

# DREW

CHARTER SCHOOL  
**JUNIOR AND SENIOR ACADEMY**



# EXECUTIVE SUMMARY

Fifteen years ago, East Lake Meadows, a public housing project with 1,400 residents was a terrifying place to live. Nine out of 10 residents had been a victim of a crime. Today it is a safe community of working, tax-paying families whose children excel in the classroom.

In the mid 1990's Tom Cousins, an Atlanta real estate developer and philanthropist, working with the mayor and the Atlanta Housing Authority, spearheaded an effort to totally rebuild the East Lake Meadows neighborhood with low and middle income housing and to rebuild the neighborhood school, Drew Elementary. At the time, Drew was the worst performing school in the city.

In 2000, after negotiating with Atlanta Public Schools to secure the city's first public charter school, Charles E. Drew School reopened in the rebuilt East Lake Villages as a K-8<sup>th</sup> grade facility. Drew offered longer school days and an extended school year. While serving 90% of the children in the East Lake neighborhood, within a few short years, this school became the 4<sup>th</sup> best performing school in the city. The Cousins family along with the East Lake Foundation continued their involvement with the school, funding professional development and capital improvements to the facility. In 2011 they decided to add a high school to Drew Charter. In studying the feasibility of adding the high school, it was decided to expand the K-5 program in the existing facility and move the 6<sup>th</sup>-8<sup>th</sup> grades into a shared facility with the proposed new the high school to be called Drew Charter Junior and Senior Academy.

*“to develop leaders for the next century  
by creating a student centered academy,  
allowing students to inquire, inspire each  
other and harness innovation to meet the  
challenges of tomorrow.”*

- Mission





# EXECUTIVE SUMMARY

Located on the back nine of the public golf course adjacent to the East Lake Villages and the East Lake Golf Club, the school is built for 400 middle school students (6<sup>th</sup>-8<sup>th</sup> grades) and 600 high school students (9<sup>th</sup>-12<sup>th</sup> grades). Set on one of the highest points in Atlanta, the 4-story, 200,000 SF Drew Charter School was situated to be a visible centerpiece of the East Lake community. The school is comprised of two buildings, the academic building and the arts and athletics facility. The academic building houses both Junior Academy (grades 6-8) and Senior Academy (grades 9-12). It is arranged around a central atrium that connects the academies and serves as the Learning Commons for the entire school community. An outdoor plaza north of the academic facility connects the academic building to the gymnasium and auditorium and provides a dynamic setting for outdoor learning. The auditorium has a seating capacity of 500 and is used for performing arts and community events. Athletic venues include a competitive gym for the senior academy athletics, as well as a practice gym for the junior academy. An Art Garden is located adjacent to the auditorium and showcases the building's rainwater collection design and sustainable landscaping.

The public front door is on the building's south facade while the first classroom level which is on the second floor has on-grade access on the north side of the building. Surrounding the four story lobby atrium, the shared Learning Commons separates the Middle School on the high end of the site from the High School on the lower end of the site.

Responding to the Drew Project Based Learning (PBL) approach to teaching, the academic building is designed with large open flexible labs on the south side and enclosed traditional classrooms for direct instruction on the north side. Each set of two classrooms has a moveable partition allowing for team teaching and collaboration. The variety of spaces provided support a wide range of teaching and learning; single classrooms which accommodate direct instruction, double classrooms for team teaching, and the large flexible labs for a variety of group and individual activities. These large flexible project lab spaces are outfitted with entirely mobile furniture and wireless technology presentation capabilities. These state-of-the-art spaces are intended to provide a completely flexible environment that is student centered, hands-on and one-of-a-kind.

As natural light was a big priority for the client, all the learning spaces are fully glazed, and the large expanses of glass afford wonderful views of the city skyline.



**LOCATION:** Atlanta, Georgia

**BUILDING SIZE:** 200,000 SF

**SITE:** 39 acres

**STUDENTS:** 1,000

**COMPLETION DATE:** July 2014

**TOTAL PROJECT COST:** \$55,000,000

**CONSTRUCTION COST:** \$44,915,053

**LEED CERTIFICATION:** Pending Gold



# SCHOOL FACTS:

**1<sup>st</sup>** Charter School in  
**CITY OF  
ATLANTA**



**1000  
LAPTOPS**

1 to 1 technology school



TRACKING  
**LEED  
GOLD**  
CERTIFICATION

**7** LARGE AND ADAPTABLE  
**PROJECT  
LEARNING  
LABS**

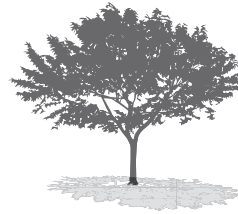


# 4

floors with unique stadium seating benches with power and wireless networking for unlimited access to technology.



