

TEACHER COLLABORATIVE SPACE

Vision and Program Statement

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

Trends

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

Anticipated Use

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

Orientation and Relationship

Teacher collaborative spaces should be near academic wings.

Space Requirements

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



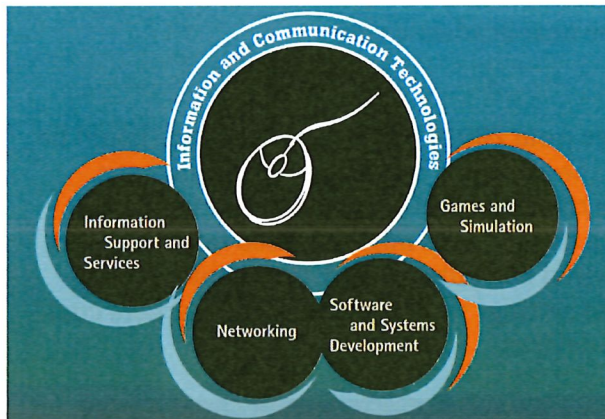
Collaborative space examples: Utah school example and Amazon headquarters, Seattle, Washington, HED Amazon photo credit

INNOVATION HUB - CAREER TECHNICAL EDUCATION (CTE) AND SCIENCE TECHNOLOGY ENGINEERING ART AND MATH (STEAM)

Vision

The vision for the Innovation Hub is to construct a student-centered space that enhances CTE offerings and builds science, technology, engineering, art and math (STEAM) interdisciplinary and project based learning possibilities.

The educational direction is to expand college and career paths for TLHS students in the Information and Communication Technologies (ICT) industry sector while linking such pathways to the common core and next generation science standards. The existing library, career center, computer lab and surrounding classrooms will be reconfigured into the Innovation Hub, a media rich space to support an articulated pathway in either information support and services, networking, software and systems development, or games and simulation or a combination of these pathways. The Hub will also be poised for the Arts, Media and Entertainment (AME) CTE industry sector with the inclusion of digital arts classrooms, green room, media control room, audio sound booth and media arts spaces.



ICT Pathways

"Information and Communication Technologies (ICT) have expanded the need for employees who can understand, manage, and support all rapidly emerging evolving, and converging computer, software, networking, telecommunications, Internet, programming, and information systems..."



AME Pathways

"...New technologies are also constantly reshaping the boundaries and skill sets of many arts career pathways. Consequently, core arts-sector occupations demand constantly varying combinations of artistic imagination, metaphoric representation, symbolic connections, and technical skills."

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

Trends

The information technology (IT) industry has had a revolutionary impact on the economy and on society. According to the CDE, the IT sector contains some of the fastest-growing industries, such as software publishing, Internet publishing, service provider's Web search portals, and data processing services. Of all the career industries, the AME sector requires perhaps the greatest cross-disciplinary interaction because the work in this sector has a propensity to be largely project-based, requiring both independent work and interdependent management skills for career success, according to the CDE.

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

Anticipated Use

The existing library, career center, computer lab and surrounding classrooms will be reconfigured into the six-classroom Innovation Hub. This Hub will be a media rich space to support articulated pathways in information and communication technologies and media arts and open possibilities for STEAM interdisciplinary teams, which include math, physics, digital arts, and technology. The Hub also provides for enclosed collaborative spaces for teachers and students.

Educational Process

Curriculum in this area is evolving from teacher-direct instruction of discrete skills to student-centered learning. In intermediate and advanced computer technology courses, for example, students are often encouraged to work at their own pace, demonstrating mastery of individual instructional modules in areas such as spreadsheet development, word processing, database design, multimedia presentation, and Internet research and publishing. Students, who master all instructional standards, may work toward industry certification from companies such as Nortel and Microsoft. Teachers who individualize instruction in this way use a number of strategies to promote students' mastery of concepts. In addition to providing individual instruction to students, teachers pair students who are working on similar projects, and provide tutorials for students who need additional instruction.

Orientation

The Innovation Hub is in the center of the school's academic learning spaces bridging the English language arts, mathematics and science and arts departments with an interdisciplinary space to enhance the CTE and STEAM options for students.

Curriculum

Each career pathway is a sequence of CTE courses that integrate academic and

career skills that prepare student for career entry. TLHS will offer a sequenced CTE program in the ICT industry sector. A program sequence in CTE has three parts: (1) an introductory or foundations course, (2) one or more concentration courses, and (3) a capstone course. Many capstone courses will meet the A-G requirements for preparation to enter the University of California or the California State University System.

TLHS will build on the existing computer programming sequencing from beginning computer programming to AP Computer Science Principles and the new Video Game Development Studio in collaboration with 2K Next Level Foundation. Possible sequencing could be:

Information Technology Sector

Introductory	Concentration	Capstone
Introduction to Programming	AP Computer Science A	3D Programming**
Computer Science Essentials*	AP Computer Principles	Selected Topics in Computer Principles
Physics	AP Physics	Robotics Engineering*

Art and Media Sector

Introductory	Concentration	Capstone
Intro to Graphic Design	Graphic Design II	3D Animation**
Digital Photography or Digital Media Art I*	Journalism Yearbook	Advanced Digital Media Production*

