Olathe Advanced Technical Center

2014 Exhibition of School Planning and Architecture

Olathe USD 233

Olathe, Kansas

Olathe Advanced Technical Center

Olathe Advanced Technical Center

EXISTING SITE

SITE PLAN - AERIAL

Community Environment

The site is located on an intersection of two primary streets at the existing Olathe North High School Campus and is highly visible to the surrounding neighborhood. It was important to the School District to not only respect the architectural character of the existing adjacent High School, but to also convey the image of the District's "21st Century" Programs through innovative use of materials and thoughtful integration with the site. The Design Team wanted the facility design to instill pride in the students that may not have an opportunity to attend a higher education institution after High school and are consequently attending in order to learn a technical career skill.

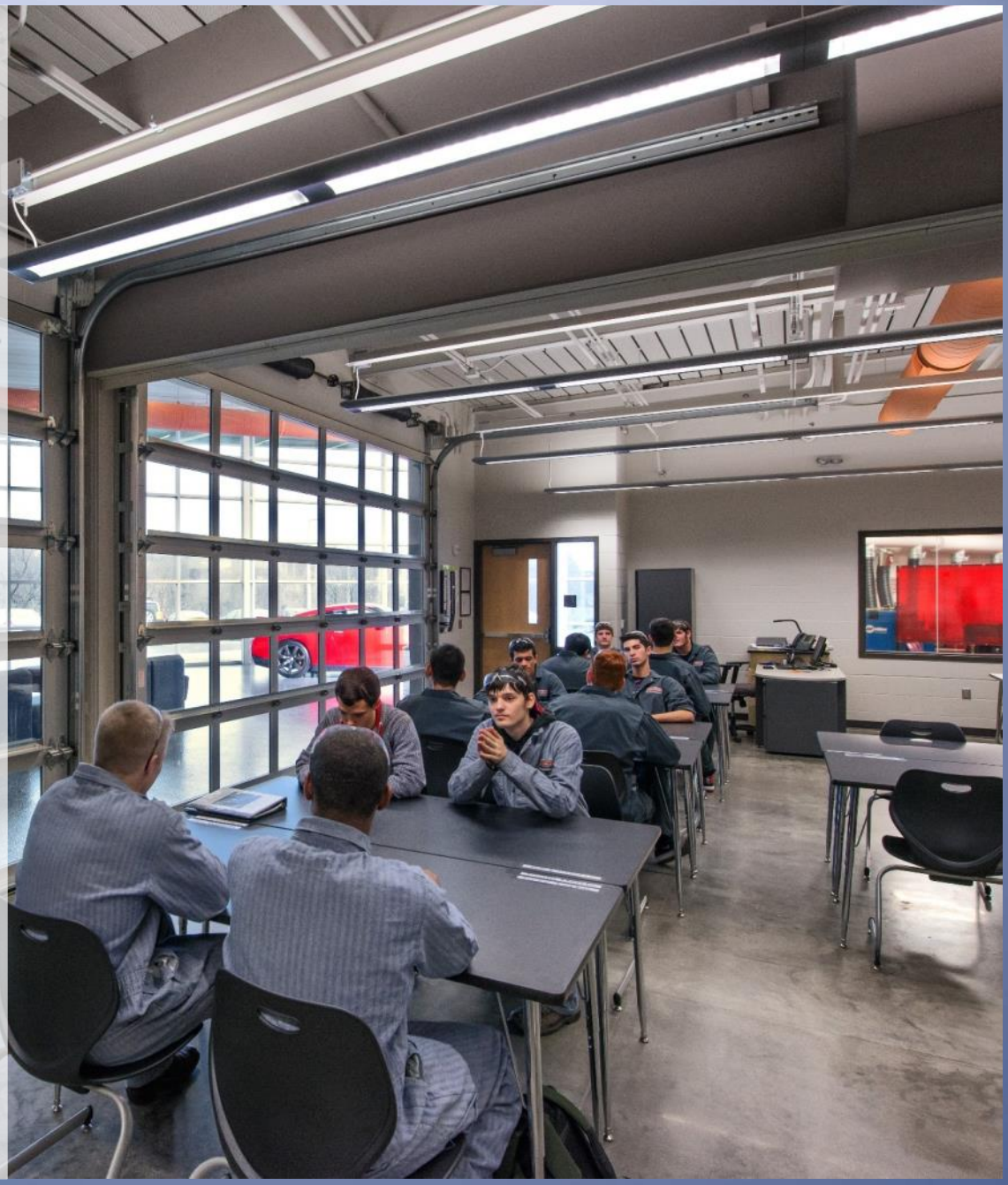
Community Environment

The "21st Century Programs" housed in the facility are Automotive Technology, Automotive Collision Repair and Welding. The students are connected to the community through the Program's partnerships with automobile dealerships, repair shops and parts suppliers. The School District is also partnered with Automobile manufacturers that provide new components to use in the Learning Labs.