200,000 SQ. FT.  
LOCATED ON ONE OF THE HIGHEST  
POINTS IN ATLANTA



39 acres  
WITH AN ART GARDEN  
AND SUSTAINABLE  
LANDSCAPING



23 HARPS  
WITHIN THE PERFORMING  
ARTS PROGRAM



CENTER FOR THE ARTS  
500 SEAT AUDITORIUM  
USED FOR PERFORMING ARTS & COMMUNITY EVENTS



# HOME OF THE EAGLES




# COMMUNITY ENGAGEMENT

Founded in 1890, East Lake is one of Atlanta's most historic neighborhoods. East Lake is a community of families, professionals and local businesses invested in the idea of a caring and diverse intown community. Its rich history includes Atlanta's second-oldest house, the famous golfer Bobby Jones,' East Lake Golf Club, and the home of civil rights activist Hosea Williams. In recent years East Lake has enjoyed a rebirth due in part to The East Lake Foundation. East Lake is a great example of community redevelopment with a mission to break the poverty cycle for many of it's residents.







A stylized graphic of a hand with five fingers, rendered in a light green color. The hand is positioned in the lower-left corner of the slide. The background features a series of light blue diagonal stripes radiating from the bottom-left corner, creating a sunburst effect.

*An educational environment that will provide for multiple teaching and learning strategies including direct instruction, collaboration, project-based learning and community internships.*

- Vision



# VISIONING

The design team began the project with visioning workshops with East Lake Community Leaders, School Board Members, Faculty, Staff and Students to generate ideas, gather and confirm existing information and develop the goals and objectives, “the vision” for the project. These interactive workshops involved all levels of the school community and resulted in designing a school all constituents of the community wanted.



# COMMUNITY ENGAGEMENT PROCESS

The design process began with a series of workshops that engaged some 60 stakeholders including representatives from the East Lake Villages, the adjoining East Lake YMCA, the East Lake Foundation, the Cousins family, and the existing Drew Charter School. Participants in the workshops from the school included Board members, parents, administrators, staff, teachers, and a number of elementary and middle school students.

We began our process by asking each participant to bring an object or an image that represented his/her vision for the new Junior and Senior Academy. As each individual presented his/her vision for the future of the school through his/her object, a consensus of thinking emerged from which we formulated the guiding principles against which we are able to measure all our design decisions going forward. As illustrated in the list below of “Vision That We Heard”, paramount to these stakeholders was focus on the students and preparing them for college and career intellectually, physically, and socially. Drew Charter’s mission is very much a “cradle-to-college” approach as reaffirm here.

## THE VISION THAT WE HEARD....

A school where every student goes to college

A school that teaches students life skills

A school that teaches student inquiry

A school whose students are prepared to compete in a global world

A school whose students are using technology to find, filter, and create

A school which focuses on the whole child with a combination of arts and sciences

A school that emphasizes teamwork, motivating students and working toward goals

A school which focuses on the whole child with emphasis on the intellectual and the physical



We also asked the constituents to answer the question “*What was your most memorable learning experience?*” In all instances the stakeholders described something hands-on and experiential. This coincided with the schools adoption of its project-based learning curriculum and led to discussions of what should a school look like where experiential learning is embraced.

Getting the constituent community buy-in on the value of experiential learning helped the administration in its implementation of the PBL curriculum and in getting the faculty and staff thinking about new ways to use space. Constituents in the workshops also participated in visual listening exercises. We showed a number of learning environments, some from the K-12 world, some from higher education, and some from the corporate world; direct instruction spaces, one on one collaborative spaces, large group collaborative spaces, individual work spaces, etc., and asked them to choose their favorites with colored dots.

Consensus grew around the importance of collaboration for both students and faculty; how important teamwork and the exchange of ideas are for an enriched learning experience. This desire to be able to foster collaboration for everyone became a major driver in the design. To encourage collaboration among teachers, teacher planning rooms with hoteling spaces for every teacher were developed. For each grade level there is a large teacher planning area where each teacher has an individual work station around the perimeter of the room and there are large conferencing tables in the middle where curriculum planning, collaborative conversations, etc. can take place.

To foster collaboration among students, each grade level has an open flexible project lab space. All the classrooms plus the science rooms open onto this space. The more traditional classrooms are fully transparent from the labs through floor to ceiling glass. Learning can seamlessly move from the more direct instruction spaces to the open flexible lab spaces.

Community input also drove the design of the Learning Commons. In response to the community's vision for an open free-flowing media center, we developed the vertical Learning Commons that wraps the center atrium of the building. As you move up the central staircase which is used as part of the Learning Commons, the spaces become quieter with open group work spaces on the lower floors and the majority of the stacks and individual study spaces on the top floor.

The administration at Drew had recently adopted its project-based learning curriculum in the lower grades. The pedagogical paradigm was shifting. The community engagement process helped reaffirm the value of PBL and how spaces can best support it. It built consensus in the community for this paradigm shift.

The East Lake Villages constituents take great pride in the Drew Charter School. Including them in this community engagement workshops reaffirmed their commitment to the success of the school and their gratitude for what it has done for the neighborhood.