* New courses; ** Cross-sector; Room usage color coded

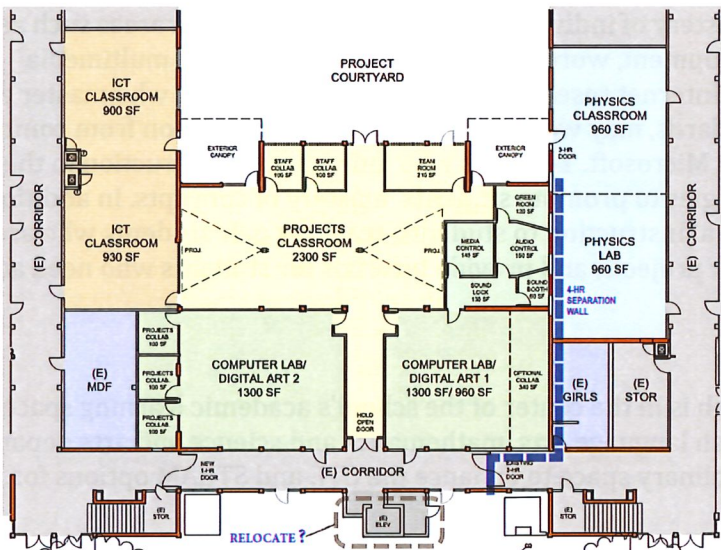


Diagram of proposed Innovation Hub, DLM HED Architects

Specific Requirements for Designated Area



DLM HED Architects, example areas for Innovation Hub – Projects Classroom

Program Area	Educational Specification Requirements
Technology Hub (reconfigured library, career center, computer lab, plus additional classroom out of library space)	<p>The learning environment layout and spaces are versatile and include small to large spaces, multi-purpose, conference, meeting, group learning, and storage capabilities</p> <p>Tables and chairs for 60</p> <p>Soft furnishings</p> <p>Large screen monitors</p> <p>Distance learning capability providing access to video conferencing</p> <p>Ceiling mounted electrical access for flexible classroom/lab configuration and use</p>

	<p>Roll-up door to an outdoor academic quad</p> <p>Teacher and student collaborative areas (see Collaborative Space Section)</p> <p>Concrete flooring</p>
Physics Classroom and Lab	<p>Instructional technology per District standard</p> <p>Sink in counter if possible</p> <p>Under counter cabinetry for storage of physics equipment</p> <p>Moveable tables and chairs for 36 students</p>
ICT Classrooms (2) – already adjacent to Hub	<p>Instructional technology per District standard</p> <p>Group based learning design (tables and chairs, configurable for groups of two, three or four)</p> <p>Fixed laptop storage for 36 17- inch screen laptop computers</p> <p>Networked smart projector with capacity of broadcasting laptop screens</p> <p>Lots of draw space</p>
Computer Lab/ Digital Art I	<p>Instructional technology per District Standard</p> <p>Computer stations for 36 computer</p> <p>3 Collaborative Rooms, Project space adjacent</p> <p>Storage Cabinetry or room for photo equipment</p>
Computer Lab/ Digital Art II	<p>Instruction technology per District standard</p> <p>Computer stations for 36 computers</p>

	Adjacent Green and Control Room(s)
Green Room and Media Control Room	See below example
Audio Sound Room and Sound Booth	Adjacent to Green and Media Rooms



Example Green and Control Room

Innovation Hub (Remodel) Square Footage

Space	Square Footage
New Projects Classroom	2,300
Physics Lab and Classroom	1,920
Expanded Computer Lab/Digital Art	1,300
New Computer Lab/Digital Art	1,300
2 Remodeled Classrooms Into ICT	1,830
2 Staff Collaboration Spaces	200
1 Student Collaboration Space	210
Green Room	120
Media Control Room	145
Audio Control Room	150
Sound Booth and Sound Lock	190
Total	9,665

PHYSICAL EDUCATION – NEW GYMNASIUM COMPLEX

Vision

The vision is to build a competitive sport gymnasium and all school meeting space. The principal focus of the physical education curriculum is that all students—regardless of ethnicity, gender, native language, race, religion or ability—be given opportunities to succeed in physical education and develop a lifelong commitment to physical activity for both health and pleasure. Additionally, the physical education curriculum emphasizes a variety of cognitive, affective, and psychomotor teaching and learning strategies.

Trends

The trends in high school physical education encourage life-long fitness and are more and more incorporating fitness rooms with climbing walls, ropes courses, cardio vascular machines and yoga offerings.

Physical education teachers are encouraged to incorporate a variety of instructional media and appropriate instructional technology into their teaching. As instruction moves from team centered sports and competition to individual fitness, educational equipment must reflect this changing focus. For example, heart monitors can provide students with feedback on their heart rates while they perform cardiovascular exercise. Journals can be utilized to develop goals setting for both short-term goals in a specific class and long-term goals for lifetime fitness.

Anticipated Use

TLHS's existing gymnasium (gym), shower locker and team room will be expanded by the construction of a second competition gym. The new physical education building contains a gym, physical education classroom, athletic team rooms, physical education and athletic storage rooms, coaches' offices, a conference room, athletic training room, the athletic director's office, and a lobby with concessions area.

Community use of the gym will be extensive, and, therefore, wayfinding signage from well-lit parking lots is important.

Orientation

The physical education building should be located near the largest parking lot(s) to facilitate use and access. The outdoor facilities and play fields should be located as close to the physical education buildings as possible.

Curriculum

The major emphases of study in the ninth grade are fitness and team sports. Ninth grade is a stage at which students are able to synthesize much of what they have learned in the earlier grades, including knowledge of human growth development and physiology. Affiliation, a feeling of being connected and involved, is of primary

importance to ninth graders. Individuals are able to coalesce as a team and focus on the needs and contributions of other team members. The ninth grade physical education courses may include: wellness and fitness for life, volleyball, tennis, wrestling, self-defense, weight training, softball, dance, and soccer.

