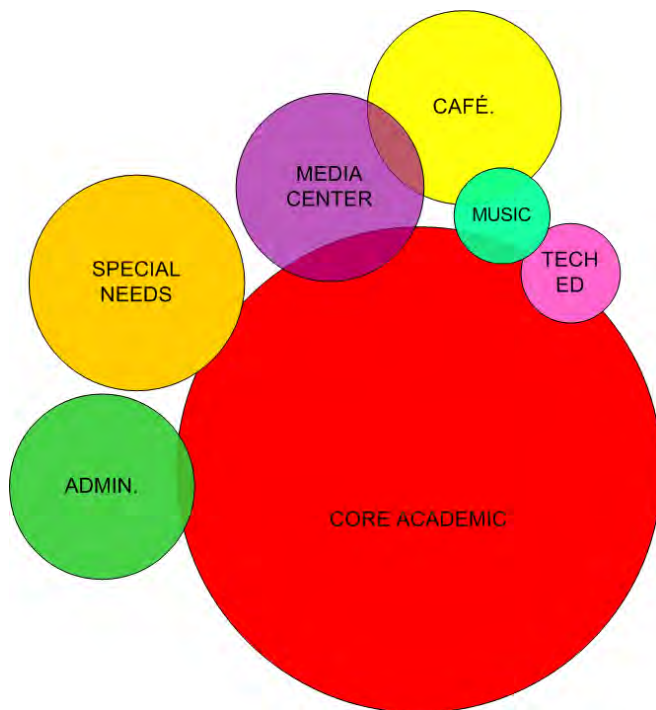
Sample Area Shared Between 2 Pods	Pod/Cluster			
	TS	Quantity	SF	Total
Team Planning Areas & Storage		1	500	500
Resource Room [RSP, SDC: ED, MM, DHH]		1	450	450
Restrooms		2	250	500
<b>Sub Total</b>				<b>950</b>

Total Space for 1 Cluster [two pods]	Suggested Spaces			
	TS	Quantity	SF	Total
Learning Lab/Classroom	8	8	960	7,680
Team Planning Areas & Storage		1	500	500
Resource Room [RSP, SDC: ED, MM, DHH]		1	450	450
Rest Rooms		2	250	500
<b>Cluster Total</b>	<b>8</b>			<b>8,630</b>

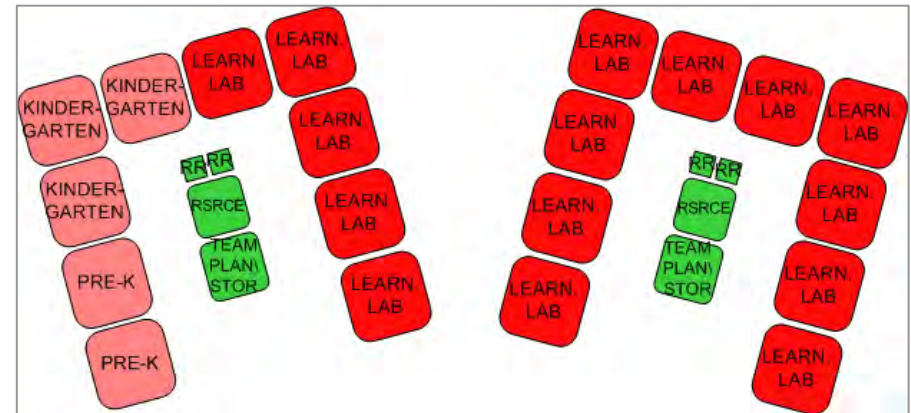
Each Cluster would support approximately 180 students

## Spatial Relationships

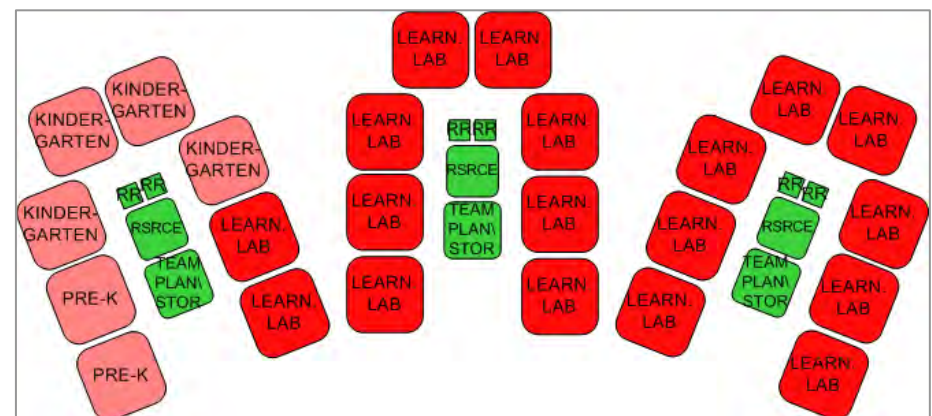
The Core Academic Program Area should be located adjacent to all other Program Areas, specifically, Special Needs, the Media Center, Physical Education, and Visual Arts. Drawings are shown for each size school.



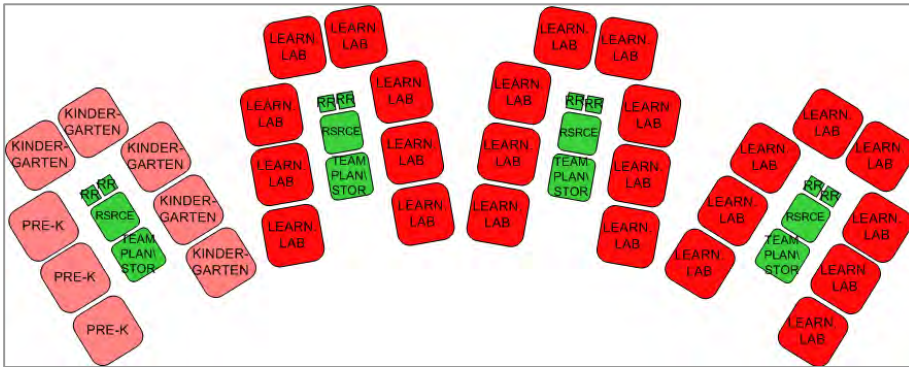
### 400 Student School



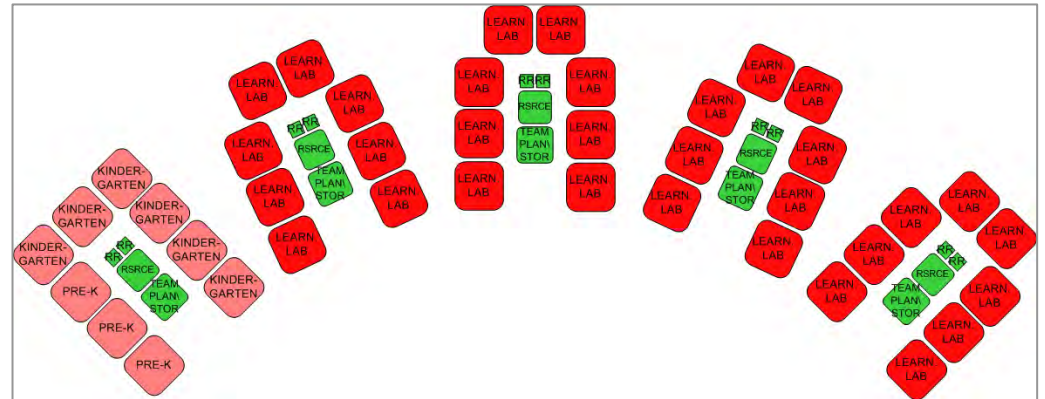
### 550 Student School



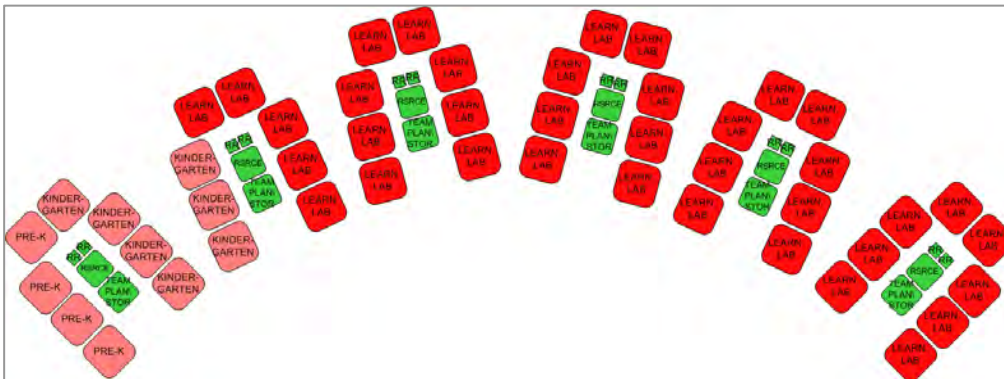
## 700 Student School



## 850 Student School



## 1,000 Student School





### Future Potential Addition for 100 Students

Space	Pod/Cluster			
	TS	Quantity	SF	Total
Learning Lab/Classroom	3	3	960	2,880
Team Planning Areas/Faculty Lounge		1	250	250
Instructional Material Storage		1	150	150
Resource Room w/divider wall		1	960	960
Small Group Room		1	150	150
<b>Total</b>				<b>4,390</b>

### STANDARDS FOR TYPICAL LEARNING LABS/CLASSROOMS, ELEMENTARY

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Student work tables, 2 students each	13
Student chairs	26
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
Elevated pull down screen	1
Maximize bulletin board surfaces	

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
Data drop dedicated to wireless, high on wall	1
Wireless Internet access	Yes

MECHANICAL	QTY
Air-conditioning	
Operable windows	

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

### STANDARDS FOR TYPICAL KINDERGARTEN, PRE-KINDER, SELF-CONTAINED

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Student work tables, 24 students each	13
Student chairs	26
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
Pull down screen	1
Elevated pull down screen	1
Maximize bulletin board surfaces	

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
Data drop dedicated to wireless, high on wall	1
Wireless Internet access	Yes

MECHANICAL	QTY
Air-conditioning	
Operable windows	

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
Drinking fountain	1
Restroom in each classroom	1

TECHNOLOGY	QTY
Analog telephone	1
Intercom	Yes
Smartboard w/ integral LCD projector	1
Audio Enhancement	1 system
Laptop computers with carts, shared	K:26; PK: 16

## 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
Cig 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

<b>FURNITURE/EQUIPMENT</b>	<b>QTY</b>
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





*sample photo: does not  
represent LBUSD facilities*

## Learning Labs/ Classrooms

### 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
- Bathrooms in PreK, K, and Special Ed. Classrooms
- Drinking fountain

#### Electrical & Lighting

- Multiple quad electrical outlets on each wall
- Overhead lighting with banked switching
- Room darkening capability
- Controlled day lighting



Technology

- Access to voice, video, data ports, and electrical outlets
- Intercom
- Teacher data port separate from student data ports
- LCD projector with pull-down screen

**Doors & Windows**

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

Doors & Windows

- Door with windows (no blinds)
- Windows with blinds
- View panel at door
- Windows to corridor and /or Learning Community
- Double-paned and tinted

**Furniture & Equipment**

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

Furniture & Equipment

- Flexible or multiple display surfaces
- Portable closets/cabinets
- Bookcases
- Pocket Doors – 5 ft wide space
- Age appropriate and adjustable furniture
- Bulletin boards and white magnetic boards
- Corkboard on cupboard doors
- Kidney/teacher worktable for small group instruction

**Special Considerations**

The following table reflects design considerations for the space.