Located in an area that was one once notorious for being one of the most impoverished, crime-ridden communities in America, the new school is a symbol for the community's transformation, and completes the vision of this charter school's leadership to transform lives through a "cradle-to-college" education.



## BRANDING THE ENVIRONMENT

Reinforcing the vision of the school as well as enhancing the learning environment, we concretized the school's brand in response to their commitment to project-based learning: inquire, make, share. We incorporated this message into flexible display system for student presentations, the atrium staircase, and other walls and floors throughout the building.



## THE BRAND IDEA



- focus on developing driving questions and researching answers
- messaging reinforces seeking and activating
- environment is open and relaxed to stimulate new perspectives; technology provides diverse research tools



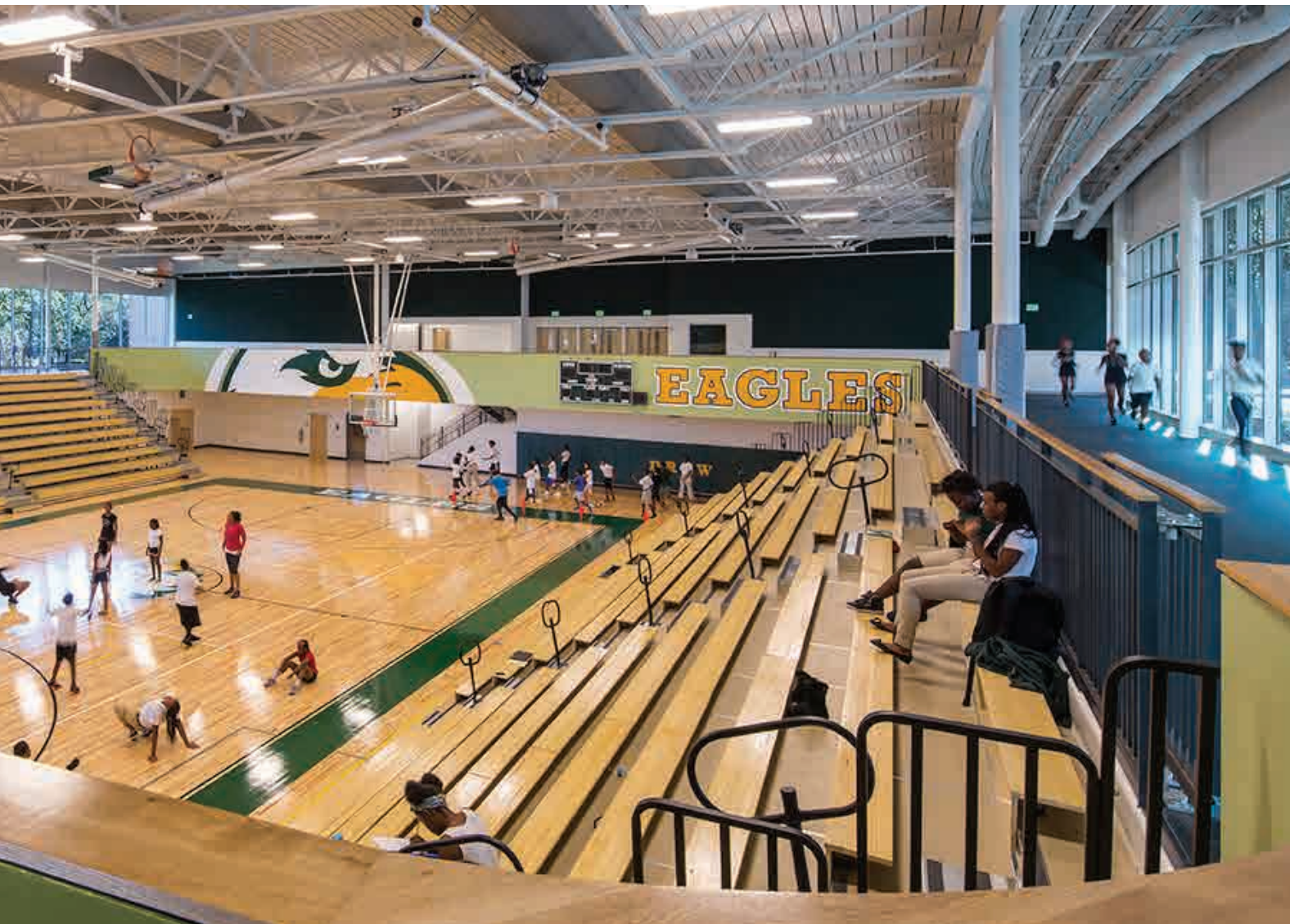
- focus on problem solving and building products
- messaging reinforces creating and innovation
- environment is flexible and layered to provide for multiple functions and group collaboration



- focus on communication of ideas, public forum, and teamwork
- messaging reinforces presentation and participation
- environment accommodates audience and presenters; information is conveyed interactively