Job Counselors housed in the facility work closely with the students to help them achieve their education goals by monitoring their academic achievement, and providing mentorship opportunities in both community businesses as well as career placement upon graduation.

The Learning Environment

The compact facility plan locates the Classrooms and Computer Lab adjacent to the Auto Technology, Auto Collision and Welding Lab spaces, giving direct access and providing the opportunity for instructors and students to easily move back and forth between the Classroom and hands-on Lab learning environments during the delivery of a particular lesson plan. The Classroom location also provides a visual connection to the Labs, allowing the instructors to supervise students in the Lab while teaching in the Classroom. The four Classrooms have moveable partitions, which can create two large Classrooms that can be used to give demonstrations to larger groups of students at one time.

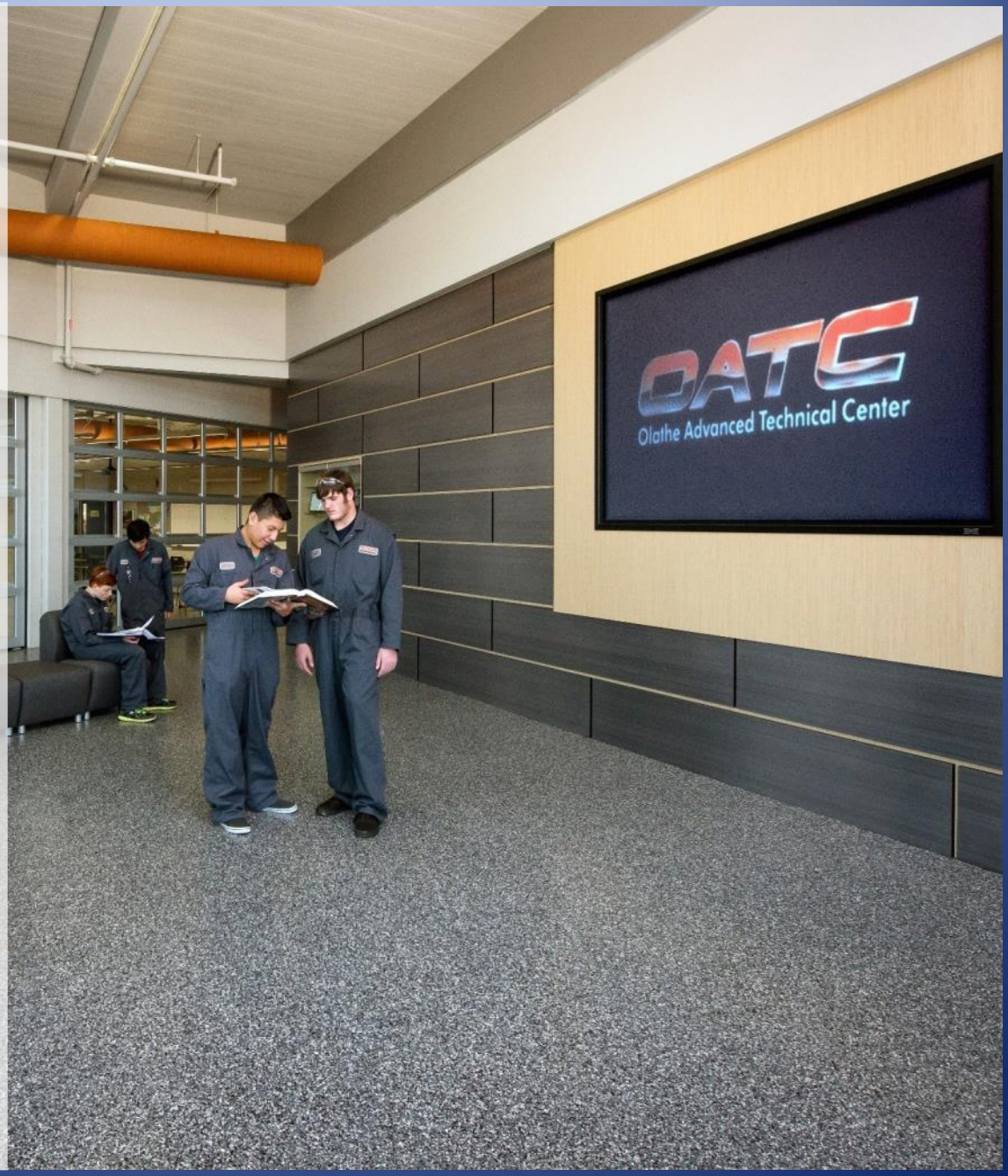


The Learning Environment

As seen on the plan, two Classrooms have full glass overhead doors that open up the Classrooms to the Student Commons, providing a large assembly space that can be used for community or school district events.