At grades ten through twelve, students are capable of choosing the physical activities they want to pursue. Opportunities may focus on individual or team sports of choice such as dance and personal defense. The tenth through twelfth grade physical education elective classes may include: cardio-vascular conditioning, tennis, racquetball, pickle ball, badminton, team handball, floor hockey, aerobics, golf, line dancing, archery, volleyball, flag football, basketball, and weight training.

Specific Requirements for Designated Area

All indoor physical education facilities are to be air-conditioned.

Gym

The gym is located in proximity to substantial parking and existing locker rooms. The gym needs to have two retractable main glass backboards, four retractable glass side backboards, and a resilient maple wood flooring system that will be striped for one 94-foot long basketball court with school logo at center court, a 10-foot safety zone at each end and 5-feet on each side, one main competition volleyball court, three competition cross volleyball courts and two auxiliary cross basketball courts. The floor needs to have all the floor plates and sleeves installed to accommodate the specified court. Two hydration stations are to be installed at each end of the gym. The gym is to have Wi-Fi and Bluetooth capabilities.

The bleachers on both sides of the gym should contain seating for approximately 1,200 spectators and be motorized to allow them to be opened or closed by one person. The gym must be equipped with a quality sound system that provides surround sound pointing downward with outlets on both sides and both ends of the facility. Two multi-sport scoreboards will be mounted on the walls at each end of the gym with outlets on one side of the gym. Two shot clocks will be on the backboards. One duplex outlet needs to be installed on each side, centered at the top of the bleachers for filming of events. Other data requirements to be located at both ends of the gym include: phone jacks, networked computer outlets, two wall mounted clocks and intercom systems. A scoring table is to be located on the team bench side of the bleachers, centered in the front with data outlets and access to scoreboard mechanics. Space for pendants and team rosters is to be provided on walls.

A storage room with two 4-foot wide doors, directly accessible from the inside of the main gym, needs to be large enough to accommodate basketball equipment and volleyball equipment (including nets and posts). The storage area is to have wire mesh dividers.

The gym must be Americans with Disabilities Act (ADA) compliant.

Lobby/Concessions Room/Ticket Booth

Located in lobby area of the gym is the concession room, which needs to be large enough to contain all the necessary equipment, storage, and accessibility to provide a food selling counter and food service for all extracurricular events that are hosted in the gym. The concessions room needs to have the appropriate number of duplex outlets, a networked computer outlet, a phone outlet, and a clock. A ticket booth is required at the public entry to the gym.

Physical Education Classroom

Located in proximity to the gym, the physical education classroom needs to be larger than typical classrooms to seat 40-50 students, and otherwise contain the standards for regular classrooms with instructional technology.

Athletic Training Room/Office

The athletic training room should be wired for a networked computer and a phone outlet, be equipped with a clock, an intercom connection, a whirlpool that has the proper electrical outlet and hot and cold water supply, and enough space to accommodate a trainer's table, four taping tables, storage cabinets for training supplies, a sink, and an electrical outlet and water source for an ice machine that is large enough to meet the supply and replacement demands of the athletic and physical education departments. The cement floor needs to contain a drain.

Athletic Director's Office

The athletic director's office should be located to allow visitors direct outside access and allow the athletic director access to the physical education offices. The location of the office also needs to allow for easy access to the training room and the athletic team rooms. The office should have enough space for three staff workstations and should be equipped with networked computer outlets, four duplex outlets, and have a carpeted floor and a clock. The athletic uniform storage room and restrooms are adjacent to the athletic director's office.

Athletic Team Rooms

Three athletic team rooms (one male, one female, one visitor) need to be located in the gym. Each needs to contain 20 vented athletic lockers, fixed benches in front of the lockers, a clock, and a mounted whiteboard that can be viewed easily from anywhere in the room. These rooms must be well ventilated and have inside access to the main gym.

Coaches Offices

Two coaches offices are to be located in proximity to the athletic director's office, athletic training and team rooms. An eight-person conference room is adjacent to the coaches' offices.

Program Area	Educational Specification Requirements
Gym Lobby	<p>Display area</p> <p>Concessions area with counter for selling and back counter with area for refrigerator, hot dog roaster, nacho maker, heating plates and lockable storage, sink, running water</p> <p>Numerous outlets for concessions equipment</p> <p>VoIP and handset</p> <p>Clock</p>
Gym	<p>Bleachers for 1,200 total, motorized</p> <p>Layout per above</p> <p>Scoring table area with technology access and integrated power</p> <p>Two multi-sport scoreboards</p> <p>Shot clocks on the glass backboards</p> <p>High quality sound system</p> <p>Maple floor</p> <p>Mounted defibrillator</p> <p>Two hydration stations</p> <p>Wi-Fi and Bluetooth capability</p>
Physical Education (Health) Classroom	<p>40-50 student capacity</p> <p>Instructional Technology per Standard</p> <p>Tables and chairs for 50</p>
Athletic Director's Office	<p>Desk space and data access for three (3) staff members</p>

	VoIP and three (3) handsets
Trainer Room	Data outlets for computer Whirlpool with proper electrical and hot and cold water supply Trainer's table Four taping tables Built-in storage cabinets for training supplies Ice machine and water outlet Sink and counter area Cement floor with drain
Coaches Offices (2)	Area for desk, data outlets, VoIP handsets Area for 4-person table and chairs
Conference Room	Table and chairs for eight people Matte finished whiteboard Short -throw projector Counter space VoIP and handset
Team Rooms (3) – Boys, Girls, Visiting	Well-ventilated 20 lockers each, open faced Benches Whiteboard, short throw projector mounts Carpeted
Storage	Directly accessible to gym Wire mesh dividers 4 foot wide doors