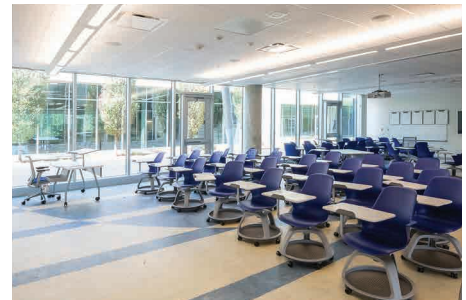
# EDUCATIONAL ENVIRONMENT

With its upward sloping roof, Drew Charter is 3-stories on the high school side and 4-stories at the atrium and on the middle school end. The first floor houses shared facilities; administrative offices, music, the robotics lab, and the cafeteria. On the high school side, the second floor houses the 9<sup>th</sup> and 10<sup>th</sup> grades ,and the third floor houses the 11<sup>th</sup> and 12<sup>th</sup> grades. On the middle school side, the 6<sup>th</sup> grade is on the second floor, the 7<sup>th</sup> on the third floor, and the 8<sup>th</sup> on the fourth floor. Each grade level has four classrooms, a designated science room, and a designated large flexible lab space.

In support of the school's project-based learning and STEAM focused curriculum, a variety of different sized flexible spaces make up the learning environments. They include the single classroom for 25 students, the double classroom which can accommodate 50 students, and the project lab which can accommodate the entire grade level and/or grouping of individuals in multiple furniture configurations. Glazed from floor to ceiling, the classrooms, labs, and learning commons all flow into one another.

It is envisioned that art will be fully integrated into the curriculum and taught in the project labs, thus only one designated art lab (primarily for 3D projects) existed, and it is located on the middle of the second floor, accessible to all students. Similarly there is a robotics lab , maker space, in the middle of the first floor serving everyone. This is located with access to the front plaza affording the opportunity for building and testing projects outside. Administrators and teacher planning areas are located at the front of each grade level wing making them fully accessible to the students also.

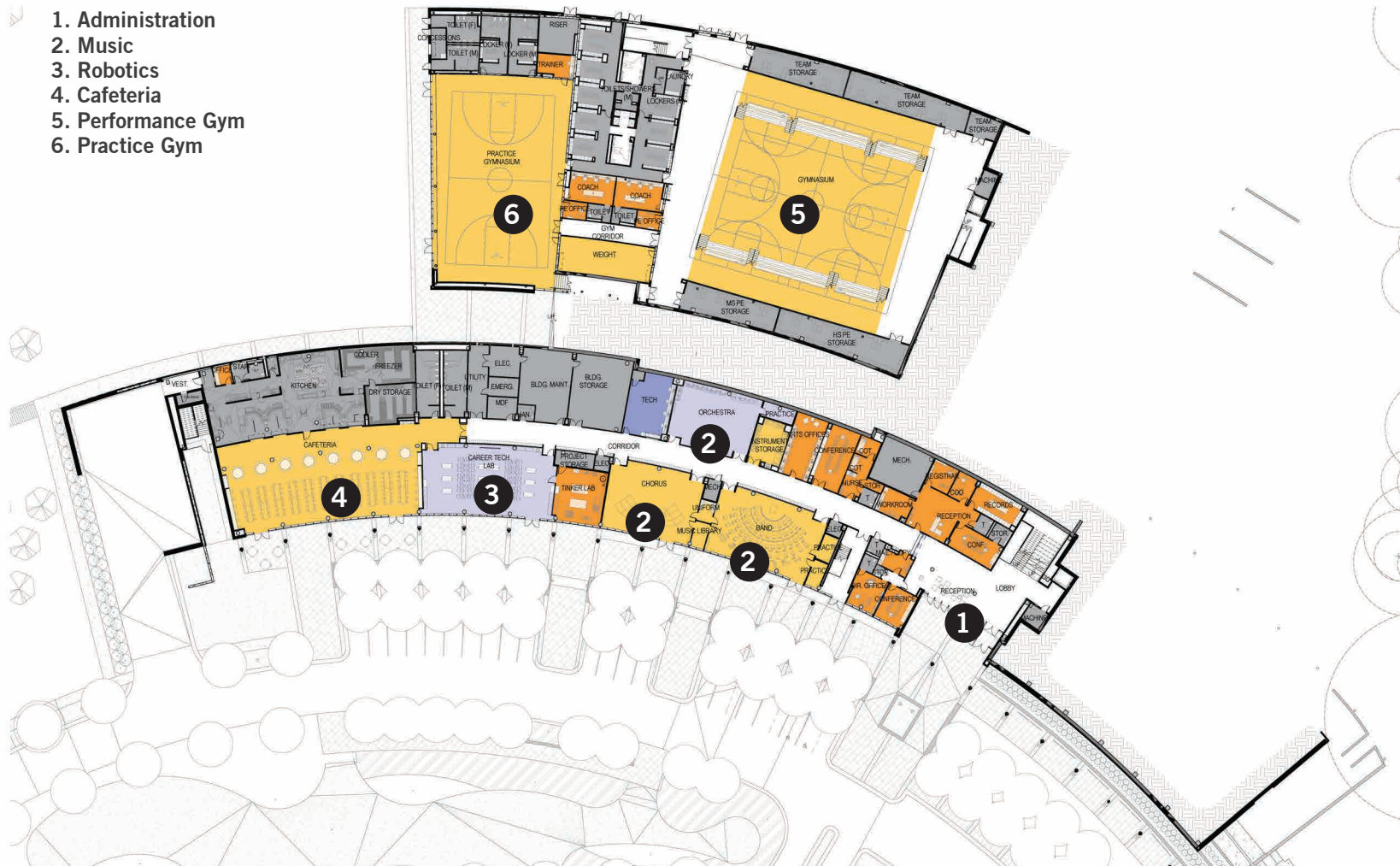
With the glass everywhere, walls in the project labs become writable surfaces and with modular desks and spaces that promote movement, learning happens anywhere, everywhere and all the time.