The Student Commons was designed to have the look and feel of an Automobile Showroom, which is highly visible from the street. The space is not only used as a student gathering place but is also used to put student's completed project cars on display for the public to see.

The large open Lab spaces with large overhead door access, high structure, abundance of natural daylight and ventilation can easily be adapted for other programs in the future as needed.



Physical Environment

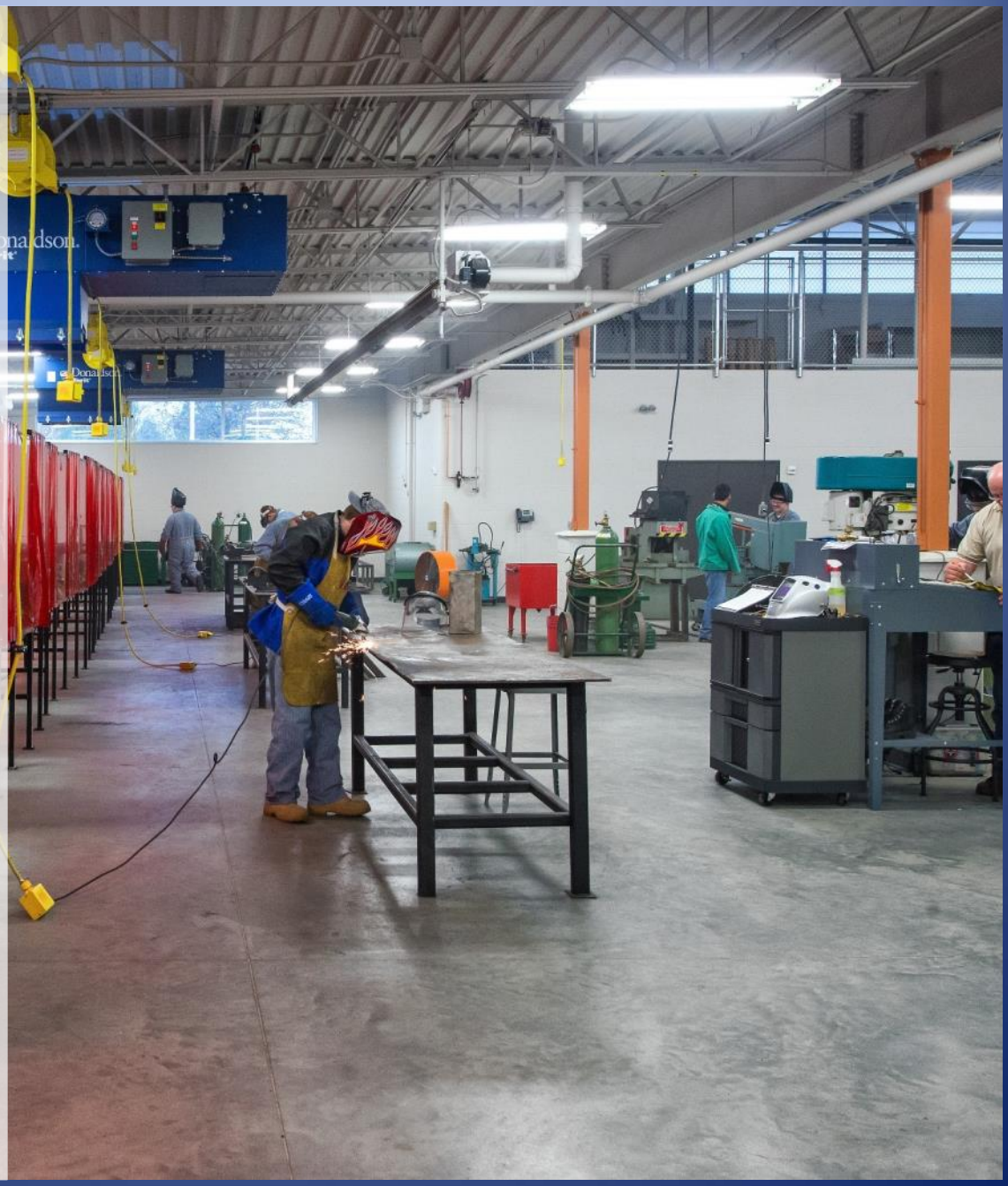
The flexible education environment supports a variety of teaching methodologies and curriculum delivery including one-on-one individual instruction, various sizes of group learning settings and supervised individual project based learning environments. The design intent of each space is to inspire students by conveying a high level of academic and technical skills in a professional industry related environment. The Classrooms provide flexible teaching settings with integrated data and audio/visual technology while the vehicle and welding Lab spaces provide teaching stations spaced apart to enhance safety, provides data connections at each vehicle bay, an abundance of natural diffused daylight and natural ventilation.