Special Considerations

- Individual student shelves for books, independent reading material
- Baskets/boxes
- Folding doors that can be used for display
- Space for hanging students' coats and backpacks
- Vinyl Tile Flooring
- Acoustics to block noise from airports, roads, traffic, etc.

## Team Planning & 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	• Teacher planning and collaboration
	• Team meetings
	• Scheduling of appointments
	• Record keeping
	• Preparation of teaching materials
	• Lunch
	• Copying
	• Collating
	• Storage of team materials
	• Storage 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
	• Electrical service for photocopy machine
	• Overhead lighting
	• Controlled day lighting

Technology	• Access to voice, video, data ports, and electrical outlets
	• LCD Projector
	• Telephone with outside line
	• Keypad access

## 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
- Flexible surfaces
- Storage cabinets
- Desks and chairs
- Round tables for conferencing and lunch
- Casework to include:
  - Countertop with sink, base and wall cabinets
  - Lockable storage cabinets
  - Wall shelving
- Copier
- Binding equipment
- Fax machine and printers
- Laminating machine
- Paper storage, shredder, and cutter
- Tack board/marker board
- Clock
- Abundant shelving
- Storage bins

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- Adequate counter-top space for small appliances
- Acoustical privacy
- Small appliances (coffee, refrigerator, microwave)
- Telephone with outside lines

## Resource Room [RSP, SDC: 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
	• Independent study
	• Small group project work
	• Tutoring
	• Conferences
	• Observation of the outside environment
	• Display of student work and educational materials
	• Art and other "messy" projects
	• Computer-based learning
	• Storage
Persons	• Pull-out activities
	• Teachers
	• Aides
	• Staff
	• Students
	• Volunteers

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

### Building System Requirements

## 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
- Visual access from the classroom or from the corridor
- Same as Learning Lab/Classroom

## 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
- Modular, group-able tables
- Shelving unit against walls
- Same as Learning Lab/Classroom

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- Spill and stain-resistant flooring
- Handicapped accessible and accessible to large wheelchairs
- If possible accessible to Team Planning room
- Adjustable cubicles
- Acoustical privacy

## Pre-K and Kindergarten Classrooms

### 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
	• Teacher directed
	• Small group
	• One-on-one instruction
	• Cooperative learning

Persons	• Students
	• Teachers
	• Parents
	• Volunteers
	• 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	• Sink with hot and cold water
	• Drinking fountain
	• Bathroom

Electrical & Lighting	• 2 quad electrical outlets on each wall
	• Banked switching to allow varied light levels

Technology	• Telephone/intercom/voicemail port
	• Video port and monitor
	• Data ports
	• Data port for teacher
	• Quad outlet adjacent to each data port
	• Listening center (headphones, audio devices)
	• LCD projector with pull-down screen

### 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.

## Special Considerations

The following table reflects design considerations for 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 for poster board and chart paper
  - File Cabinets
- Fixed cubbies for student storage
- 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
- Networked computers
- Portable sand table
- Puppet theater
- Kidney shaped table
- Lego table
- Low projects table with rails
- Chart stand
- Child-sized living room furniture set
- Big book stand
- Painting easel
- Age appropriate and adjustable mobile furniture
- Coat closet with closing doors and bulletin board material on outside

### Special Considerations

- Comfortable rooms with pleasant décor that contribute to an atmosphere conducive to creativity
- Adequate storage for mats, instructional materials
- Tile flooring
- Acoustics to block noise from airports, roads, traffic, etc.



## Pre-K and Kindergarten Restrooms

### 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

- Personal hygiene

#### Persons

- 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
- Toilet (child size)
- Floor drains for cleaning
- 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

- Door: Solid, no window; no lock

### 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



## Special Needs

### Introduction

The goal of the Special Education Program Area is to meet the needs 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.

### Overview

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].

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

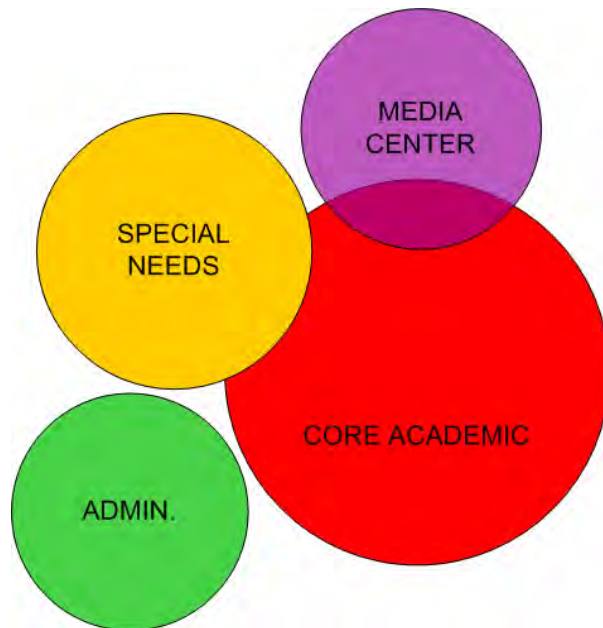
The following table lists the type, quantity, and size of each space to be included in the special needs area.

Special Needs Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Self-Contained Classroom* [SDC: MS, M, OI]	1	1	1,080	1,080	2	2	1,080	2,160	3	3	1,080	3,240	4	4	1,080	4,320	5	5	1,080	5,400
Restroom/Shower		1	100	100		1	100	100		1	100	100		2	100	200		2	100	200
Time-Out Room/Additional Storage		1	100	100		1	100	100		1	100	100		1	100	100		1	100	100
Student Services Offices		2	100	200		3	100	300		4	100	400		4	100	400		5	100	500
Resource/Tutorial Room [RSP, SDC: ED, MM, DHH]	See Core Academic Area				See Core Academic Area				See Core Academic Area				See Core Academic Area				See Core Academic Area			
Conference Room		1	250	250		1	250	250		1	250	250		1	250	250		1	250	250
Storage		1	100	100		1	100	100		1	100	100		1	100	100		1	100	100
Adaptive PE		1	300	300		1	300	300		1	300	300		1	300	300		1	300	300
<b>Special Needs Sub-Total</b>	<b>1</b>			<b>2,130</b>	<b>2</b>			<b>3,310</b>	<b>3</b>			<b>4,490</b>	<b>4</b>			<b>5,670</b>	<b>5</b>			<b>6,850</b>

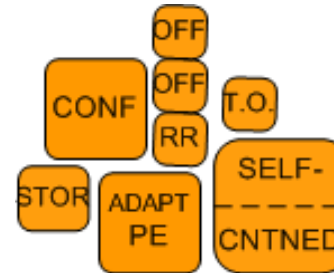
\*classrooms divided by moveable walls; can be turned into larger room so two rooms can be combined

## Spatial Relationships

The Special Education Program Area should be within adjacent to the Core Academic Program Areas, Media Center and Administration. Drawings are shown for each size school.



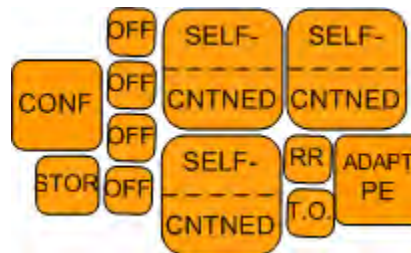
### 400 Student School



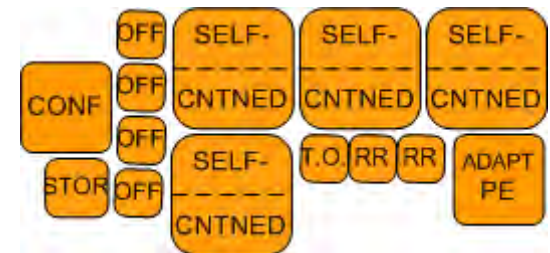
### 550 Student School



### 700 Student School



### 850 Student School



### 1,000 Student School





### STANDARDS FOR TYPICAL KINDERGARTEN, PRE-KINDER, SELF-CONTAINED

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Student work tables, 24 students each	13
Student chairs	26
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
Pull down screen	1
Elevated pull down screen	1
Maximize bulletin board surfaces	

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
Data drop dedicated to wireless, high on wall	1
Wireless Internet access	Yes

MECHANICAL	QTY
Air-conditioning	
Operable windows	

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
Drinking fountain	1
Restroom in each classroom	1

TECHNOLOGY	QTY
Analog telephone	1
Intercom	Yes
Smartboard w/ integral LCD projector	1
Audio Enhancement	1 system
Laptop computers with carts, shared	K:26; PK: 16

### 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

## 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	<ul style="list-style-type: none"> <li>Individual, small, and large group activities</li> <li>Storage of materials, equipment</li> <li>Project-based learning</li> <li>Computer-based instruction</li> </ul>
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Persons	<ul style="list-style-type: none"> <li>Students</li> <li>Teachers</li> <li>Parents</li> <li>Volunteers</li> <li>Other staff</li> </ul>
---------	--

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>Moveable wall to divide room</li> </ul>
------------	--

#### Plumbing

- Sink with hot and cold water, adjustable heights
- Drinking fountain
- Attached restroom

#### Electrical & Lighting

- Two 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
- LCD projector with pull-down screen

### 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, wheelchair accessible with push button control
- 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

- 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
- Tables, chairs, and student desks that are mobile
- Networked computers
- Kidney 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

## 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
- VCT tile/spill resistant flooring
- Mats on floor
- Wheelchair accessibility
- Wide hallways to include wheelchair storage without fire code violation
- Storage specifically for mobility equipment
- Walking bars in hallway & restroom
- Adjustable foot benches

## Restroom/ Shower

### 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	<ul style="list-style-type: none"> <li>Personal hygiene</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Nurse</li> <li>Aides</li> <li>Students</li> <li>Teachers</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>Exhaust fan</li> <li>High speed air dryers</li> </ul>
------------	--

#### Plumbing

- Sink with hot and cold water
- Toilet
- Shower with hand held shower head

#### Electrical & Lighting

- Duplex electrical outlets on each wall

#### Technology

- Telephone access

### 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
- Stalls with lower dividers for potty training & supervision
- Wheelchair accessible

## 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
	• Storage for diapers, clothing, and medical equipment/supplies
	• Rolled toilet paper dispenser
	• Handrail/grab bar
	• Extra wall space for adaptive toilet chairs

## Special Considerations

The following table reflects design considerations for the space.