# FIRST FLOOR PLAN

1. Administration
2. Music
3. Robotics
4. Cafeteria
5. Performance Gym
6. Practice Gym





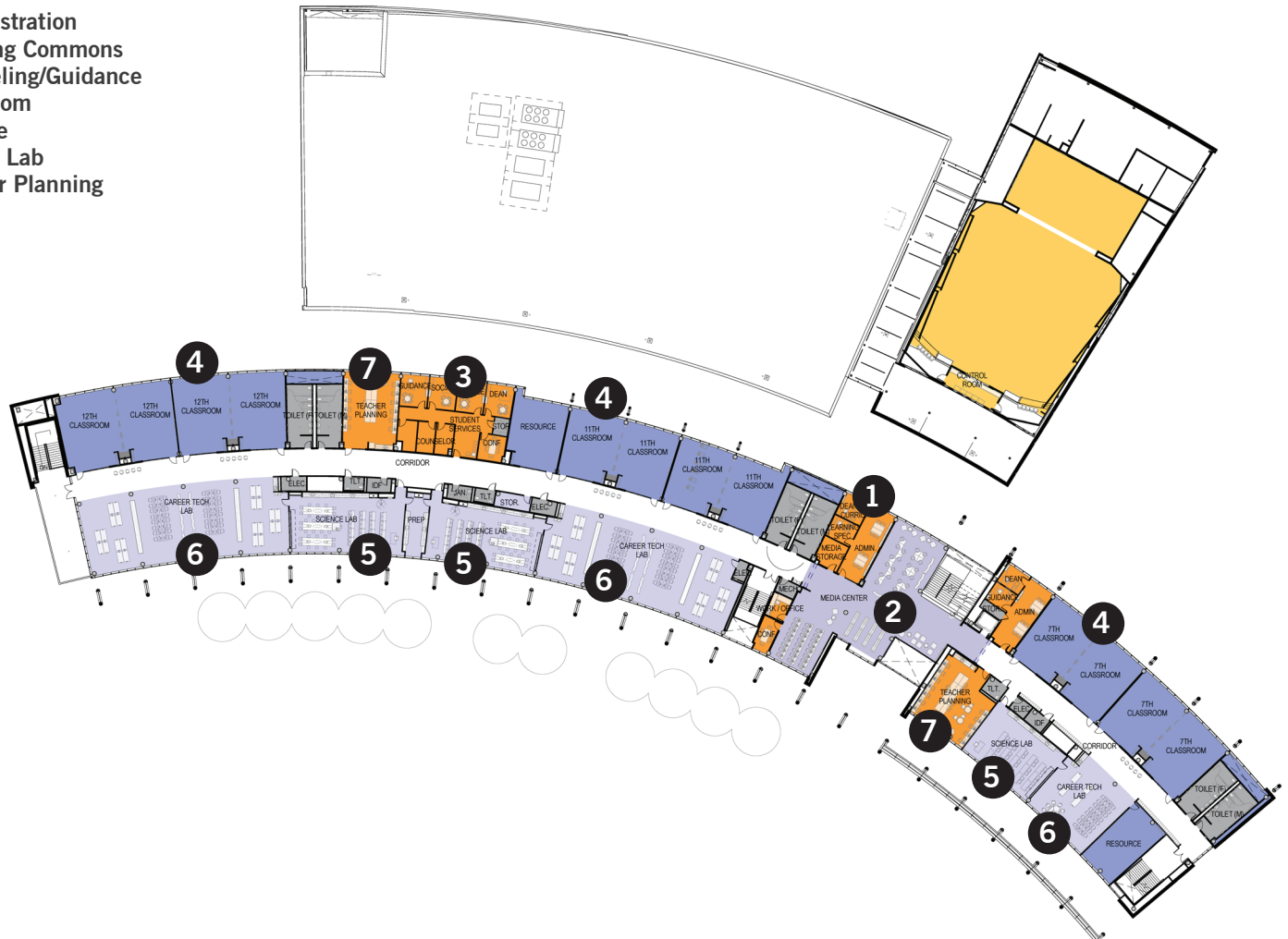
## SECOND FLOOR PLAN

1. Administration
2. Learning Commons
3. MAC Lab
4. Classroom
5. Science
6. Project Lab
7. Art
8. Teacher Planning
9. Auditorium
10. Dance