	Accommodates basketball equipment, volleyball equipment, and other storage needs
Uniform Storage Room	Adjacent to athletic director's office
	Check with athletic director for system needed to store uniforms
Laundry Room	An industrial washer and industrial dryer
Restrooms (if single occupancy, all gender)	Boys and girls, staff, public
Data/Electrical/Custodial	

Gym Square Footage

Area	Square Footage
Gym	10,000
Concessions/Lobby/Ticket Booth	600
P.E. Classroom	1,000
Athletic Director Office (3 staff)	300
Trainer Room/Office	450
Coaches Offices (2@150)	300
Conference Room	400
Team Rooms (3@400: boys, girls, visitors)	1,200
Laundry	80
Athletic Uniform Storage	300
Restrooms	495
Storage	800
Data/Electrical/Custodial	175
15% Circulation and Support	2,422
Total	18,522

VISUAL AND PERFORMING ARTS

Vision

Arts education provides students with unique knowledge and meaning based on inventions, imagination, and human judgment. The study of dance, music, theatre, and the visual arts guides students to experience and understand a universal language that speaks to the rich diversity of our multicultural society.

Whether students study the traditional disciplines of the arts, or engage in newer forms of artistic expression represented through computer generated visual design, video, or cinematography, they are exposed to the following instructional strands: artistic perception, creative perception, historical and cultural context, aesthetic valuing, and connection, relationships and applications.

TLHS is reconstructing its Visual and Performing Arts areas for the music, drama, ceramics, and two-and-three dimensional art classes. The ceramics and art classrooms may remain in existing location and be upgraded as needed.

Trends

Educational technology has had a great impact on arts education. In the visual arts, for example, digital photography, graphic arts, video production, and cinematography have become mainstream parts of the curriculum. In both instrumental and vocal music, students compose and arrange music using digital and electronic technology when appropriate. In theatre and dance, students utilize state of the art technology in set design, staging, and production. As stated in the Visual and Performing Arts Content Standards for California Public Schools, “[t]echnology is recognized as an essential tool that enhances learning and expression in all the arts disciplines and provides for expanded forms of expression in digital and electronic media.” Virtual Reality technology is also beginning the visual and performing arts sectors as well as library services.

Another goal for arts education is to promote academic rigor through active practice, reading, researching, and writing about the arts, and participating in arts criticism. In addition, guiding students to make connections between all areas of the arts, and across subject areas, is a key focus of the standards.

Anticipated Use

TLHS is reconstructing its Visual and Performing Arts area for the music, drama, ceramics and two-and-three dimensional art classes into two new building area an art and performance courtyard. The ceramics and art classrooms may remain in existing location and be upgraded as needed. Digital and graphic arts will be located in the Innovation Hub.

Orientation

The Visual and Performing Arts complexes will be separate, yet adjacent buildings

on TLHS campus. The Performing Arts and Theatre complex houses the black box theatre, a drama classroom, a vocal and music classroom with adjoining practice areas and teacher offices. This complex will be located adjacent to the Performing Arts Theater. The visual arts program will either relocate or be enhanced within its current configuration.

These areas should have connection, by a corridor or some other visual method, to the academic areas of campus.

Curriculum

The Visual and Performing Arts Content Standards for California Public Schools (2001) outlines subject area standards that provide a foundation for instruction.

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

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

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

Classes for the music program currently include wind ensemble, string orchestra, choir, jazz band, and beginning piano. Classes for drama include two sections each of beginning and advanced drama. Classes for ceramics and art are Art, Advanced Art, and AP Art and a full day schedule of Ceramics classes.

Specific Requirements for Designated Area

Performing Arts

The Performing Arts building should be located near the school's main parking lot to provide patron parking for special events, as well as direct access to the black box theatre from the parking lot. The back of the building should be accessible to an interior campus road to allow for the delivery and transport of theatre production materials and musical equipment.

Black Box Theater, Control Booth, Dressing Rooms, Backstage

The entrance to the black box theatre should face the center or "quad" of the

campus. A ticket sales booth may either be included as part of the black box theater building or located in the nearby Commons or Performing Arts Theater. The area of the 150-seat black box theater and the control booth should be approximately 2,250 square feet. Public restrooms should be incorporated into the design of the Performing Arts building, or located in proximity to the building. The lobby could be designed for access through the Commons building.

The black box theatre design should provide maximum flexibility for the staging of theatre and musical productions. Flexibility for a “green screen” and other media arts functions should be considered within this design for multiple use of this space where possible. Seating should be situated on moveable portable risers, which accommodate individual padded folding chairs. The floor of the theatre should be constructed of wood to allow theatre sets to be safely and securely positioned on the stage. In addition, the floor should be able to be repainted, and when necessary, parts of it replaced.

An elevated control booth of approximately 150 square feet will be accessed either by stairs, or by a lift as required by code for individuals with disabilities. The control booth will be located such that the entire stage area may be viewed from the booth, nearest the backstage area. This booth will contain the computerized controls for both the theatre’s grid lighting system, as well as the its built-in sound system. It should be noted that prior to the installation of the lighting and sound systems, District officials and the building contractors should confer with an outside consultant, as well as a current district theatre teacher, to ensure that the specifications for light and sound adequately meet program needs.

Theatrical curtains will be installed on the walls of the theatre, including the opening leading to the backstage area. The doorway to the backstage will be of ceiling height and substantial width to allow for the movement of sets and props into and out of the theatre proper.