Special Considerations	• Adjacent to Health Clinic

## Student Services 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
<ul style="list-style-type: none"> <li>Administrative work</li> <li>Scheduling</li> </ul>

Persons
<ul style="list-style-type: none"> <li>Occupational Therapist</li> <li>Physical Therapist</li> <li>Aides</li> <li>Staff</li> <li>Volunteers</li> </ul>

### Building System Requirements

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

Mechanical
<ul style="list-style-type: none"> <li>No special requirements</li> </ul>

Plumbing
<ul style="list-style-type: none"> <li>Sink</li> </ul>

Electrical & Lighting
<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> <li>Overhead lighting</li> <li>Controlled day lighting</li> </ul>

Technology
<ul style="list-style-type: none"> <li>Access to voice, video, data ports, and electrical outlets</li> </ul>

### Doors & Windows

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

Doors & Windows
<ul style="list-style-type: none"> <li>One-way glass for observation</li> </ul>



## 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

- Accessible to Conference Room



**Resource/Tutorial Room [RSP, SDC: ED, MM, DHH]**

*See Core Academic*

## 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	
	<ul style="list-style-type: none"> <li>• Casework to include: <ul style="list-style-type: none"> <li>▪ Counter top with sink, base and wall cabinets</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• Conference tables and chairs</li> </ul>
	<ul style="list-style-type: none"> <li>• Side chairs</li> </ul>
	<ul style="list-style-type: none"> <li>• Magnetic marker board</li> </ul>
	<ul style="list-style-type: none"> <li>• Tack board</li> <li>• Clock</li> </ul>

## Special Considerations

The following table reflects design considerations for the space.

Special Considerations	
	<ul style="list-style-type: none"> <li>• Consideration for sound transfer</li> <li>• Carpeting</li> </ul>

## 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

- 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 with keypad access
- Windows: none

## Furniture & Equipment

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

- | Furniture & Equipment |  |
|-----------------------|--|
|                       | • Casework to include: <ul style="list-style-type: none"><li>▪ Countertop with base cabinets</li><li>▪ Lockable storage cabinets</li><li>▪ Wall shelving</li></ul> |
|                       | • Lockable file cabinets   |
|                       | • Paper storage, shredder, and cutter  |

## Special Considerations

The following table reflects design considerations for the space.

- | Special Considerations |                           |
|------------------------|---------------------------|
|                        | • No special requirements |



## 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	<ul style="list-style-type: none"> <li>Individual, small, and large group activities</li> <li>Storage of materials</li> <li>Physical therapy</li> <li>Occupational therapy</li> <li>Storage</li> </ul>
------------	--

Persons	<ul style="list-style-type: none"> <li>Occupational Therapist</li> <li>Physical Therapist</li> <li>Aides</li> <li>Staff</li> <li>Volunteers</li> </ul>
---------	--

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
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Plumbing	<ul style="list-style-type: none"> <li>Adjustable sink</li> <li>Laundry facilities</li> </ul>
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Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> <li>Overhead lighting</li> <li>Controlled day lighting</li> </ul>
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Technology	<ul style="list-style-type: none"> <li>Access to voice, video, data ports, and electrical outlets</li> </ul>
------------	--

### Doors & Windows

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

Doors & Windows	<ul style="list-style-type: none"> <li>One-way glass for observation</li> <li>Wheelchair accessible doors with push button to open</li> </ul>
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## Furniture & Equipment

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

### Furniture & Equipment

- Lockable storage cabinets, large enough for mobility equipment
- 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



*sample photo: does not  
represent LBUSD facilities*

## 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. Through various networks the Media Center will maintain 2-way communication with all parts of the building, all schools within the district, homes and businesses that are on-line [either via cable or telephone lines], colleges, universities, public libraries, and other remote sources.

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 will 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
- Media Specialist Office/Workroom
- Technology Control Center
- A/V Storage
- Media Production Room

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 Pre-Kindergarten through Fifth. 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.



*sample photo: does not  
represent LBUSD facilities*



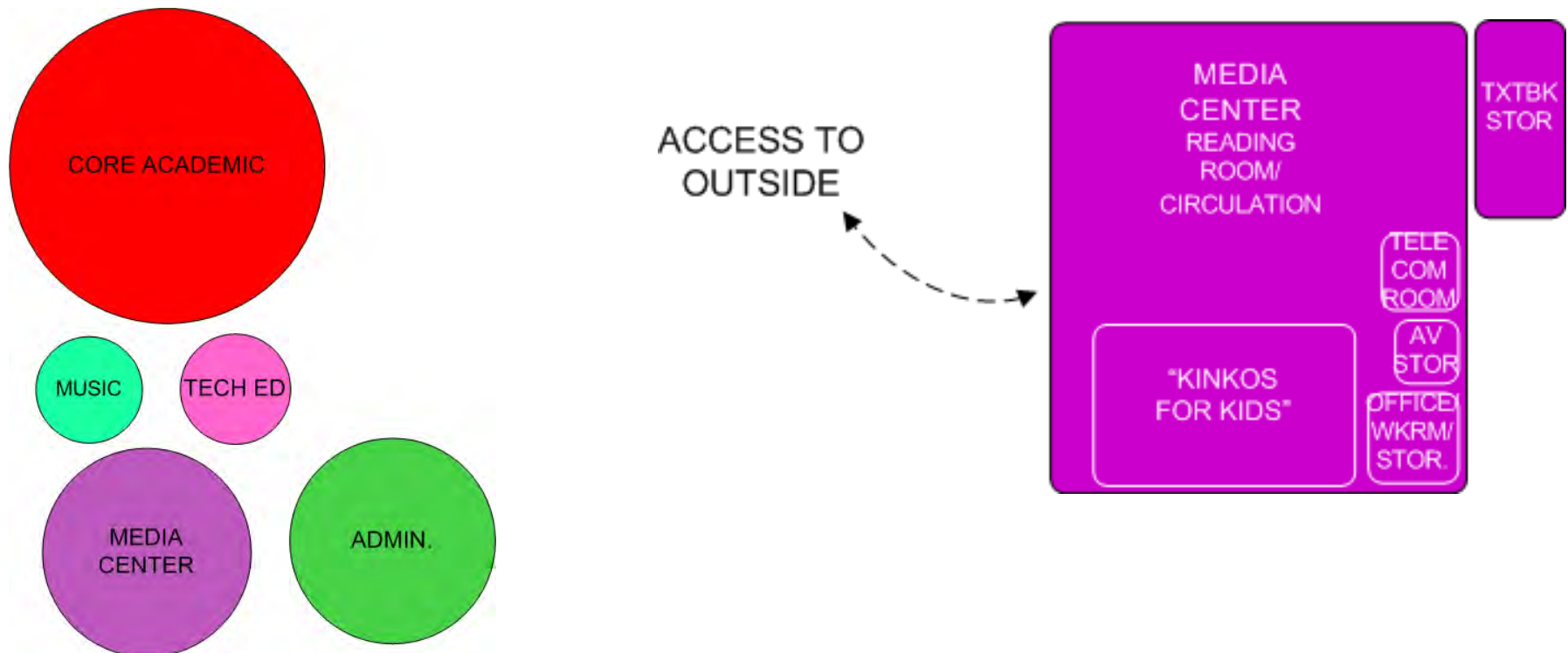
## Space Requirements

The following table lists the type, quantity, and size of each space to be included in the media center.

Media Center Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Library/Media Center Main Room		1	1,500	1,500		1	1,500	1,500		1	2,000	2,000		1	2,000	2,000		1	2,500	2,500
Multi-Media Workroom/"Kinko's for Kids"		1	750	750		1	750	750		1	750	750		1	750	750		1	750	750
Media Specialist/Clerk Office		1	200	200		1	200	200		1	200	200		1	300	300		1	300	300
Textbook Storage		1	400	400		1	400	400		1	400	400		1	400	400		1	400	400
Telecommunications Room		1	200	200		1	200	200		1	200	200		1	200	200		1	200	200
A/V Storage		1	200	200		1	200	200		1	200	200		1	200	200		1	200	200
<b>Media Center Sub-Total</b>	<b>0</b>			<b>3,250</b>	<b>0</b>			<b>3,250</b>	<b>0</b>			<b>3,750</b>	<b>0</b>			<b>3,850</b>	<b>0</b>			<b>4,350</b>

## Spatial Relationships

The Media Center Program Area should be in a centralized location and easily accessed by the community. It should also be adjacent to the Core.





## 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

## 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	<ul style="list-style-type: none"> <li>Reading</li> <li>Story area</li> <li>Circulation of materials and resources</li> <li>Whole group and small group instruction</li> <li>Provide meeting areas</li> <li>Research</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Students</li> <li>Information searchers</li> <li>Individual students for research</li> <li>Media specialist</li> <li>Paraprofessional</li> <li>Community patrons for after school hours</li> <li>Volunteers</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
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Plumbing	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> <li>Full spectrum lighting</li> <li>Ability to control specific lighting areas</li> </ul>
Technology	<ul style="list-style-type: none"> <li>Telephone/intercom/voicemail port</li> <li>Video ports and monitors</li> <li>Data ports</li> <li>Quad outlet adjacent to each data port</li> <li>Wireless access points throughout school</li> <li>Ceiling, table, or wall mounted LCD projector; drop down screen</li> <li>Wireless laptops with carts for battery recharging</li> <li>ELMO</li> <li>Combo VCR/DVD player</li> </ul>

## 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 to 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:
  - Appropriate height book shelving
  - Circulation counter and base cabinets centrally located
  - Countertop with base and wall cabinets
  - Periodical shelving
  - Display cases [secure/lockable]
  - Built-in cabinets/shelving behind circulation desk for processing
- 4-6 person tables with chairs
- Soft seating/separate reading area
- Appropriately proportioned furniture for PreK-5<sup>th</sup> grade students
- Computer tables and chairs
- Printers and printer tables
- Networked computers w/access to programs and card catalog
- Electronic mounted screen
- Tack board
- Magnetic marker board
- Photocopy machine

## 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
- Line of site across media center
- Bookshelves with flat tops for display of student work
- Space for special collections e.g. holidays, professional library for staff
- Line of site across media center
- Bookshelves with flat tops for display of student work
- Outside reading garden/small amphitheater

## Multi-Media Workroom/"Kinkos 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	<ul style="list-style-type: none"> <li>Multi-media production</li> <li>Preparing for Distance Learning</li> <li>Preparing for presentations</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Students, teachers and classes</li> <li>Individual students</li> <li>Media specialist</li> <li>Media assistants</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
------------	---

Plumbing	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> <li>Full spectrum lighting</li> <li>Ability to control specific lighting areas</li> </ul>
Technology	<ul style="list-style-type: none"> <li>Telephone/intercom/voicemail port</li> <li>Video ports and monitors</li> <li>Data ports</li> <li>Quad outlet adjacent to each data port</li> <li>Wireless access points throughout school</li> <li>LCD Projector and drop down screen</li> <li>Wireless laptops with carts for battery recharging</li> <li>Printers</li> <li>Copiers</li> </ul>

## 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:
  - 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
- 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

## Media Specialist/Clerk 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
<ul style="list-style-type: none"> <li>Administrative work</li> <li>Scheduling</li> <li>Processing materials</li> <li>Preparing materials for lessons</li> <li>Minor repairs</li> </ul>

Persons
<ul style="list-style-type: none"> <li>Media Specialist</li> <li>Library Staff</li> </ul>

### Building System Requirements

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

Mechanical
<ul style="list-style-type: none"> <li>No special requirements</li> </ul>

Plumbing
<ul style="list-style-type: none"> <li>No special requirements</li> </ul>

Electrical & Lighting
<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> </ul>

Technology
<ul style="list-style-type: none"> <li>Telephone/intercom/voicemail port</li> <li>Video port and monitor</li> <li>Data port for each workstation</li> <li>Quad outlet adjacent to data port</li> </ul>

### Doors & Windows

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

Doors & Windows
<ul style="list-style-type: none"> <li>Door with lock: view panel</li> <li>Windows: share glass windows with Reading Room to see entire LMC</li> </ul>

## Furniture & Equipment

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

Furniture & Equipment	<ul style="list-style-type: none"> <li>• Casework to include: <ul style="list-style-type: none"> <li>▪ Counter top with base and wall cabinets</li> <li>▪ File cabinet</li> <li>▪ Bookcases</li> <li>▪ Locking cabinet for supplies</li> <li>▪ Coat closet</li> </ul> </li> <li>• Desk and chair</li> <li>• Networked computer</li> <li>• Printer</li> <li>• Magnetic marker board</li> <li>• Small tack board</li> <li>• Fax</li> <li>• Copy machine</li> <li>• Paper cutter</li> <li>• Laminator</li> </ul>
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## Special Considerations

The following table reflects design considerations for the space.