Maintaining a visual connection for supervision was an important design consideration. Adjacencies of educational spaces provide visual connections between spaces that an instructor may teach in, whether it be a Classroom, Computer Lab or Vehicle/Welding Lab work setting.

Physical Environment

The compact triangular site had fifteen feet of slope West to East, which the design team was able to successfully integrate a compact floor plan design providing ease of supervision and efficient internal circulation as well as efficient site circulation. The building was pushed back from the street and into the sloped topography, not only to soften the impact to the surrounding neighborhood, but also to provide a low profile facing the existing High School and the added benefit of visual screening of the Exterior Secure Storage area where project cars are stored. Pushing the building back into the sloped site also provided protection from prevailing Northeast winds in the Winter, reducing the heating load.

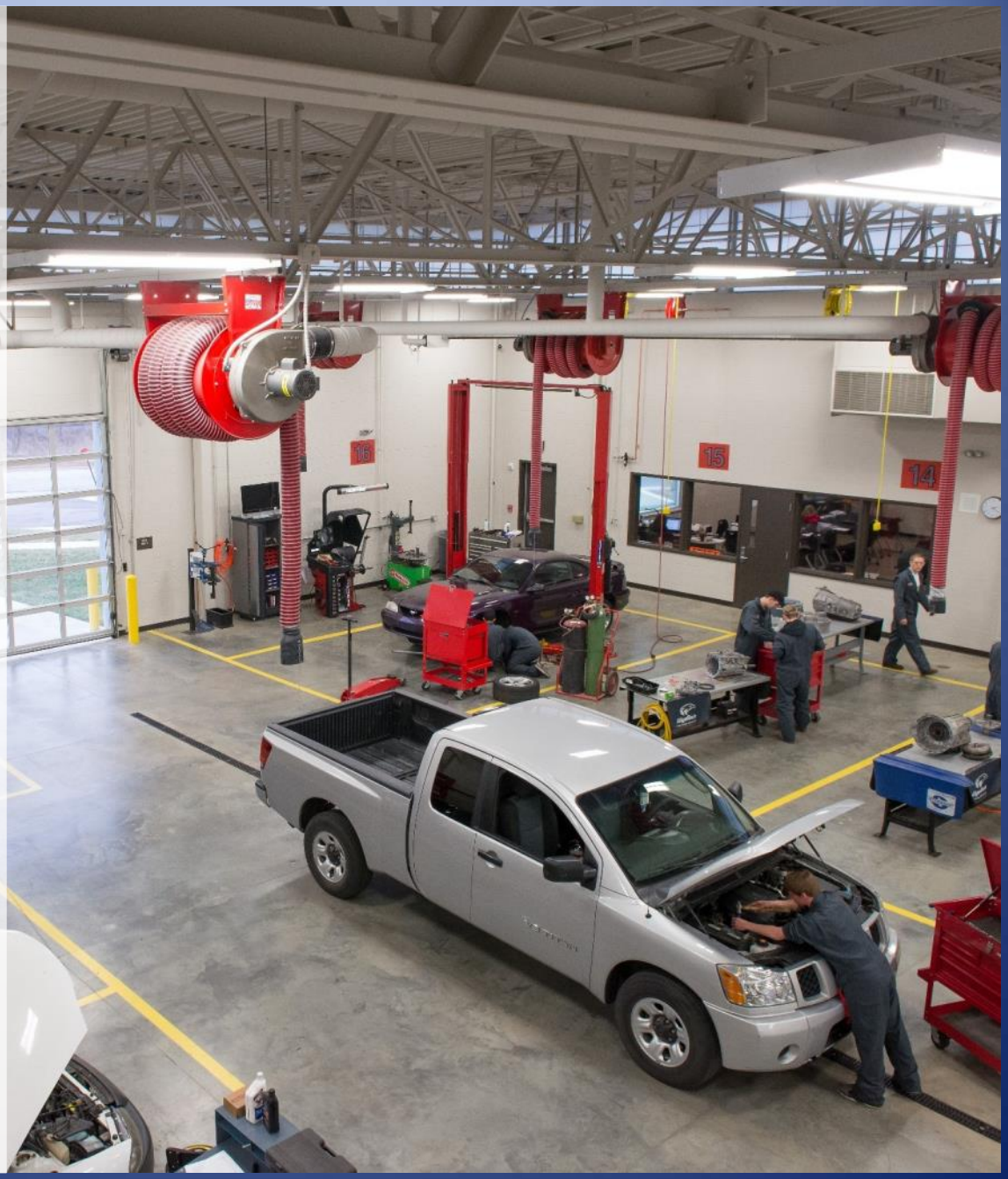
The use of exterior building skin materials that use leading edge technology (terra cotta rainscreen panels, natural finish zinc and painted metal rainscreen panels and Exterior Insulation/Finish Systems) providing a very durable exterior envelope and an architectural character appropriate for an Advanced Technology Center.



Planning Process

The School District and Design Team believed an integrated team approach involving District Administration, School Administration, teachers and students in the programming and design phases would result in a successful design, meeting their vision, goals and needs. It is important to be good listeners but equally as important to reach a consensus among the entire team at each step of the process.