The backstage area will be accessible from the outside through an oversized automatic roll-up door or ten foot door that will open onto a fenced outdoor compound. This compound will be immediately accessible to a paved road to allow vehicles access from the theatre area to public roads. The proximity of the performing arts theater to the black box theater will provide access to additional resources for set construction. The interior of the backstage area will be large enough to support set construction and will be equipped with sufficient power outlets to support the use of multiple power tools at one time. Two private, lighted dressing rooms, each equipped with hot water sinks and full-length mirrors and one full all gender restroom per code, will be located in the backstage area. Built within the theatre complex will be adequate storage for costumes, props, and set materials. A mechanized costume storage rack may be considered. Speakers and a clock will be installed in the backstage area so that actors can hear their cues to enter the stage area.

Drama Classroom/Green Room

The backstage area will also lead to a drama classroom that can be used for classroom instruction during the day and act as a greenroom during special performances. The classroom will be equipped similar to standard classrooms on campus including instructional technology and will be equipped with either chairs and tables or student desks to facilitate instruction. This classroom will be different from other classrooms in that it will be connected to the theatre sound system. During performances, this feature will “cue” students in the greenroom to prepare for their performance. Another difference will be the size of the classroom. At approximately 1,000 square feet, this classroom will be larger than a regulation classroom to allow for presentations and rehearsals during classroom instruction when the theatre is in use.

Music Room

The Performing Arts building will also house the instrumental music classroom and could also serve for focus music in the future. This classroom will be oversized, at approximately 1,800 square feet, to allow for the use of portable choir risers, a conducting station for the teacher, and use of accompanying musical instruments, such as a piano. There will also be sufficient space for students to sit in chairs during non-performance aspects of instruction.

Primary consideration will be given to the acoustics of the room, particularly the prevention of slap echo and standing wave problems through the installation of acoustic shells. As all other classrooms, the music room will be equipped with space for a teacher desk with computer workstation, a data jack to allow for a ceiling-mounted short-throw projector, and a matte finished magnetic whiteboard with music staves and mounted projection screen on one wall of the room. This room will have additional electrical outlets on all walls to support the use of stereos and electronic instruments. A walk-in storage room for music equipment, instruments and supplies will be included as part of the design of the room.

The doors of the music room will be large enough to allow for large instruments to be moved in and out for performances. The location of the room will also provide for vehicle access to accommodate the transportation of instruments and equipment to off-campus events.

Office for Music and Drama Teachers

The music room will lead to a teacher’s office. This office will be built with windows to allow full viewing of instruction in both classrooms (music and drama) from inside the office. The office will be large enough to accommodate workspace for two teachers and will be outfitted with phone and data jacks to allow VoIP phone and computer use. The office will be equipped with built-in sheet music storage cabinets. These cabinets should be made of metal and should be constructed with pullout shelving that facilitates the filing, organization, and access of the sheet music.

Practice Rooms

Around the perimeter of the music room will be three private practice rooms. These rooms will be built with windows so that the teacher can supervise the students at all times. In addition, there will be a separate locking instrument and room of approximately 480 square feet.

Visual Arts

The current art classrooms will either be remodeled or relocated to a building adjacent to the Performing Arts Complex, Commons, and Industrial Technology classrooms. Visual Arts classrooms include digital and graphic arts (which will be located in the Innovation Hub), a ceramics room, and a general art classroom. All rooms should be built with skylights and/or clerestory windows to allow for natural light, as well as ventilation of chemicals used in art instruction, and include a chemical hood in each room.

As the Visual Art building is designed, consideration should be given to aesthetic features. As this building and the Performing Arts complex and Commons will form the cultural center of the campus, consideration should be given to the creation of circular, concrete “arts court” between the buildings. This area could be encircled with columns or arches and would serve as a gathering place during performance intermissions, as the venue for informal theatrical and musical performances, and as the location of open-air showings of student artwork that can be locked, enclosed and protected from inclement weather. One area of the courtyard also might serve as a location in which to display student sculptures.

Ceramics Room

The ceramics room of approximately 1,800 square feet will be located with access to a covered, fenced, locking kiln shed. Construction should allow for three electric and two gas-powered kilns.

The classroom itself will be built with a concrete floor with counter sunk drains. It will have adequate space for both students’ worktables and 20 pottery wheels/workstations. In addition, it will be equipped with drying shelves and display areas for student work. Display areas are lighted and well secured. There will be in-room storage for art work in progress including horizontal and vertical built-in cabinets to store work for 165 students. Separate glaze-making and glaze-using area, as well as a humidity controlled wet clay area, are needed. A gas line to the classroom will support a compressor and airbrush.

The room will include hot water, trough style sinks with four (4) faucet areas, counters with traps and a dish drying area. The door to the classroom should be easily pushed open for delivery of 25 pounds of clay. There will be a clay recycling area. The classroom will include instructional technology per the District standard and roadmap.

General Art Classroom

The general art classroom of approximately 1,800 square feet will be large enough to accommodate flat work tables or individual drafting style tables for a class of 36 students and an area for five easels. A garage door opening to an outside work area is desired.

The classroom walls will be tackable to allow for the display of student work. The room will be equipped with eight (8) hot water or four (4) industrial style hot water sinks to facilitate the preparation of materials and supplies as well as clean up. Lockable storage cabinets and flat storage shelving will be included in the room. Counters should be 36 inches wide to accommodate paper cutters and a printing press. The room will adjoin a separate, locking storage room for materials and supplies.