Special Considerations	<ul style="list-style-type: none"> <li>• Auditory privacy</li> <li>• Adjacent to workroom/storage</li> <li>• Carpeting</li> </ul>
------------------------	---



## 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	<ul style="list-style-type: none"> <li>Storage</li> </ul>	Plumbing	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Staff</li> </ul>	Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>	Technology	<ul style="list-style-type: none"> <li>Telephone/intercom/voicemail port</li> <li>Video port and monitor</li> <li>Data ports, one adjacent to entrance door</li> <li>Quad outlet adjacent to each data port</li> </ul>
		Doors & Windows	<ul style="list-style-type: none"> <li>Door: solid</li> </ul>

### Building System Requirements

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

### Doors & Windows

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

## 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

## 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

#### Persons

- Media specialist
- 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 building 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: view window, 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 with locks for laptop units
	• Compact disc interactive
	• Still video players
	• VCR/DVD combo player
	• CD/DVD burner

## Special Considerations

The following table reflects design considerations for the space.

Special Considerations	
	• Vinyl tile or carpet

## 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	<ul style="list-style-type: none"> <li>Storage of A/V equipment and supplies</li> </ul>	Plumbing	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Media Specialist</li> <li>Paraprofessional</li> </ul>	Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> </ul>
		Technology	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>	Doors & Windows	<ul style="list-style-type: none"> <li>Door: view panel</li> <li>Windows: none</li> </ul>

### Building System Requirements

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

### Doors & Windows

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

## 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
  - Cabinets
- Equipment racks

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- Vinyl tile flooring



*sample photo: does not  
represent LBUSD facilities*

## Wet Lab [Science and Art]

### Introduction

The Wet Lab will accommodate art and science projects. Students will experience computer skills, experimentation, and the integration of instruction with arts, mathematics, science, and other content areas. This space will increase the student's knowledge and appreciation for the visual arts as well as scientific experiments.



*sample photo: does not  
represent LBUSD facilities*





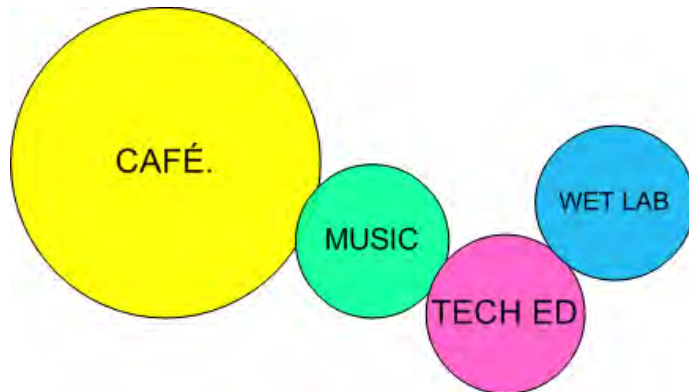
## Space Requirements

The following table lists the type, quantity, and size of each space to be included in the science/art web lab.

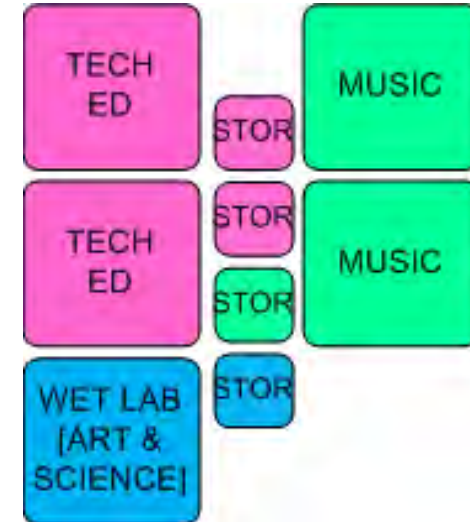
Wet Lab[Art & Science] Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Wet Lab [Art & Science]	0	0	1,100	0	1	1	1,100	1,100	1	1	1,100	1,100	1	1	1,100	1,100	2	2	1,100	2,200
Storage		0	100	0		1	100	100		1	100	100		1	100	100		2	100	200
<b>Visual Art/Wet Lab Sub-Total</b>	<b>0</b>			<b>0</b>	<b>1</b>			<b>1,200</b>	<b>1</b>			<b>1,200</b>	<b>1</b>			<b>1,200</b>	<b>2</b>			<b>2,400</b>

## Spatial Relationships

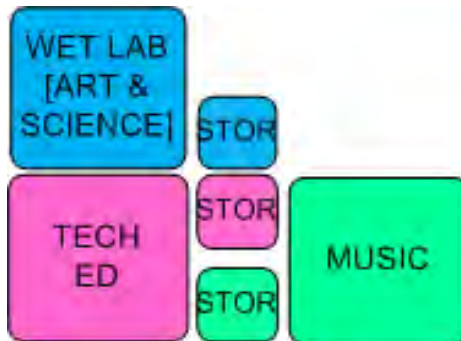
The Wet Lab should be adjacent to Technology Education and the outside.



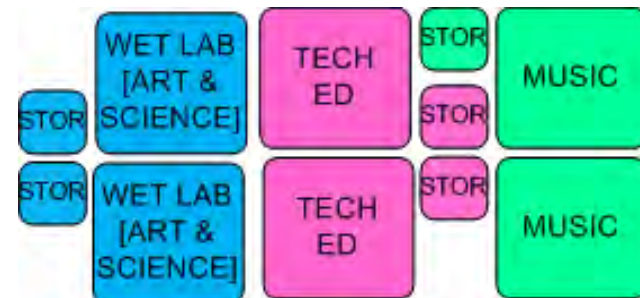
### 850 Student School



### 550 and 700 Student School



### 1,000 Student School



### STANDARDS FOR TYPICAL LEARNING LABS/CLASSROOMS, ELEMENTARY

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Student work tables, 2 students each	13
Student chairs	26
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
Elevated pull down screen	1
Maximize bulletin board surfaces	

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
Data drop dedicated to wireless, high on wall	1
Wireless Internet access	Yes

MECHANICAL	QTY
Air-conditioning	
Operable windows	

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

## Wet 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	<ul style="list-style-type: none"> <li>Whole group and small group instruction</li> <li>Project-based learning</li> <li>Experiments</li> <li>Professional Development</li> </ul>
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Persons	<ul style="list-style-type: none"> <li>Teachers</li> <li>Students</li> <li>Individual students for experiments/projects</li> <li>Art/Science specialist</li> <li>Community patrons for after school hours</li> <li>Volunteers</li> </ul>
---------	--

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>Adequate ventilation</li> <li>Air conditioning</li> </ul>
------------	--

#### Plumbing

- No special requirements

#### Electrical & Lighting

- Duplex electrical outlets on each wall and near teacher station
- 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
- Wireless access points throughout school
- Area for distance learning
- LCD projector with pull-down screen
- Networked computers
- Teacher networked computer

## Doors & Windows

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

### Doors & Windows

- 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

- Printers and printer tables
- Wall cabinets
- Magnetic marker board
- Tack board
- Computer tables and chairs
- Individual chairs and tables that can be moved around for individual and/or collaborative projects
- Variety of large and small objects
- Layout should maximize shelving and storage
- Counter tops

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- Auditory privacy
- Provide method to darken room for AV presentations
- Access to Library/Media Center during/ after school hours while maintaining security in the remainder of the school
- Printing publishing area

## 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	<ul style="list-style-type: none"> <li>Storage</li> </ul>	Plumbing	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Staff</li> <li>Community Members</li> <li>Volunteers</li> </ul>	Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> <li>Overhead lighting</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>Air conditioning</li> </ul>	Technology	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
		Doors & Windows	<h3>Doors &amp; Windows</h3> <p>The following table reflects the considerations for the doors and windows to be used in the space.</p> <ul style="list-style-type: none"> <li>Door: solid</li> <li>Windows: needed</li> </ul>

### Building System Requirements

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

### Doors & Windows

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



*sample photo: does not  
represent LBUSD facilities*

## Music

### Introduction

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

The purpose of the Music Classroom is to provide a space that will serve as the learning/practice area for general music classes.





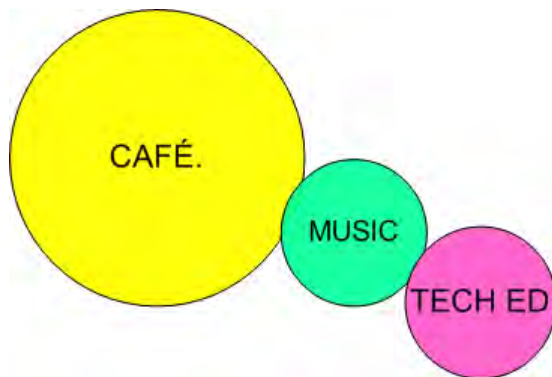
## Space Requirements

The following table lists the type, quantity, and size of each space to be included in the music area.