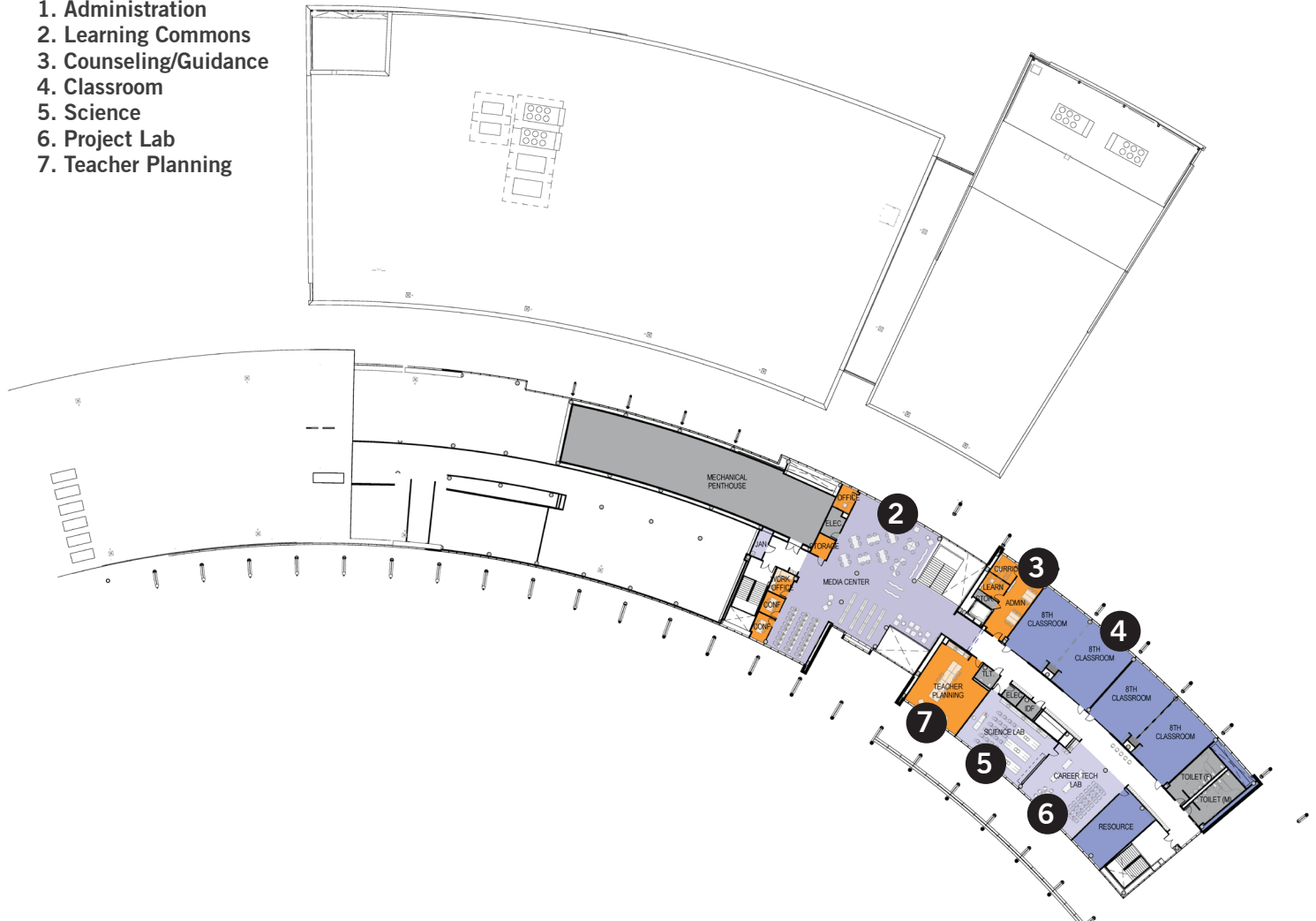
## THIRD FLOOR PLAN

1. Administration
2. Learning Commons
3. Counseling/Guidance
4. Classroom
5. Science
6. Project Lab
7. Teacher Planning



# FOURTH FLOOR PLAN

1. Administration
2. Learning Commons
3. Counseling/Guidance
4. Classroom
5. Science
6. Project Lab
7. Teacher Planning



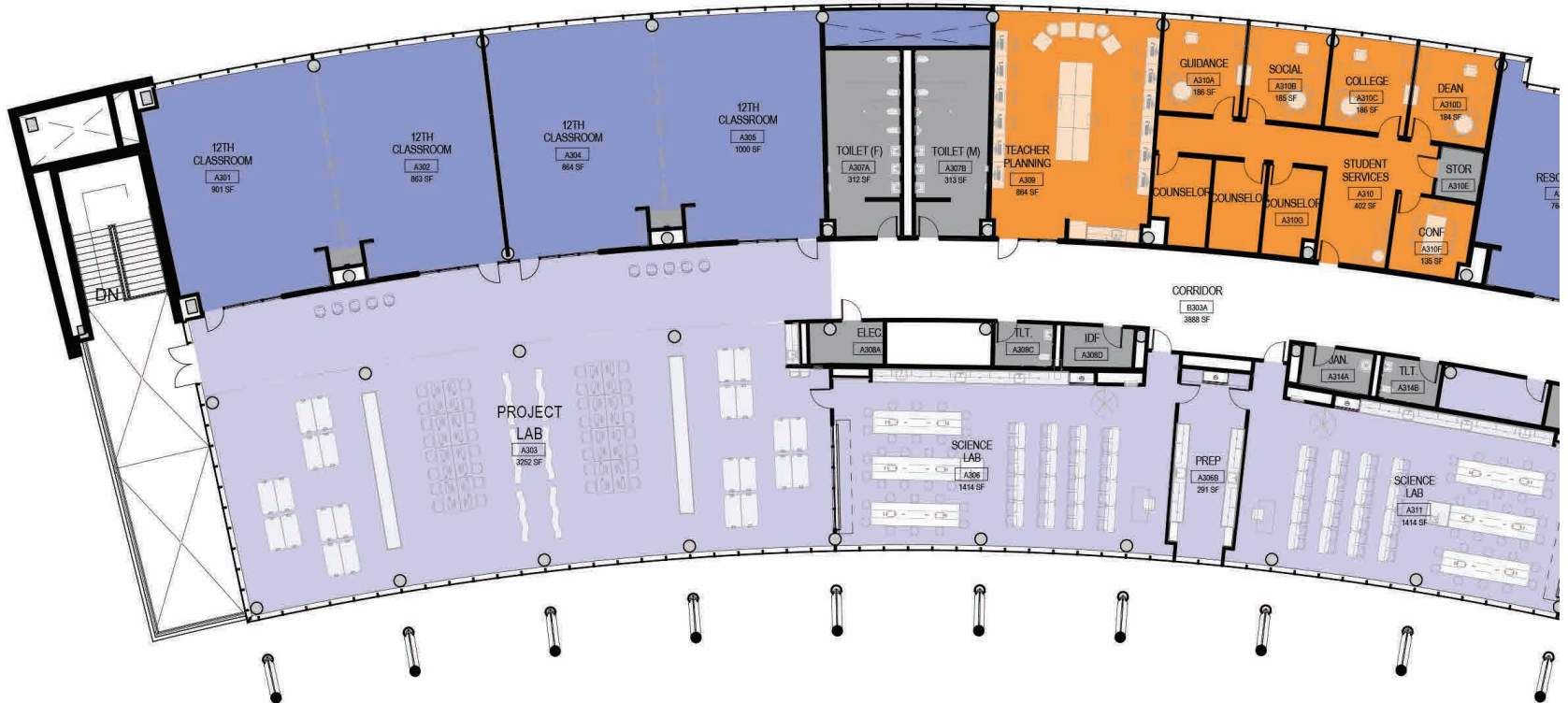
# PROJECT LABS

The project lab, a large flexible space outfitted entirely with mobile furniture, wireless networking, both mobile and fixed technology presentation capabilities, floor mounted power, sinks and storage cabinets, and utilities such as water and power, is intended to provide a completely flexible environment that is student-centered. These labs are distributed throughout the school with each grade level having access to their own lab, and they provide the building block for the educational process. These state of the art spaces are intended to provide a completely flexible environment that is student centered and enhances experiential learning.