The room is to have concrete floors with a central drain. There will be in-room storage for art work in progress including horizontal and vertical built-in cabinets to store work for 165 students. An area of the classroom will have metal shelving for storing oil paint. A ventilation hood for printmaking is required.

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

Dark Room

If the existing fine arts classrooms are modernized, then a dark room should be added. The darkroom will have white walls and ceiling, ample counter space, running water, and a dark lighting system. Entry into the darkroom will occur through a "light-tight", air lock double door. The ventilation system will be designed to avoid a concentration of chemical odors.

Office of Art Teachers

Central to the visual arts classrooms will be a teachers' office large enough to accommodate two-three teachers. This office will be built between two classrooms and will be constructed with large windows on both sides in order to observe and supervise classroom instruction. Locking doors will lead from the office to each classroom. The office shall have area for flat files, file cabinet and matte board storage as well as display area and tackable surfaces.

Program Area	Educational Specification
Performing Arts	Requirements
Black Box Theater	Includes control booth Adjacent dressing rooms (2), storage room and restroom

	<p>Access to the outside for set construction and delivery</p> <p>Built in flexibility for “green screen” and other media arts applications are considered</p> <p>Sound system TBD, includes soundboard and audio playback devices in the control booth</p> <p>Light design system TBD, includes light board, controller and dimer in the control booth</p> <p>Wood floor</p> <p>Curtains</p> <p>Padded chairs for 160</p> <p>Public restrooms (could be in Commons)</p> <p>Ceiling height at least 13 feet in theater</p> <p>Ticket booth (could be in Commons)</p>
Drama Classroom and Green Room	<p>Slightly Larger than regular classroom</p> <p>Also serves as green room</p> <p>Communication to the stage area</p> <p>Tables and chairs for 36 students</p> <p>Teacher desk space</p> <p>Instruction Technology per standard</p> <p>Pull down screen</p> <p>Ceiling height at least 10 feet</p>
Music Classroom	<p>1,800 square feet</p> <p>Space for portable risers</p>

	Floor electrical connections for 16 keyboards
	Teacher Conducting Station (mobile)
	Acoustics to prevent echo and waves
	Built in microphones for recording
	Mobile furniture for 40 for flexibility
	Instructional Technology per standard
Practice Rooms (3)	100 square feet
	Soundproofed and visible from classroom and teacher's office
	Ability to record in practice rooms
Instrument and Sheet Music Storage	480 square feet
	Instrument storage could be part of classroom with lockable cages
	Space for 12 file cabinets for music storage
Music Office	Space for 2 teachers
	May also contain music storage file cabinets

Performing Arts Square Footage

Area - Drama	Square Footage
Black Box theater for 150	2,300
Control Room	430
Drama Classroom	1,160
Dressing Rooms (2@110)	220
Storage	440
Lobby (shared with Commons)	
Restrooms (shared with Commons)	
Data/Electrical Custodial	175
15% Circulation	709
Subtotal Drama	4,725
Area - Music	Square Footage

Music Classroom	1,790
Music and Drama Office	100
Practice Rooms (3@90)	270
Instrument Storage	330
15% Circulation	374
Subtotal Music	2,864
Total Performing Arts	7,589

Program Area	Educational Specification Requirements
Visual Arts	
Ceramics Classroom	<p>1,800 square feet</p> <p>Instructional Technology per standard</p> <p>Fenced, weatherproof, locking outside area for five (5) kilns: three (3) electric, two (2) gas; able to access area with wheel cart from classroom to kiln area</p> <p>Gas for compressor</p> <p>Concrete floor with counter sunk drains</p> <p>Area and electrical for 20 pottery wheel workstations</p> <p>Separate glaze-making and glaze using area (could be separated by half wall or other room dividing structure)</p> <p>Wet clay area with wire and book shelves</p> <p>Two (2) built-in wedging tables</p> <p>A "hot box" – heated drying cabinet with shelving</p> <p>HEPA filter</p> <p>Built-in dry shelving</p> <p>Lighted and secure display</p>

	<p>36 lockers for student work</p> <p>Damp room area with humidity controls and storage for supplies</p> <p>Hot water sinks trough style with four (4) faucets and clay traps</p> <p>Electrical outlets on all walls Counter with dish drying area</p> <p>Lockable teacher storage</p>
General Arts Classroom	<p>1,800 square feet</p> <p>Instructional technology per standard and ensure that projector is centered in room visible by all students</p> <p>Space for flat work tables and chairs for 36; work tables are 36 inches deep Lighted and secure display space (could be outside)</p> <p>Whiteboard space for either mobile or moveable like a folding wall</p> <p>Space for 5 easels</p> <p>Exhaust hood for printmaking or chemicals</p> <p>Hot water sinks (4-8 depending on type)</p> <p>36 lockers for student work</p> <p>36-inch wide counters to accommodate paper cutter and printing press</p> <p>Concrete floors with drain</p> <p>Locking storage area</p> <p>Variety of cabinetry including pull out, shelves and horizontal storage</p>

	<p>Metal shelving for oil paints and supplies with doors</p> <p>Data outlets and counter for 10 computers</p>
Teacher(s) Office	<p>Space for two (2) teachers' desks (standup option)</p> <p>Data connection for two computers</p> <p>Lockable storage</p> <p>Tall storage area</p> <p>Book shelves</p> <p>Adjustable size storage area for frames, large canvases and matte boards</p> <p>Deep, flat surface at least 36 inches wide</p> <p>Sink</p> <p>Area for flat files, file cabinets and matte boards</p> <p>Display area</p>
Dark Room (if remodel existing fine arts)	<p>Black walls and ceilings</p> <p>Ample counter space</p> <p>Running water</p> <p>Dark lighting system</p> <p>Entry into the darkroom will occur through a "light-tight", air lock double door</p> <p>The ventilation system will be designed to avoid a concentration of chemical odors.</p>