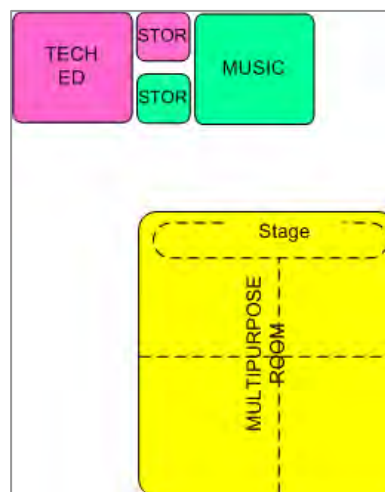
Music Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Music Room	1	1	1,200	1,200	1	1	1,200	1,200	1	1	1,200	1,200	2	2	1,200	2,400	2	2	1,200	2,400
Storage		1	200	200		1	200	200		1	200	200		1	200	200		1	200	200
Auditorium	See Food Service Area				See Food Service Area				See Food Service Area				See Food Service Area				See Food Service Area			
Music	1			1,400	1			1,400	1			1,400	2			2,600	2			2,600

## Spatial Relationships

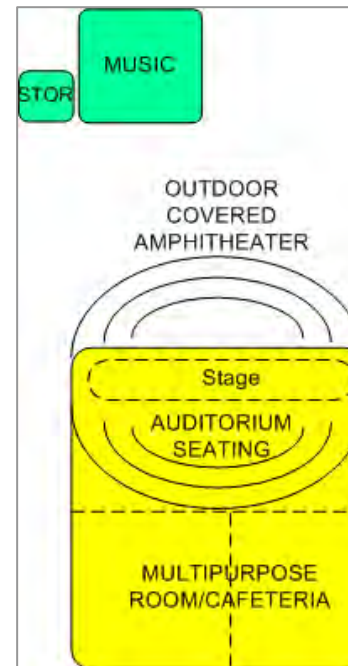
The Music Program Area should be adjacent to Technology Education and to the Stage, located in the cafeteria.



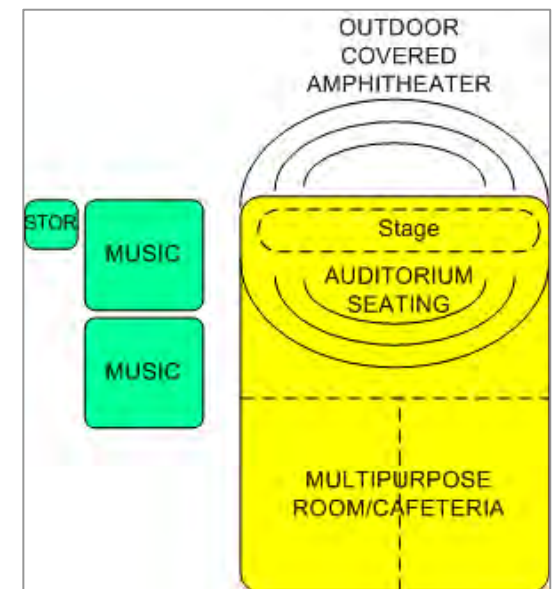
### 400 Student School



### 550 & 700 Student School



### 850 & 1,000 Student School



### STANDARDS FOR TYPICAL LEARNING LABS/CLASSROOMS, ELEMENTARY

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Student work tables, 2 students each	13
Student chairs	26
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
Elevated pull down screen	1
Maximize bulletin board surfaces	

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
Data drop dedicated to wireless, high on wall	1
Wireless Internet access	Yes

MECHANICAL	QTY
Air-conditioning	
Operable windows	

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
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	<ul style="list-style-type: none"> <li>Rehearsals, 40-60 students</li> <li>Gathering performance area</li> <li>Recitals</li> <li>Meeting area for school and community</li> <li>Instruction for music and core classes</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Students</li> <li>Teachers</li> <li>Parents</li> <li>Volunteers</li> <li>Other staff</li> <li>Community</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>Quiet HVAC system [noise from mechanical equipment should not be audible in classroom]</li> </ul>
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#### Plumbing

- Sink with hot and cold water

#### Electrical & Lighting

- Duplex electrical outlets on each wall
- Adequate lighting for room with multiple dimming capabilities

#### Technology

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

## 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, 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

- Casework to include:
  - Countertops with wall cabinets
  - 4 tall storage cabinets with shelving, drawers and lockable doors
  - Wardrobe cabinets
  - Music storage cabinets: sufficient to hold all instruments when room is used as community space
- Printer and printer table
- Desk and chair
- Portable risers and guard rails
- Computer/keyboard lab tables

### Furniture & Equipment

- CD/DVD player/burner, tape player, and digital video camera
- Networked computers
- Magnetic marker board with music staff on one section
- Tack boards and strips
- Large area rug
- Instrument carts
- Piano
- Stackable chairs
- Music stands

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- Appropriate acoustical treatment to minimize disruptions from adjacent rooms and to enhance sound quality/performance
- No noise from external sources
- Direct access to stage from music room
- Vinyl Tile flooring with area rug

## Music 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	<ul style="list-style-type: none"> <li>Storage of textbooks, instruments, equipment and supplies</li> </ul>	Plumbing	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Teacher</li> </ul>	Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> <li>Adequate lighting for space</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>	Technology	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
		Doors & Windows	<h3>Doors &amp; Windows</h3> <p>The following table reflects the considerations for the doors and windows to be used in the space.</p> <ul style="list-style-type: none"> <li>Door: view panel</li> <li>Windows: no special requirements</li> </ul>

## 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 3 walls
  - File cabinets
- Music folio cabinet
- Instrument storage shelving

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- No special requirements





*sample photo: does not  
represent LBUSD facilities*

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

## Technology Education

### Introduction

The Technology Education Program will focus on computer skills, project-based introduction to tools, and the integration of instruction with arts, mathematics, science, and other content areas. Technology Education fosters teamwork, problem-solving, technological literacy, and communication skills.



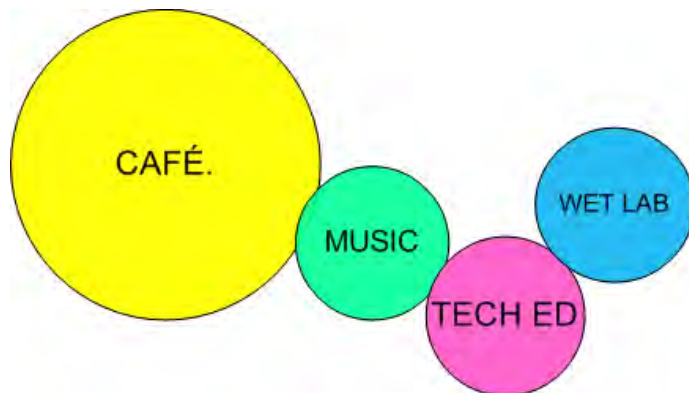
## Space Requirements

The following table lists the type, quantity, and size of each space to be included in technology education.

Tech Ed/Computer Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Tech Ed Lab	1	1	1,100	1,100	1	1	1,100	1,100	1	1	1,100	1,100	2	2	1,100	2,200	2	2	1,100	2,200
Storage		1	100	100		1	100	100		1	100	100		2	100	200		2	100	200
<b>Tech Ed Sub-Total</b>	<b>1</b>			<b>1,200</b>	<b>1</b>			<b>1,200</b>	<b>1</b>			<b>1,200</b>	<b>2</b>			<b>2,400</b>	<b>2</b>			<b>2,400</b>

## Spatial Relationships

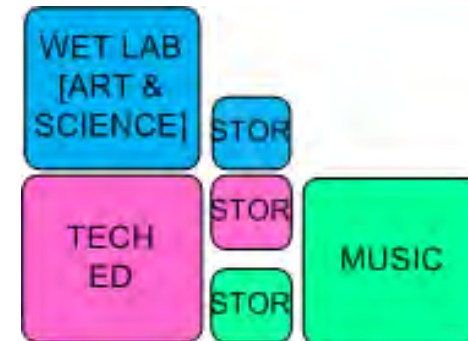
The Technology Education Area should be adjacent to the Cafeteria, Music Area, and the outside.



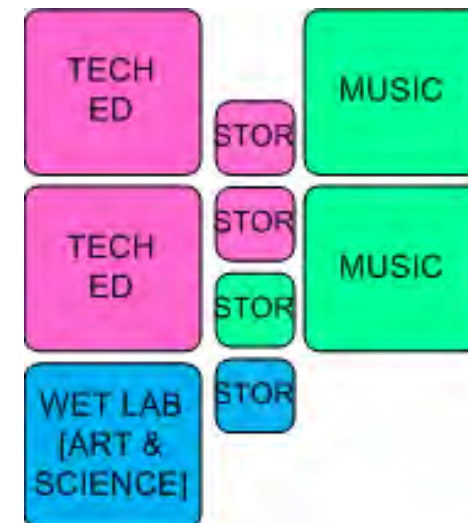
400 Student School



550 and 700  
Student School



850 and 1,000  
Student School



### STANDARDS FOR TYPICAL LEARNING LABS/CLASSROOMS, ELEMENTARY

See Program Area Descriptions for other items

FURNITURE/EQUIPMENT	QTY
Student work tables, 2 students each	13
Student chairs	26
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
Elevated pull down screen	1
Maximize bulletin board surfaces	

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
Data drop dedicated to wireless, high on wall	1
Wireless Internet access	Yes

MECHANICAL	QTY
Air-conditioning	
Operable windows	

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

## Tech Education 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	<ul style="list-style-type: none"> <li>Whole group and small group instruction</li> <li>Project-based learning</li> <li>Research</li> <li>Computer learning</li> <li>Professional Development</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Teachers</li> <li>Students</li> <li>Individual students for research</li> <li>Media specialist</li> <li>Community patrons for after school hours</li> <li>Volunteers</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>Adequate ventilation</li> <li>Air conditioning</li> </ul>
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#### Plumbing

- No special requirements

#### Electrical & Lighting

- Duplex electrical outlets on each wall and near teacher station
- 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
- Wireless access points throughout school
- Area for distance learning
- LCD projector with pull-down screen
- Networked computers

## Doors & Windows

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

### Doors & Windows

- 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

- Printers and printer tables
- Wall cabinets
- Magnetic marker board
- Tack board
- Computer tables and chairs
- Individual chairs and tables that can be moved around for individual and/or collaborative projects
- Variety of large and small objects
- Layout should maximize shelving and storage

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- Auditory privacy
- Provide method to darken room for AV presentations
- Access to Library/Media Center during/ after school hours while maintaining security in the remainder of the school
- Printing publishing area

## 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	<ul style="list-style-type: none"> <li>Storage</li> </ul>	Plumbing	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Staff</li> <li>Community Members</li> <li>Volunteers</li> </ul>	Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> <li>Overhead lighting</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>Air conditioning</li> </ul>	Technology	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
		Doors & Windows	<h3>Doors &amp; Windows</h3> <p>The following table reflects the considerations for the doors and windows to be used in the space.</p> <ul style="list-style-type: none"> <li>Door: solid</li> <li>Windows: none</li> </ul>

### Building System Requirements

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

### Doors & Windows

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



## Welcome Center



## Overview

The Administration/Guidance area will house facilities for several different student services including: Reception area, Secretarial area, Principal's office, Assistant Principal's office, Conference room, Mail/Work/Copy room, Administrative storage.

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.

## Introduction

Administration/Guidance 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 is combined with student support services (counselors, health, support staff, etc.). The administration/guidance area will assist in coordinating overall instruction and will serve as the hub of the building.