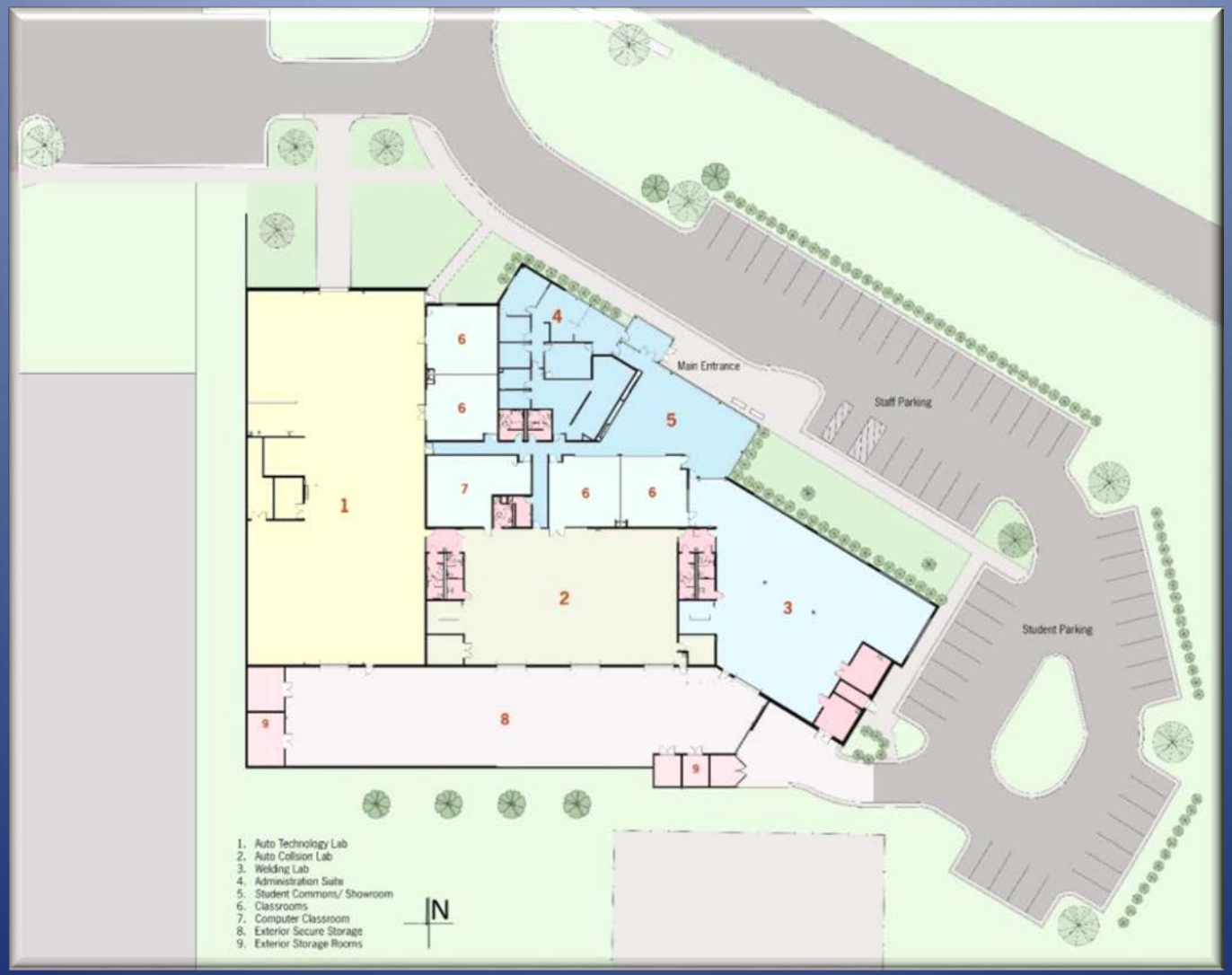
Keeping all team members engaged by presenting each refinement of the design was essential in communicating the implementation of team-generated ideas and ensuring the School District's vision for the project was being met. Presentations to the community provided the surrounding neighborhood the opportunity to communicate with the School District and design team, giving all parties the opportunity to address any concerns or issues.



Planning Process

After occupancy, the Design Team met several times with school administration, teachers and students to gather their opinions on the design and functionality of the facility. The meetings also provided the opportunity for the design team to revisit the design intent to the users of the facility. Since occupancy of the new facility, the School District has seen an increased interest High School students wanting to get into the Programs.

Floor Plan


Main Entrance
Staff Parking
Student Parking
1
2
3
4
5
6
7
8
9
1. Auto Technology Lab
2. Auto Collision Lab
3. Welding Lab
4. Administration Suite
5. Student Commons/ Showroom
6. Classrooms
7. Computer Classroom
8. Exterior Secure Storage
9. Exterior Storage Rooms
N

Exhibition of School Planning and Architecture Project Data

Submitting Firm :	HTK Architects, PA
Project Role	Architect of Record
Project Contact	Don Pruitt, AIA
Title	Principal-in-Charge
Address	9300 W. 110th St., Suite 150
City, State or Province, Country	Overland Park, Kansas 66210
Phone	913-663-5373

Joint Partner Firm:	N/A
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Other Firm:	N/A
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