Fine Arts Square Footage

Area – Fine Arts Classroom	Square Footage
Classroom	1,800
Storage	100
Shared Office	150
15% Circulation and Support	308
Subtotal	2,358
Area - Ceramics	Square Footage
Music Classroom	1,800
Music and Drama Office	80
Practice Rooms (3)	100
Instrument Storage	175
15% Circulation and Support	323
Subtotal	2,478
Area – Dark Room	Square Footage
f	450
Fine Arts Total	5,286

STUDENT COMMONS (CAFETERIA)

Vision

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

Trends

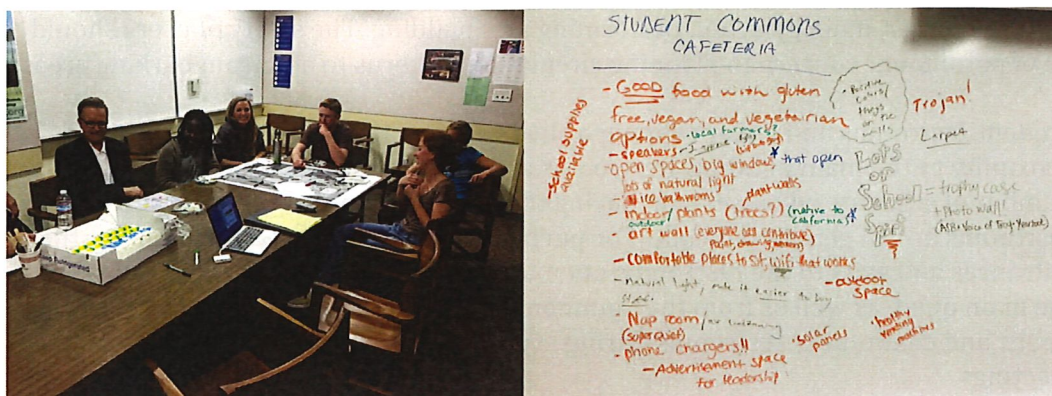
Traditional dining halls with serving lines and large foldup tables are being replaced by more open, interactive environments that have a variety of seating possibilities including table and chair groupings for 4-6 students to dine together, soft furnishings to relax and socialize, and counter height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

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

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

Student Voice

A student voice session was held at TLHS on May 11, 2017. The student leaders indicated the Commons should be for every student and a place to encourage interaction. The students indicated that a student Commons should be a space with lots of natural light, positive colors, comfortable chairs, open spaces, big windows that open, indoor plants, an art wall, display spaces (for ASB, yearbook, and Voice of Troy), Wi-Fi, outdoor space, nap pods or a super quiet room and phone charging area. Food options should include gluten free, vegan, and vegetarian options.



TLHS student voice session, 2017

Anticipated Use

The Commons and its adjoining areas accommodate a variety of uses, including students' and staff's food preparation and service, dining and Commons seating, assembly and meeting seating, and student government and activities planning. This facility is most heavily used by and for students: for breakfast and lunch service, for student activities, and for large meetings, and even performances. The Commons complex houses the multipurpose area, kitchen, food service areas including receiving, staff-dining lounge, Associated Student Body (ASB) store (could be located in Performing Arts Theater ticket booth area), ASB activity area, Career Center with student lounge and security office.

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

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

Orientation

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

Since this facility is used for a variety of events and activities after hours and on weekends, it is located near parking for school and community use and is located near other major buildings that require access to parking: the school office, student

services center, main gym, and performing arts building. The safety of users should be of paramount concern in planning circulation patterns to and from parking areas.

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

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

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

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

All food service points of sale throughout the complex are connected to Wi-Fi with redundancy through data outlets to allow for the computerized sale of lunches. Display signs for menu items are to be installed for full view of patrons.

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

Specific Requirements for Designated Areas

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

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

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

ASB Activities Space

The ASB activities space will be located in the Commons and provide space and storage for ASB activities and for conducting student government class.

ASB Student Store

The ASB student store is located near the central student entrance to the Commons or can be run through the existing ticket booth area of the Performing Arts building. Its design will allow students to move quickly from a single entrance through a single service line to select and pay for items. Built-in Formica-topped glass front counters will allow both display and storage of merchandise. The area behind these counters will be wide enough to allow a minimum of three student workers (as the program grows) to move freely to assist students with selection and purchase immediately. A built-in sink and counter-top unit of approximately 12 feet will be built-in on the wall immediately behind the work area. Above this counter will be built-in shelves for additional product display. Networked computer jacks will be provided to allow for two computerized cash registers on the main counter.

Career Center

The Career Center will be located in the Commons on the first or second floor and should have ample display space, data connections for 5-10 computer stations, space for the career counselor's desk and tables and chairs for 36 students as well as soft furnishings.

Staff Dining and Collaboration

A staff dining and collaboration room is located in the Commons building with the capacity for 45 at any one time. The room shall include sink and counter space for plugging in of coffee machines, microwaves and other small appliances as well as a space for a refrigerator. Soft furnishings and tables and chairs to seat 45 are provided together with tackable wall surfaces for notices and art. Staff restrooms should be located nearby.

Security Office

An office for security personnel is located in the Commons to provide supervision of the Commons and campus. This office has space for two desks, screens for campus monitoring and space to charge technology equipment.