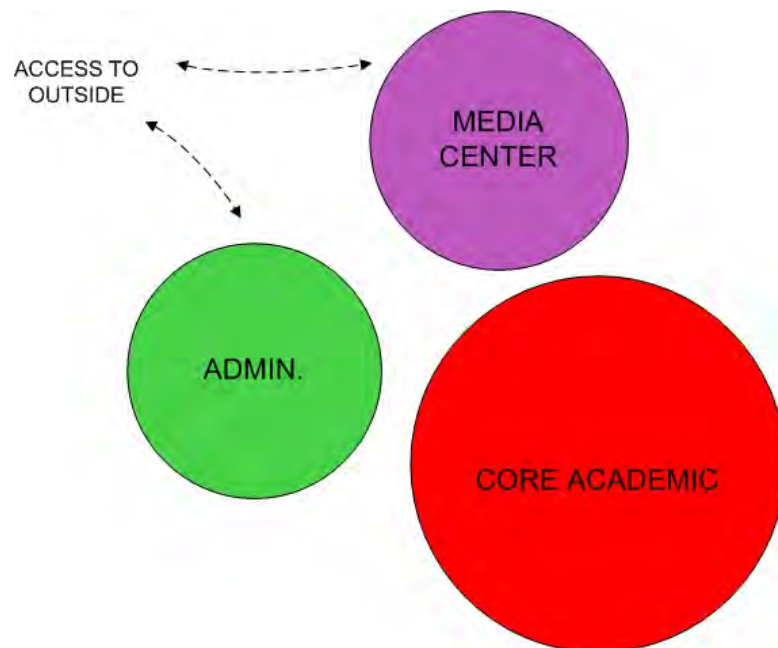
## Space Requirements

The following table lists the type, quantity, and size of each space to be included in the administration area/ welcome center. Offices will be used by Speech, Social worker, etc.

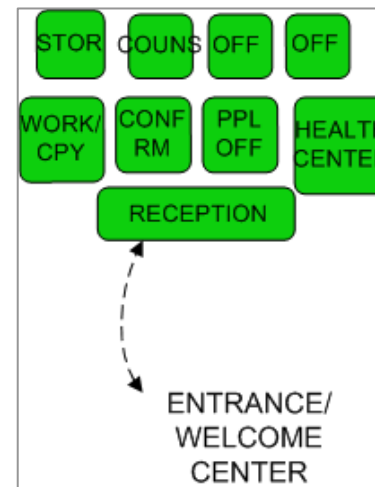
Welcome Center Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
<b>Welcome Center/Admin</b>																				
Reception Area		1	500	500		1	500	500		1	700	700		1	700	700		1	700	700
Secretarial Area (Combined w/ reception)		0	80	0		0	80	0		0	80	0		0	80	0		0	80	0
Principal's Office		1	200	200		1	200	200		1	200	200		1	200	200		1	200	200
Asst. Principal's Office		0	120	0		0	120	0		1	120	120		1	120	120		1	120	120
Conference Room		1	300	300		1	300	300		1	300	300		1	300	300		1	300	300
Counselor's Office		1	120	120		1	120	120		2	120	240		2	120	240		3	120	360
Intake/Pre-Assessment Room		0	250	0		1	250	250		1	250	250		1	250	250		1	250	250
Mail/Work/Copy Room		1	250	250		1	250	250		1	400	400		1	400	400		1	400	400
Administrative Storage		1	150	150		1	150	150		2	150	300		2	150	300		2	150	300
Health Clinic		1	450	450		1	450	450		1	450	450		1	450	450		1	450	450
Additional Offices		2	120	240		3	120	360		3	120	360		4	120	480		4	120	480
<b>Total</b>	<b>0</b>			<b>2,210</b>	<b>0</b>			<b>2,580</b>	<b>0</b>			<b>3,320</b>	<b>0</b>			<b>3,440</b>	<b>0</b>			<b>3,560</b>

## Spatial Relationships

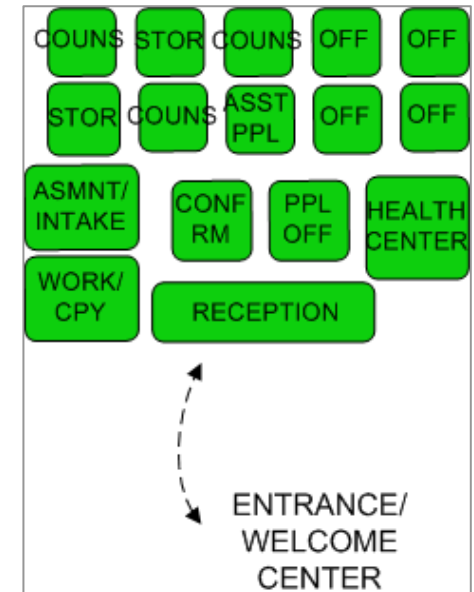
The Administrative Program Area should be located near the school's entrance. It should be adjacent to the Media Center and the Core Academic Program Area.



### 400 Student School



### 1,000 Student School



### 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 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 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
Cfg 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

## Reception Area (combined with 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	<ul style="list-style-type: none"> <li>Greeting people and directing them to the proper location or person</li> <li>Waiting area for students, visitors and staff members</li> </ul>
Persons	<ul style="list-style-type: none"> <li>School staff</li> <li>Student population</li> <li>Parents</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>Chimes to indicate entrance into building</li> </ul>
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#### 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

### Doors & Windows

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

Doors & Windows	<ul style="list-style-type: none"> <li>Door: view panel</li> <li>Windows: operable, with blinds to allow controlled natural lighting</li> </ul>
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## Furniture & Equipment

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

- | Furniture & Equipment |   |
|-----------------------|---|
|                       | • Couches and chairs, comfortable seating for students and visitors |
|                       | • Locking file cabinets   |
|                       | • Information board   |
|                       | • Message board   |
|                       | • 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      |
|                        | • Colorful                  |
|                        | • Secure entry for visitors |
|                        | • Tile flooring             |

## 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	<ul style="list-style-type: none"> <li>• Greeting people and directing them to the proper location or person</li> <li>• Assisting in administrative duties</li> </ul>	Plumbing	<ul style="list-style-type: none"> <li>• No special requirements</li> </ul>
Persons	<ul style="list-style-type: none"> <li>• School staff</li> </ul>	Electrical & Lighting	<ul style="list-style-type: none"> <li>• Duplex electrical outlets on each wall</li> </ul>
Building System Requirements	<p>The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical &amp; Lighting, and Technology.</p>	Technology	<ul style="list-style-type: none"> <li>• Telephone/intercom/voicemail port at each workstation</li> <li>• Video port and monitor</li> <li>• Data ports for each workstation</li> <li>• Quad outlet for each data port</li> <li>• Station for walkie talkie chargers</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>• No special requirements</li> </ul>	Doors & Windows	<p>The following table reflects the considerations for the doors and windows to be used in the space.</p> <ul style="list-style-type: none"> <li>• Door: view panel</li> <li>• Windows: operable, with blinds to allow controlled natural lighting</li> </ul>



## Furniture & Equipment

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

Furniture & Equipment	• Desk/computer workstation:
	• 1 at 300 student school
	• 2 at 450 & 600 student schools
	• Locking file cabinets
	• Ergonomic task chairs
	• Bulletin board
	• Magnetic marker board
	• Message board
	• Networked computers
	• Synchronized 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
	• Tile flooring
	• Secretarial area combined with Reception area

## 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	<ul style="list-style-type: none"> <li>• Conferences with staff and other visitors</li> <li>• Telephone calls</li> <li>• Administrative activities</li> <li>• Planning</li> <li>• Computer input</li> </ul>
Persons	<ul style="list-style-type: none"> <li>• Principal</li> <li>• Small group meetings [6-8 people]</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>• No special requirements</li> </ul>
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Plumbing	<ul style="list-style-type: none"> <li>• 1 bathroom immediately adjacent to office</li> </ul>
Electrical & Lighting	<ul style="list-style-type: none"> <li>• Multiple duplex electrical outlets on each wall</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• Telephone/intercom/voicemail port</li> <li>• Video port and monitor</li> <li>• Data ports [walls &amp; floors]</li> <li>• Quad outlet adjacent to each data port</li> </ul>

### Doors & Windows

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

Doors & Windows	<ul style="list-style-type: none"> <li>• Door: narrow view panel [two entrances]</li> <li>• Windows: operable, blinds to allow controlled natural lighting</li> <li>• Interior window with blinds to view in-school suspension room</li> </ul>
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## Furniture & Equipment

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

Furniture & Equipment	<ul style="list-style-type: none"> <li>• Casework to include: <ul style="list-style-type: none"> <li>▪ Storage cabinets</li> <li>▪ Bookshelves</li> <li>▪ File cabinets</li> <li>▪ Wardrobe closet</li> </ul> </li> <li>• Desk and chair</li> <li>• Conference table</li> <li>• Side chairs and couch</li> <li>• Lamps</li> <li>• Networked computer</li> <li>• Small refrigerator/ microwave</li> <li>• Magnetic marker board</li> <li>• Clock</li> </ul>
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## Special Considerations

The following table reflects design considerations for the space.

Special Considerations	<ul style="list-style-type: none"> <li>• Second exit for security</li> <li>• Carpeting</li> </ul>
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## Assistant 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	• 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
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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 view panel [two entrances]
	• Windows: operable, with blinds to allow controlled natural lighting
	• Interior window with blinds to view in-school suspension room

## 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
	• Table

## Special Considerations

The following table reflects design considerations for the space.

Special Considerations	
	• 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



## 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	<ul style="list-style-type: none"> <li>• Counseling of students with concerns</li> <li>• Conferencing with parents, students, and staff</li> </ul>
Persons	<ul style="list-style-type: none"> <li>• Counselors</li> <li>• School staff</li> <li>• Parents</li> <li>• Students</li> <li>• Visitors</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>• No special requirements</li> </ul>
------------	---

Plumbing	<ul style="list-style-type: none"> <li>• No special requirements</li> </ul>
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Electrical & Lighting	<ul style="list-style-type: none"> <li>• Duplex electrical outlets on each wall</li> </ul>
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Technology	<ul style="list-style-type: none"> <li>• Telephone/intercom/voicemail port</li> <li>• Video port and monitor</li> <li>• Data ports</li> <li>• Quad outlet adjacent to each data port</li> </ul>
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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	<ul style="list-style-type: none"> <li>• Door: narrow or view panel with blinds</li> <li>• Windows: desired if possible; operable with blinds for privacy</li> </ul>
-----------------	--

## Furniture & Equipment

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

Furniture & Equipment	<ul style="list-style-type: none"> <li>• Casework to include: <ul style="list-style-type: none"> <li>▪ Bookcases</li> <li>▪ Storage closet/ wardrobe</li> <li>▪ Locking file cabinets [min of 3]</li> </ul> </li> </ul>
	• 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

## 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	• Ventilation to prevent copier from overheating
------------	--

#### Plumbing

- Sink with hot and cold water
- Soap dispenser

#### 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		Special Considerations
	<ul style="list-style-type: none"> <li>• Casework to include: <ul style="list-style-type: none"> <li>▪ Countertop with sink, base and wall cabinets</li> <li>▪ Lockable storage cabinets</li> <li>▪ Wall shelving</li> </ul> </li> <li>• Work tables and chairs</li> <li>• Staff mailboxes [with hallway access]</li> <li>• Networked computer</li> <li>• Copier</li> <li>• Binding equipment</li> <li>• Fax machine and printers</li> <li>• Laminating machine</li> <li>• Paper storage, shredder, and cutter</li> <li>• Tack board/marker board</li> <li>• Clock</li> <li>• Poster maker machine</li> <li>• AccuCut letter/shape cutter</li> <li>• Butcher paper cart</li> </ul>	<ul style="list-style-type: none"> <li>• Consideration for sound transfer</li> <li>• Vinyl tile</li> </ul>

## Special Considerations

The following table reflects design considerations for the space.