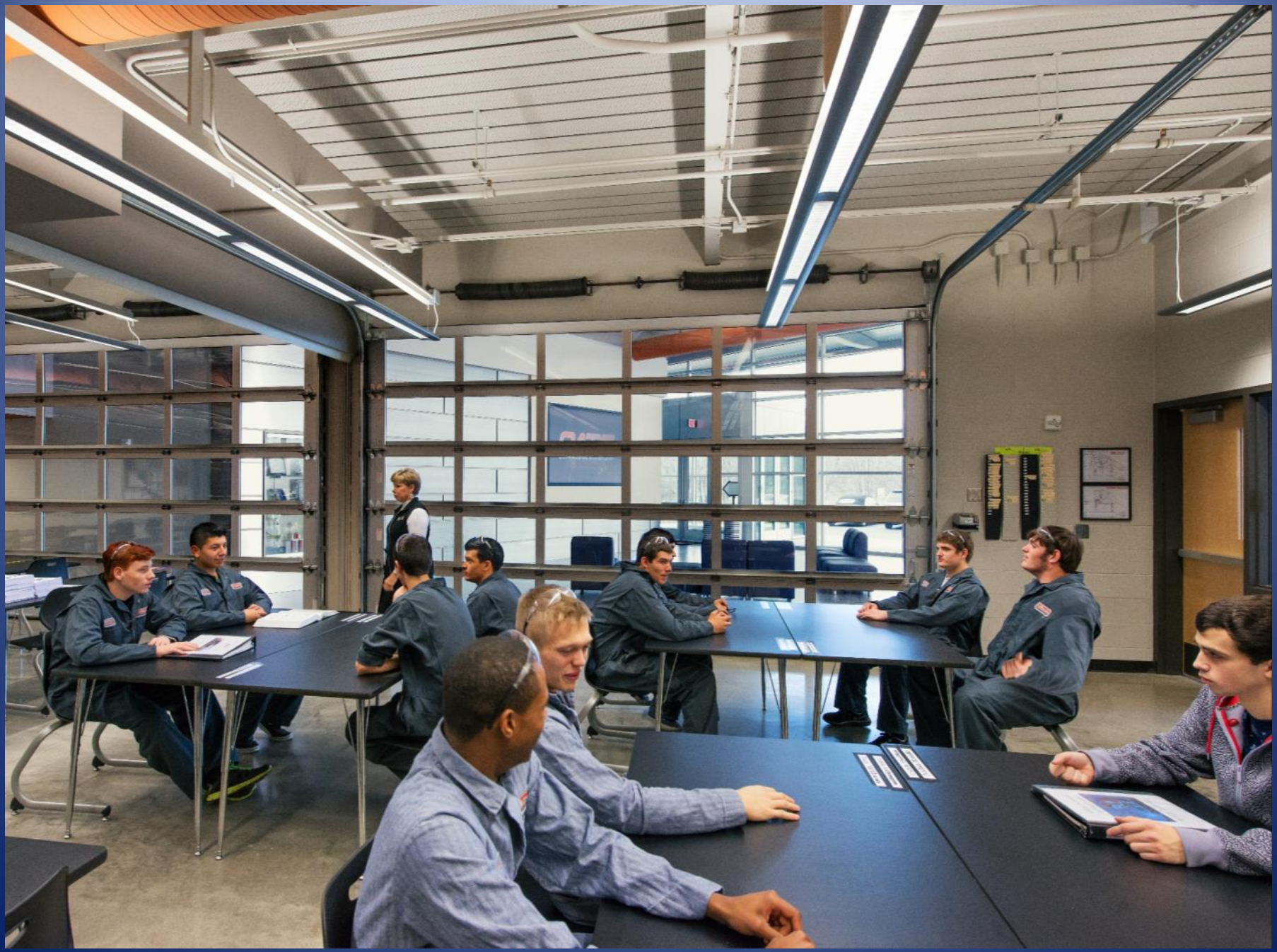
Construction Firm:	Universal Construction Company, Inc.
Project Role	Construction Manager
Project Contact	Archie Smith
Title	Vice-President
Address	11200 West 79th Street
City, State or Province, Country	Lenexa, Kansas 66214
Phone	913-342-1150

Exhibition of School Planning and Architecture Project Details

Project Name	Olathe USD 233: Advanced Technical Education Center
City	611 N. Nelson Road
State	Kansas
District Name	Olathe (KS) Unified School District No. 233
Supt/President	Dr. Marlin Berry (Superintendent)
Occupancy Date	August 2013
Grades Housed	10th – 12th
Capacity(Students)	200 Students - 13 Staff
Site Size (acres)	3.79 Acres
Gross Area (sq. ft.)	35,000 GSF
Per Occupant(pupil)	164 SF/ Occupant
gross/net please indicate	1.05
Design and Build?	Design/ Bid/ Build
If yes, Total Cost:	$5,286,800
Includes:	Site Development, Building Construction & Fixed Equipment
If no,	
Site Development:	
Building Construction:	
Fixed Equipment:	
Other:	
Total:	$5,286,800


OATC
Ohio Advanced Technical Center


CLAIRE ADVANCED TECHNICAL CENTER




OLATHE ADVANCED TECHNICAL CENTER