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

Program Area	Educational Specification Requirements
Commons	<p>To be used for cafeteria-style, large group activity, and small group activities (4-6 person seating)</p> <p>4,500 square feet (approximately) to accommodate sit-down dining for 300</p> <p>Acoustical insulation</p> <p>Sound system</p> <p>Mountable wall strips for student displays</p> <p>Portable staging</p> <p>Technology charging stations</p> <p>Large screen monitors (2-4)</p> <p>Automatic projection screen</p> <p>VoIP clocks/intercom (2-4)</p> <p>Portable whiteboards</p> <p>Variety of soft furnishings; tables and chairs; and counter areas with technology access</p> <p>Wiring for exterior doors equipped with back stops or automatic closing</p>
Security Office	<p>Adjacent to the Commons</p> <p>Desk (standup option) for two staff</p> <p>Large screen monitors for campus supervision</p>

	Charging areas for technology equipment
Staff Lounge / Development	Seating for 45; soft furnishings Counter space for: Microwave ovens (2), coffee pots, other plug-in equipment Sink Refrigerator Technology Bulletin boards or tackable surface Restrooms located nearby Access to outside seating Clock/Intercom VoIP handset
Student Store	Outside covered access (if possible) Counter space w/display cases Service line flowing through space “In” and “Out” doors Counter w/sink and multiple outlets behind service counter Built-in shelves above back counter (2) laptops/cash registers and drawer VoIP handset Electrical outlets (numerous) Space and utilities for self service items Clock/Intercom
ASB Space in connection with student store	Linked to outside or Commons space

	<p>Portable speaker system TV monitor</p> <p>Ample storage and cabinets for poster making and other ASB activities Floor to ceiling matte finished magnetic whiteboard</p> <p>Clock/Intercom</p>
Career Center and Student Lounge	<p>Tables with seating for minimum of 25; soft furnishings</p> <p>Overhead projection screen or Magnetic whiteboard, short-throw projector, and data wiring</p> <p>(5-8) Computer stations</p> <p>Desk area for Coordinator</p> <p>(4-6) File cabinets</p> <p>VoIP and handset; Video conferencing capability</p> <p>Ample storage and display space; lockable storage</p> <p>Nano wall between Career Center and student lounge</p>
Outdoor Eating Area	<p>Adjoins Commons</p> <p>Covered</p> <p>Large enough to accommodate table seating for 75 students</p> <p>Equipped with wiring support installation of food carts</p> <p>Includes designated space and wiring for food service carts</p> <p>Located to provide line of sight supervision from inside Commons</p>

Food Prep Area Central Kitchen	See Exhibit C
Custodial Storage	200 square feet
Custodial Workroom	75 square feet
Storage	Storage for chairs and tables

Commons Square Footage

Area	Square Footage
Cafeteria / Student Commons	4,350
Security Office	150
Career Center/ Student Lounge (2 nd floor)	2,200
Student Store / ASB Projects Cafe	340
Staff Lounge/ Development (2 nd floor)	1,450
Staff Patio (2 nd floor)	730
Commons Restrooms (staff/student/public)	320
15% Circulation	1,431
Total	10,971

Kitchen per CINI Little International

Area	Square Footage
Kitchen	1,400
Walk-In Refrigerator	150
Walk-In Freezer	145
Dry Storage	400
Cleaners Store Room	8
Laundry Room	30
Staff Break Room/Lockers	125
Food Service Office	260
Servery	510
Receiving	130
Kitchen Staff Restrooms	335
Data/Electrical/Custodial	175
15% for Circulation	453
Total	4,121

LIBRARY MEDIA CENTER

Vision

The vision is for the Library together with the Commons to be the hub of the school—a vibrant student-focused place where there are spaces to meet, to relax and read interesting books and materials in comfortable furniture, where food is available and there is access to the internet and areas to put group projects together—think a combination of an independent bookstore and a Starbucks.

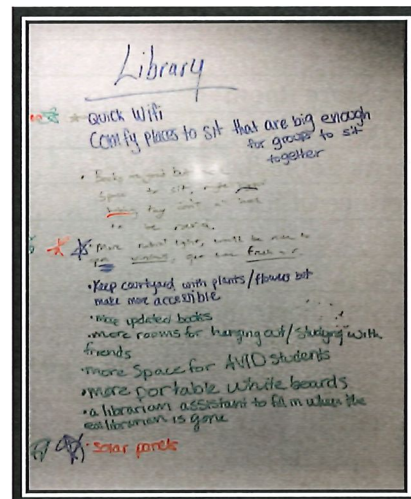
The library is centered on six education and social pillars:

- 1) Reading and browsing;
- 2) Individual research;
- 3) Project production space;
- 4) Group collaboration spaces;
- 5) Easy access to technology; and
- 6) Adjacent eating space, possible rooftop garden and seating area.

The mission of the library and media program is to ensure that students and staff are effective users of ideas and information. The entire school community, including students, teachers, support staff, parents, and local organizations, uses the library media center. It is the point of contact with all available information systems outside the school campus. The central function of the library media center facility is the housing, circulation, and centralized distribution of the collection of information resources and equipment used in implementing the school's curriculum. It is an instructional space used for independent study, small groups, and whole-class learning activities. Staff meetings, workshops, and community events occur here.

Student Voice

A student voice session was held at TLHS on May 11, 2017. The student leaders indicated the Library should have lots of natural light, operable windows, comfy places to sit that are big enough for group to work together, access to portable white boards, quick WiFi, contemporary books and a variety of seating arrangements. They suggest an accessible library courtyard with plants and seating areas, and solar panels for the roof.



Student voice session, 2017