

HTH Architectural Design Elements



High Tech Middle reception and Gallery

Each of the underlying principles of High Tech High's academic program, personalization, common intellectual mission, and adult world connection has implications for architectural design. Our program emphasizes team teaching, integrated curriculum, project-based learning, community-based internships, and assessment through presentation and exhibition. The HTH facilities have been designed to support these innovative approaches to teaching and learning. Specifically, there are 9 types of spaces within our buildings that would not necessarily be found in a traditional school facility. They include:

- 1. A Commons Room
- 2. Student Workstations
- 3. Project Rooms
- 4. Multi-Purpose Seminar Rooms
- 5. Shared Teacher Offices
- 6. Specialty Labs
- 7. Gallery Spaces
- 8. Studio Spaces
- 9. Teaching Clusters
- 10. Outdoor Learning Spaces

Each of these spaces is more fully explained on the following pages.

1. The Commons Room

To foster personalization and a common intellectual mission, HTH facilities contain centrally located meeting areas that allow for formal and informal gatherings.

The Commons is a centrally located meeting space that supports community building and the public exhibition and presentation of student work. It is the most essential space in each of the HTH facilities. As the intellectual hub of the school, the Commons offers opportunities for the formal and informal gathering of students, teachers, and visiting community members. It is adjacent to the reception and administrative areas and acts as a town square of sorts. Soft seating and coffee tables provide a lounge-like atmosphere, while stackable chairs stored in adjacent storage areas allow the Commons to be transformed into a formal presentation hall for over 175 visitors. The High Tech High (HTH), High Tech Middle (HTM), and High Tech International (HTH) Commons areas are fully equipped with LCD projectors, audio-visual systems, and projection screens. Each Commons can accommodate its whole school population during weekly community meetings, and has a wrap-around curtain that encloses the space for more private gatherings. Ranging in size from 2000 to 2,500 square feet, and with the ability to expand into adjacent circulation spaces, the Commons is used alternately as a waiting area, lounge, classroom, large group presentation area, whole school meeting area, small group and advisory meeting area, black box theater, computer lab, and study space.

High Tech High Commons



High Tech High Commons allschool meeting

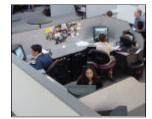


High Tech High Commons



High Tech Middle Commons





HTH Workstations

HTH Workstations and Gallery



HTH Workstation Suite



HTH Workstation Suite and Project Room

2. Student Workstations

To foster personalization and adult world connection, HTH facilities provide students with office-like work environments in which they can do independent and small group work.

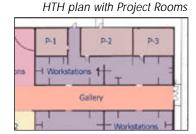
Student Workstations provide students with a dedicated space to do individual and small group project work as well as computer-based research and study. The HTH "Great Room" contains 80 networked desktop computers at individual workstations that are visually connected to 6 adjacent "Project Rooms." This "open office" environment feels more like a workplace than a school, and engenders a culture of focused and quiet individual and small group activity. High ceilings with sound attenuating baffles help to create an atmosphere alive with the vibrant "hum" of students at work. HTH students in grades 10 and 11 have access to these workstations throughout the day while their academic classes take place in acoustically private, glass-walled project rooms. Teachers and students have visual access to the project rooms from their workstations and vice versa.

3. Project Rooms

To promote personalization and adult-world connection, HTH facilities provide areas for the "making and doing" of student projects.

The HTH Project Rooms are used alternately for direct instruction and project-based work. Equipped with locked storage for student projects and building materials, they allow direct physical and visual access to adjacent "suites" of student computer workstations. Teachers working within them can easily monitor activity in the workstation suites and go back and forth between workstation and project room environments. Project rooms range from 600-850 square feet in size. They have sinks and non-carpeted floors for easy clean-up. Project areas in Multi-Purpose Seminar Rooms provide adequate flexible furniture, adequate space, and locked storage for project-based activities.

High Tech High Project Room





Denver School of Science and Technology plan with project room and Studio connection

HTH Seminar Room



HTH Seminar Room





HTH Seminar Room

High Tech Middle Seminar Room

4. Multi-Purpose Seminar Rooms

To promote Personalization and Common Intellectual Mission, HTH facilities provide adaptable seminar spaces for teaching and learning.

↑ulti-Purpose Seminar Rooms can be adapted for team teaching, as well IVI as for direct, project-based, and computer-based instruction. HTH, HTM, and HTI seminar rooms range in size from 750-950 square feet. Movable wall partitions allow sets of adjacent seminar rooms to open to each other for team teaching or for large group events and presentations. Banks of desktop computers (at HTH), or carts of laptop computers (at HTM and HTI) are provided at a ratio of one computer to every two students, thus allowing teacher teams to fully outfit their classes for computer use as needed. Flexible furniture can be arranged for direct instruction in addition to small or large group project work. Upper cabinets and shelving provide storage and display areas for student projects, books, materials, and equipment. All seminar rooms contain sinks for easy clean-up. Seminar rooms used as science labs are provided with "chem surf" table tops but their furniture remains movable. Most seminar rooms are clustered around visually and physically accessible shared office spaces for their associated teacher teams (see #5, below).