## 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	<ul style="list-style-type: none"> <li>Storage</li> </ul>	Plumbing	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Staff</li> </ul>	Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> </ul>
		Technology	<ul style="list-style-type: none"> <li>Telephone/intercom/voicemail port</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>	Doors & Windows	<h3>Doors &amp; Windows</h3> <p>The following table reflects the considerations for the doors and windows to be used in the space.</p> <ul style="list-style-type: none"> <li>Door: solid</li> <li>Windows: operable blinds for privacy</li> </ul>

## 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

## 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	<ul style="list-style-type: none"> <li>Personal Hygiene</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Teachers</li> <li>Administration</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>Exhaust fan</li> </ul>
------------	---

#### 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: 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:
  - Mirror
- Soap dispenser
- Tissue holder
- Paper towel dispenser

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- Located throughout school





*sample photo: does not  
represent LBUSD facilities*

## 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
- Lie down area for students

#### 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
- Ice machine

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
- Privacy curtain at cots
- Rolling carts
- Lamps
- Refrigerator
- Networked computer
- Magnetic marker board
- Tack board
- Cubical curtains with track
- Clock
- Sharps waste disposal
- Soap dispenser

### 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
- Vinyl tile flooring

## Additional Office Space

### 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	<ul style="list-style-type: none"> <li>Meeting with students</li> <li>Scheduling of appointments</li> <li>Record keeping</li> <li>Preparation of materials</li> </ul>	Plumbing	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
Persons	<ul style="list-style-type: none"> <li>School staff</li> <li>Student population</li> <li>Speech/language therapist</li> <li>Special Needs Staff</li> <li>Aides</li> <li>Teachers</li> </ul>	Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> </ul>
		Technology	<ul style="list-style-type: none"> <li>Telephone/intercom/voicemail port</li> <li>Video port and monitor</li> <li>Data ports</li> <li>Quad outlets adjacent to each data port</li> </ul>
		<b>Doors &amp; Windows</b>	
	<p>The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical &amp; Lighting, and Technology.</p>	The following table reflects the considerations for the doors and windows to be used in the space.	
Mechanical	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>	Doors & Windows	<ul style="list-style-type: none"> <li>Door: view panel</li> <li>Windows: no special requirements</li> </ul>

## 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
- Table and chairs
- 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



## Overview

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

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.

## Food Services

### Introduction

The Food Service Center will serve as an area where students, staff, and visitors can obtain a quick, desirable, and economical snack or meal. The center will be comfortable and cheerful and have the ability to serve as a banquet facility, meeting room, or area where dances are held.



## Space Requirements

The following table lists the type, quantity, and size of each space to be included in the food services area.

Cafeteria/Food Service Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Kitchen, warming/serving only																				
Preparation Area																				
Serving Area																				
Dry Food Storage																				
Cooler/Freezer		1	1,500	1,500		1	2,000	2,000		1	2,000	2,000		1	2,500	2,500		1	2,500	2,500
Ware Washing																				
Kitchen Mgr Office																				
Restroom																				
Lockers																				
Multipurpose Room (with dividers)*		1	2,000	2,000		1	2,000	2,000		1	2,000	2,000		1	2,500	2,500		1	2,500	2,500
Table & Chair Storage		1	200	200		1	200	200		1	200	200		1	250	250		1	250	250
Stage Area		1	600	600		1	600	600		1	600	600		1	600	600		1	600	600
Auditorium Seating						1	1,500	1,500		1	1,500	1,500		1	1,500	1,500		1	1,500	1,500
Exterior Patio/Covered Eating Area		1	2,000	Outside		1	2,000	Outside		1	2,000	Outside		1	2,000	Outside		1	2,000	Outside
Outdoor Athletic Equipment Storage		1	500	500		1	750	750		1	750	750		1	750	750		1	750	750
<b>Food Service Sub-Total</b>	<b>0</b>			<b>4,800</b>	<b>0</b>			<b>7,050</b>	<b>0</b>			<b>7,050</b>	<b>0</b>			<b>8,100</b>	<b>0</b>			<b>8,100</b>

\* Suggest a layout which there is divider wall between the auditorium and multipurpose room

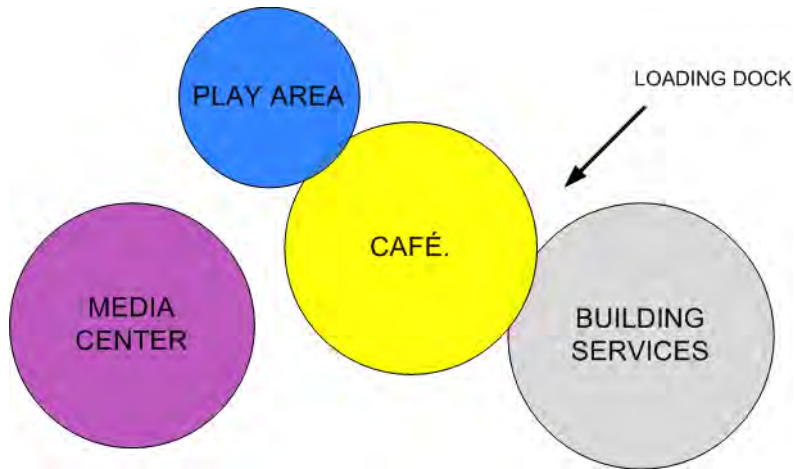


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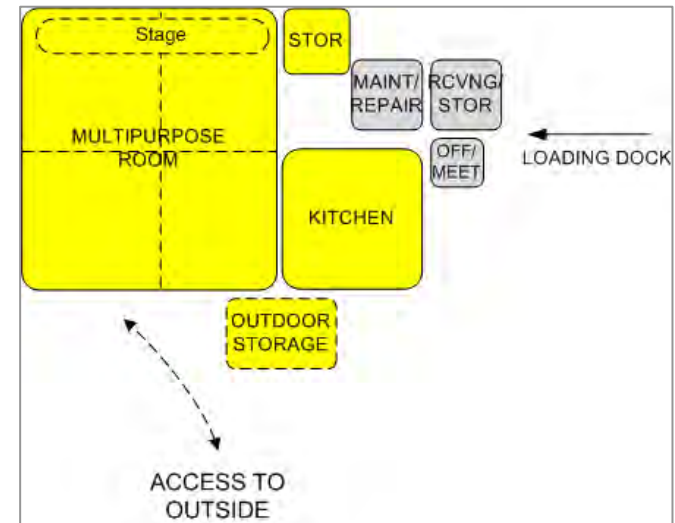


## Spatial Relationship

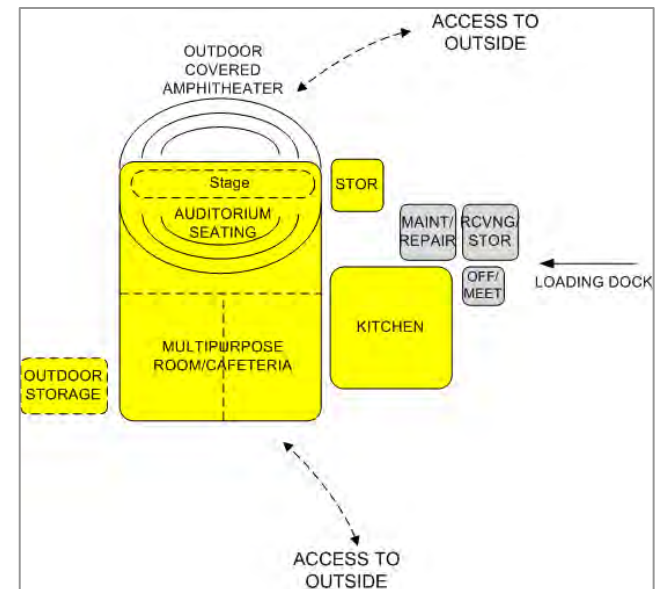
The Food Service Area should be adjacent to the Custodial & Maintenance Area and the Student Dining Area. It should also have easy access to the loading dock.



## 400 Student School



## 1,000 Student School







#### 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

## 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	<ul style="list-style-type: none"> <li>Warming food</li> <li>Preparing food</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Food service personnel</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>65 Degrees year round temperature</li> <li>MUA unit capable of heating and cooling [evap or A/C]</li> <li>Mechanical [cable operated] gas shut-off valve for hood fire suppression system</li> <li>Surface mounted gas manifold under hood for cooking equipment gas supply</li> </ul>
Plumbing	<ul style="list-style-type: none"> <li>Multiple sinks</li> <li>Waste disposal</li> <li>Trough drain at cook line</li> <li>Floor sinks and drains</li> <li>Garbage disposals &amp; pre-rinse</li> </ul>
Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> <li>Other electric based on equipment requirements</li> </ul>
Technology	<ul style="list-style-type: none"> <li>Data ports</li> </ul>

## 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
- Double doors to storage
- Double doors to Loading/Receiving
- Double doors to Serving area

### Special Considerations

- Quarry tile flooring per District standards
- Non slip flooring
- Locate near dock and kitchen
- Meet Department of Health standards
- Washable ceilings, walls

## 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.

## 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	<ul style="list-style-type: none"> <li>Serving food</li> <li>Holding prepared food</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Food service personnel</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>65 Degrees year round temperature</li> </ul>
------------	---

#### Plumbing

- No special requirements

#### Electrical & Lighting

- Duplex electrical outlets on each wall, maximum 12' apart
- Cord drop for all holding and serving equipment

#### Technology

- Data ports
- Single lane POS system

### Doors & Windows

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

Doors & Windows	<ul style="list-style-type: none"> <li>Door: view panel</li> <li>Windows: none</li> <li>Security system</li> </ul>
-----------------	--

## Furniture & Equipment

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

### Furniture & Equipment

- Point of sale cash register
- Other special equipment needs for food serving
- Owner-furnished/contractor-installed serving equipment

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- Quarry tile flooring
- Locate near dock and kitchen
- Special opening to enable multiple serving areas for community use

## 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	<ul style="list-style-type: none"> <li>Storage for dry food and paper</li> </ul>	Plumbing	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Food service personnel</li> </ul>	Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>65 Degrees year round temperature</li> </ul>	Technology	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
<h3>Building System Requirements</h3> <p>The following tables reflect the needs of four different areas of Building System Requirements: Mechanical, Plumbing, Electrical &amp; Lighting, and Technology.</p>		<h3>Doors &amp; Windows</h3> <p>The following table reflects the considerations for the doors and windows to be used in the space.</p>	
		Doors & Windows	<ul style="list-style-type: none"> <li>Door: view panel</li> <li>Windows: none</li> <li>Security system</li> </ul>

## 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
- Shelving to maximize storage

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- Concrete flooring
- Locate near dock and kitchen

## 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

- See manufacturer's specifications
- Separate condensing units for each box [cooler and freezer]

#### Plumbing

- No special requirements

#### Electrical & Lighting

- Duplex electrical outlets on each wall
- Coordinate power requirements with equipment manufacturer
- Fluorescent lighting

#### Technology

- Radio controlled temperature monitoring

### 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

- Walk-in freezer and cooler
- Rust-proof shelving, 18' deep with additional 24" deep dunnage racks in freezer and refrigerator

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- No special requirements

## 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	<ul style="list-style-type: none"> <li>Washing of preparation equipment</li> <li>Sanitizing</li> </ul>	Plumbing	<ul style="list-style-type: none"> <li>Large sinks and sprayers</li> <li>Garbage disposal</li> <li>Floor drain</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Food service personnel</li> </ul>	Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> <li>Coordinate power requirements with equipment manufacturer</li> <li>Fluorescent lighting</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>	Technology	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
		Doors & Windows	<h3>Doors &amp; Windows</h3> <p>The following table reflects the considerations for the doors and windows to be used in the space.</p> <ul style="list-style-type: none"> <li>Door: no special requirements</li> <li>Windows: none</li> </ul>

### Furniture & Equipment

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

#### Furniture & Equipment

- Rust-proof shelving

### Special Considerations

The following table reflects design considerations for the space.

#### Special Considerations

- Tile flooring

## Kitchen Manager 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	<ul style="list-style-type: none"> <li>• Scheduling</li> <li>• Staff evaluations/discipline/small meetings</li> <li>• Customer Service</li> <li>• Ordering food</li> </ul>
Persons	<ul style="list-style-type: none"> <li>• Food service manager</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>• No special requirements</li> </ul>
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Plumbing	<ul style="list-style-type: none"> <li>• No special requirements</li> </ul>
----------	---

Electrical & Lighting	<ul style="list-style-type: none"> <li>• Duplex electrical outlets on each wall</li> </ul>
-----------------------	--

Technology	<ul style="list-style-type: none"> <li>• Telephone/intercom/voicemail port</li> <li>• Video port and monitor</li> <li>• Data ports</li> <li>• Quad outlet adjacent to each data port</li> </ul>
------------	---

### Doors & Windows

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

Doors & Windows	<ul style="list-style-type: none"> <li>• Door: large view panel</li> <li>• Windows: operable with ½ glass looking into serving area and food prep area</li> </ul>
-----------------	---

## 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

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- No special requirements

## 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	<ul style="list-style-type: none"> <li>Personal hygiene</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Food service staff</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>Exhaust fan</li> </ul>
------------	---

#### Plumbing

- Sink with hot and cold water
- Toilet

#### Electrical & Lighting

- Duplex electrical lighting 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 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	<ul style="list-style-type: none"> <li>Food service personnel storage</li> </ul>	Plumbing	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Food service personnel</li> </ul>	Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> </ul>
		Technology	<ul style="list-style-type: none"> <li>Telephone/intercom/voicemail port</li> <li>Video port and monitor</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>Ventilation</li> </ul>		
		Doors & Windows	<ul style="list-style-type: none"> <li>Door: no special requirements</li> <li>Windows: no special requirements</li> </ul>

### Building System Requirements

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

### Doors & Windows

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



## Furniture & Equipment

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

### Furniture & Equipment

- Lockers with sloped tops
- Bench
- Locking storage cabinet

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- Adjacent to food service restroom

## Multipurpose 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

- Student dining
- School and community program, meetings, and activities.
- Performances

#### Persons

- Staff members
- 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
- 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: 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

- Round, fold up tables
- Stackable, free standing chairs and chair dolly
- CD/DVD player
- Equipment rack in control closet
- LCD projector
- Flat screen televisions mounted to wall

## 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 in multipurpose room with light and sound control box
- Vinyl tile flooring with various colors to show table placement

## 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

- Student and visitor presentations,
- School and community programs, meetings, and activities.
- Performances

#### Persons

- Students
- Staff members
- 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

- Air conditioning

#### Plumbing

- No special requirements

#### Electrical & Lighting

- Duplex electrical outlets on each wall
- Adjustable theater lights

#### Technology

- Data port
- Quad outlet adjacent to each data port
- 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: single door
- Windows: none

## Furniture & Equipment

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

### Furniture & Equipment

- Stage curtain
- Backdrop curtain
- Appropriate/balanced proscenium arch for special acoustics
- Risers/steps as part of front of stage

## Special Considerations

The following table reflects design considerations for the space.

### Special Considerations

- Raised above Multipurpose Room floor
- Barrier free access from Multipurpose Room
- Vinyl tile flooring

## 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	<ul style="list-style-type: none"> <li>Storage</li> </ul>	Plumbing	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Custodial/Maintenance staff</li> </ul>	Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>	Technology	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
		Doors & Windows	
		Doors & Windows	
		<ul style="list-style-type: none"> <li>Door: solid</li> <li>Windows: none</li> </ul>	

### 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

## Overview

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



*sample photo: does not  
represent LBUSD facilities*

## Custodial / Maintenance

### Introduction

Custodial may provide space for receiving/storage, maintenance/repair, and office/meeting space. In addition, maintenance should be able to access major electrical, plumbing, and mechanical fixtures without having to go into the classrooms.





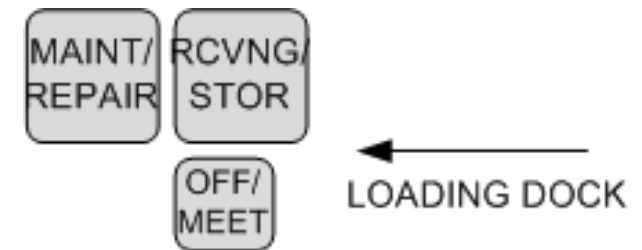
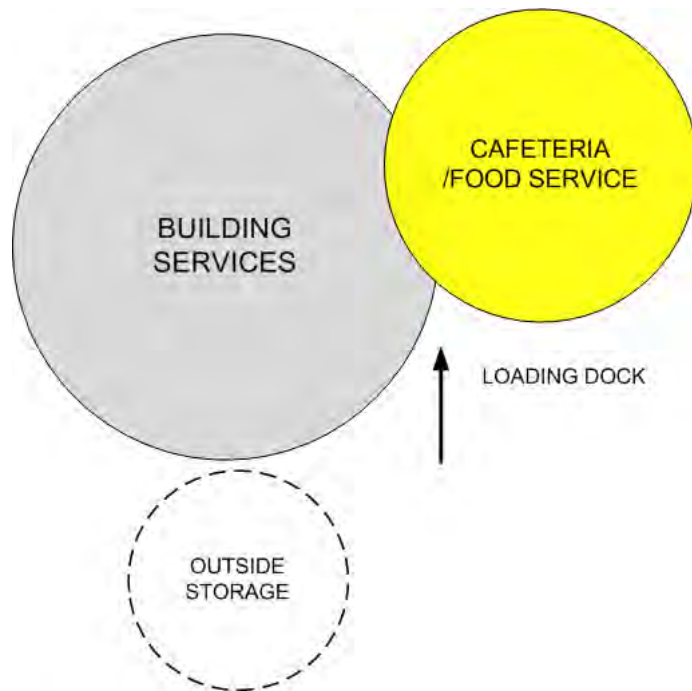
## Space Requirements Table

The following table lists the type, quantity, and size of each space to be included in this program area.

Custodial Spaces	Suggested Spaces for 400 Students				Suggested Spaces for 550 Students				Suggested Spaces for 700 Students				Suggested Spaces for 850 Students				Suggested Spaces for 1,000 Students			
	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total	TS	Quantity	SF	Total
Receiving/Storage		1	500	500		1	500	500		1	500	500		1	700	700		1	700	700
Maintenance/Repair Area		1	500	500		1	500	500		1	500	500		1	500	500		1	500	500
Office/Planning/Meeting Area		1	200	200		1	200	200		1	200	200		1	200	200		1	200	200
Custodial Hopper Room (throughout school)		2	100	200		4	100	400		6	100	600		8	100	800		10	100	1,000
Mechanical Rooms & Restrooms	See Building Service in Sum Chart				See Building Service in Sum Chart				See Building Service in Sum Chart				See Building Service in Sum Chart				See Building Service in Sum Chart			
Loading Dock			outside				outside				outside				outside				outside	
<b>Custodial Sub-Total</b>	<b>0</b>			<b>1,400</b>	<b>0</b>			<b>1,600</b>	<b>0</b>			<b>1,800</b>	<b>0</b>			<b>2,200</b>	<b>0</b>			<b>2,400</b>

## Spatial Relationships

The Custodial area should be located next to receiving/storage as well as next to the Food Services areas.





#### 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

#### 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
- Shelves
- Built-in cabinets
- Large mop sink

## 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

## 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 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 12' apart
	• 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: no special requirements

## 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
	• Locking shelving for tools
	• Compressor
	• Eye wash
	• Soap dispenser
	• Paper towel holder
	• Built in vise
	• Hazmat storage cabinet

## Special Considerations

The following table reflects design considerations for the space.

Special Considerations	• Soundproofing between workroom and instruction areas
	• Adjacent to loading dock

## Office/Planning & 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	<ul style="list-style-type: none"> <li>Telephone calls</li> <li>Paperwork</li> <li>Scheduling</li> <li>Training</li> </ul>
Persons	<ul style="list-style-type: none"> <li>Maintenance and Custodial personnel</li> </ul>

### Building System Requirements

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

Mechanical	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
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Plumbing	<ul style="list-style-type: none"> <li>No special requirements</li> </ul>
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Electrical & Lighting	<ul style="list-style-type: none"> <li>Duplex electrical outlets on each wall</li> <li>Adequate lighting</li> </ul>
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Technology	<ul style="list-style-type: none"> <li>Telephone/intercom/voicemail port</li> <li>Video port and monitor</li> <li>Data ports</li> <li>Quad outlet adjacent to each data port</li> <li>HVAC controls</li> <li>Data ports or e-mail (hand held) access and charging ports in custodial office</li> </ul>
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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	<ul style="list-style-type: none"> <li>Door: view panel</li> <li>Windows: window with a view of workroom and loading dock</li> </ul>
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## Furniture & Equipment

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

- | Furniture & Equipment |  |
|-----------------------|--|
|                       | • Casework to include: <ul style="list-style-type: none"><li>▪ Filing cabinet</li><li>▪ Bookcase</li></ul> |
|                       | • Tack board   |
|                       | • Desk and chair   |
|                       | • Ergonomic task chairs  |
|                       | • Networked computer   |
|                       | • Printer  |

## Special Considerations

The following table reflects design considerations for the space.

- | Special Considerations |                           |
|------------------------|---------------------------|
|                        | • No special requirements |

## 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
- Locked drop area with security alarm