5. Shared Teacher Offices

To promote personalization and create opportunities for students to be well known by teachers, HTH facilities provide shared office spaces where teams of teachers can work together with access to adjacent Multi-Purpose Seminar Rooms.

Because teachers work together and plan curriculum in cross-discipline teams, their offices and classrooms are clustered together. Each HTH ninth grade teaching team, for example, consists of one math/science teacher and one humanities teacher who share an office that looks out onto both of their respective classrooms. Typically, HTH teaching teams focus on no more than 50-75 students per year. Grouping teachers in cross-discipline teams enhances their development of integrated curricula and facilitates their collaboration. Shared Teacher Offices are generally both visually and physically connected to the seminar rooms in which the teachers are based.

High Tech High view to teachers' office



High Tech High teachers' office s



High Tech High Physics Lab

6. Specialty Labs

To promote common intellectual mission and adult world connection, HTH facilities provide Specialty Labs that allow students access to state-of-the-art technology and equipment.

Specialty Labs provide teachers and students with technology, equipment, and classroom facilities that support in-depth study and project work in particular subject areas. HTH labs include Biotech, Physics, Robotics and Engineering, Computer Animation, Computer Technology, Fine Arts and Design, Video, and Theater. The number and types of specialty labs that a HTH school has is related to the focus and curriculum of the school. Since specialty labs are often costly to build, furnish, and equip, careful thought should go into their planning. Local businesses that have a vested interest in a particular subject area can be good sources of funds or equipment donations that can mitigate the cost of Specialty Labs.

7. Gallery Spaces

To promote common intellectual mission, HTH facilities provide visual access to seminar room activities and multiple venues for the exhibition of student work

ith performance-based assessment at the core of the HTH curriculum, **V** the facility should take on a museum-like quality in which student work and achievement is continuously on display. HTH buildings attempt to use their main circulation routes-formerly known as corridors-as spaces in which the viewing of student activity and student project work can take place. When possible, Gallery spaces also provide alcoves that allow for informal student gathering. The HTH, HTM, and HTI Gallery spaces provide highly visible and accessible backdrops for the academic life of each school. Half-walls or large interior windows offer vistas into the school's Commons Rooms, Workstation Suites, Specialty Labs, and Studios. Glass fronted display cases and picture frames cover every available wall surface with exhibitions of student work. The intellectual focus and creative energy of the students is made palpable.

High Tech High Gallery



HTH hallway Gallery



High Tech Middle Studio

High Tech Middle Studio

8. Studios

To promote personalization and common intellectual mission, HTH facilities provide Studios in which large group meetings and small group activities can take place.

Studios are large multi-purpose spaces around which seminar rooms of "teamed" teachers are clustered. They serve as a central meeting spaces for team presentations, integrated learning activities, independent and small group project work, and computer-based study. The HTM Studios serve the 6th, 7th, and 8th grade teams respectively, and can function as a commons area that fits each cohort of 100-120 students comfortably. They help to create a sense of place for the smaller learning communities within the school. Teacher offices flank the entry to the Studios and look out onto them.

Learning

9. Teaching Clusters

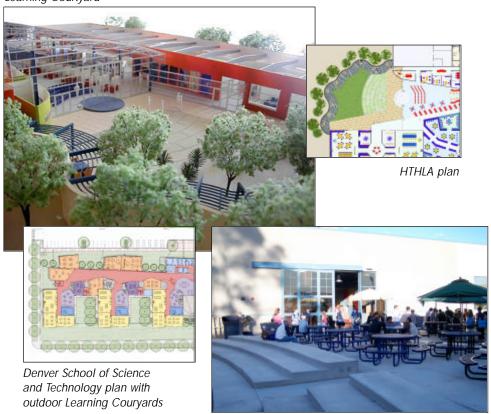
To promote personalization and common intellectual mission, HTH facilities provide Teaching Clusters that include Studios, Multi-Purpose Seminar Rooms, and Shared Teacher Offices.

Whenever possible, HTH Multi-Purpose Seminar Rooms are clustered to allow teams of teachers to work together with their students. Many seminar rooms share movable wall partitions that enable teachers to team teach and conduct larger group activities. Seminar Rooms are often clustered around centrally located Studios that provide a central focus as well as additional space for a wide variety of activities. Shared Teacher Offices are also included in the Teaching Clusters. Their close proximity to Seminar and Studio spaces provides adult supervision for students doing independent work, and allows easy access to teachers by students.

High Tech High clustered Seminar Rooms



HTM Studio with clustered Teachers' Offices and Seminar Room entries



High Tech Middle amphitheater and Eating Courtyard

10. Outdoor Learning Spaces

To promote personalization and adult world connection, HTH facilities provide Outdoor Learning Spaces that extend learning beyond the walls of the school.

In an effort to extend the parameters of the schools' walls and promote the use of outdoor spaces for social and educational activities, HTH facilities also include a number of outdoor courtyards and learning spaces. With shelter from the wind and shading from the sun, these spaces are connected to Commons Rooms and Seminar clusters and function as adaptable, open-air learning environments. Electrical outlets provide plug-in capacity for students using laptop computers. At HTH Los Angeles, the Outdoor Learning Café also has data hookups for hardwired Internet access.