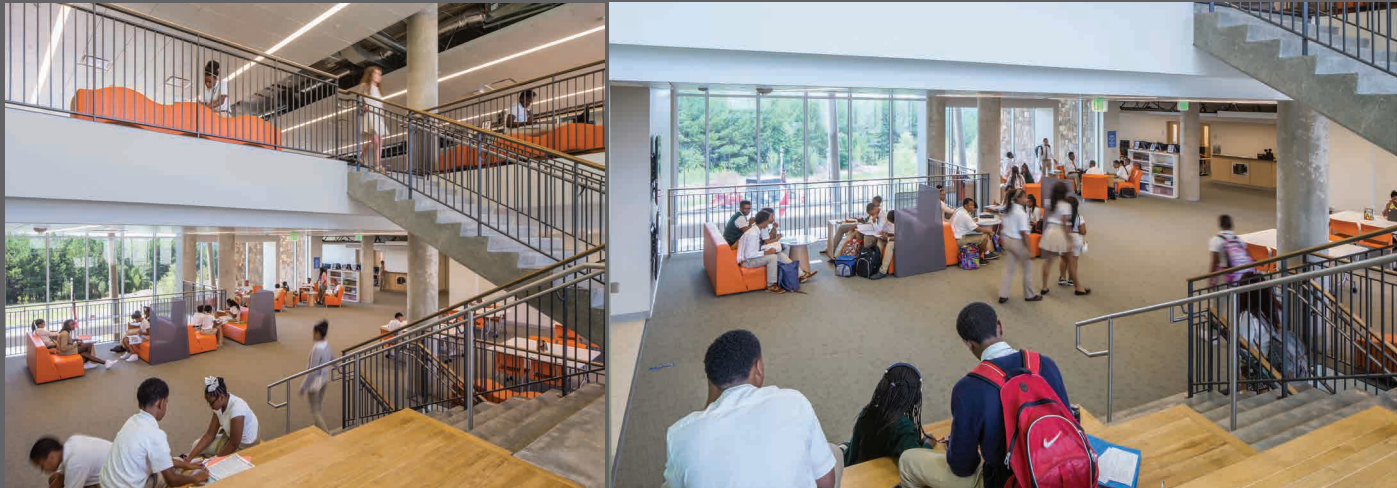
## PROJECT LAB FLOOR PLAN

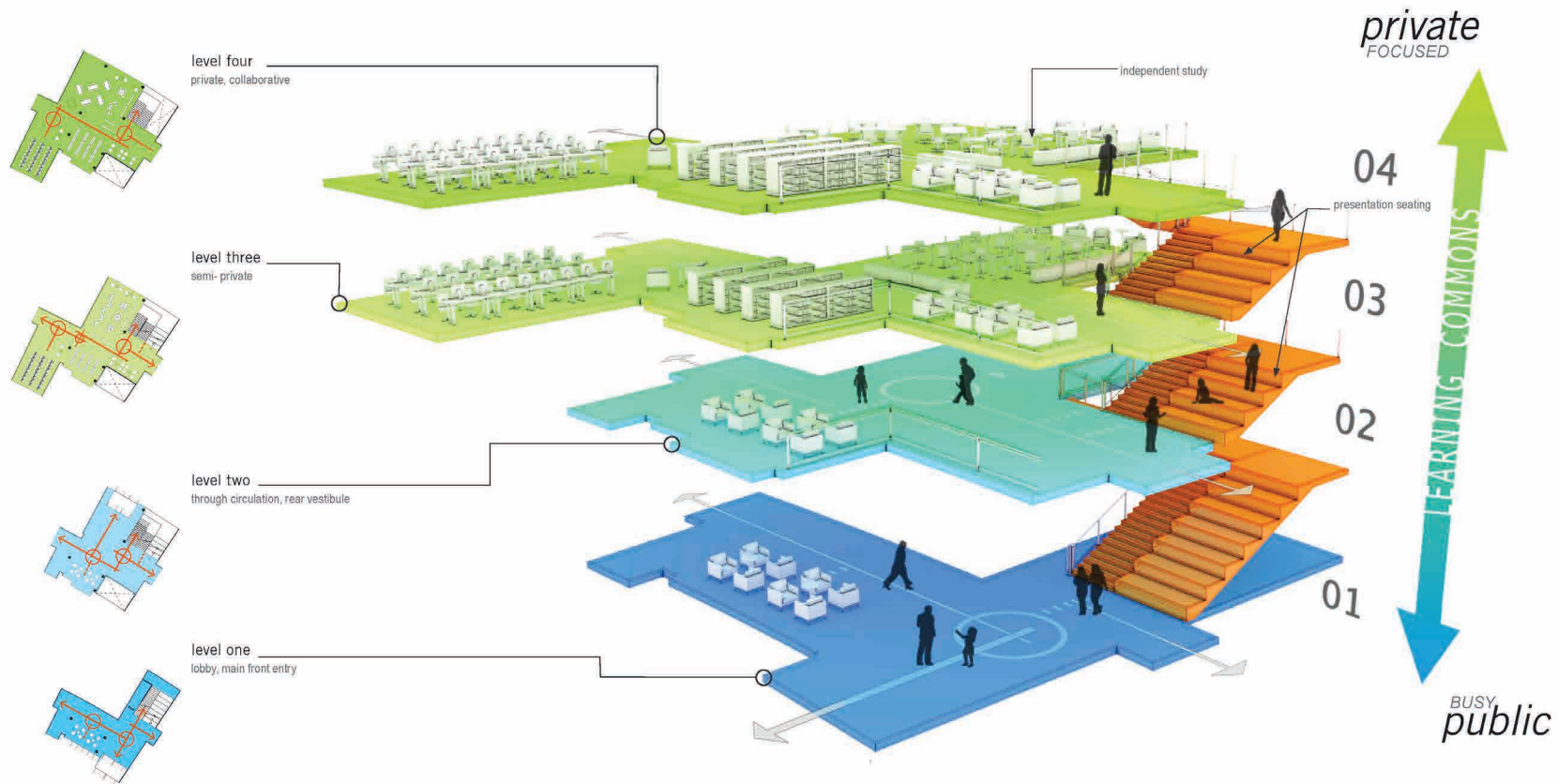


*Spaces are designed for endless variations, allowing teachers and students to define how to organize their learning space according to their needs.*

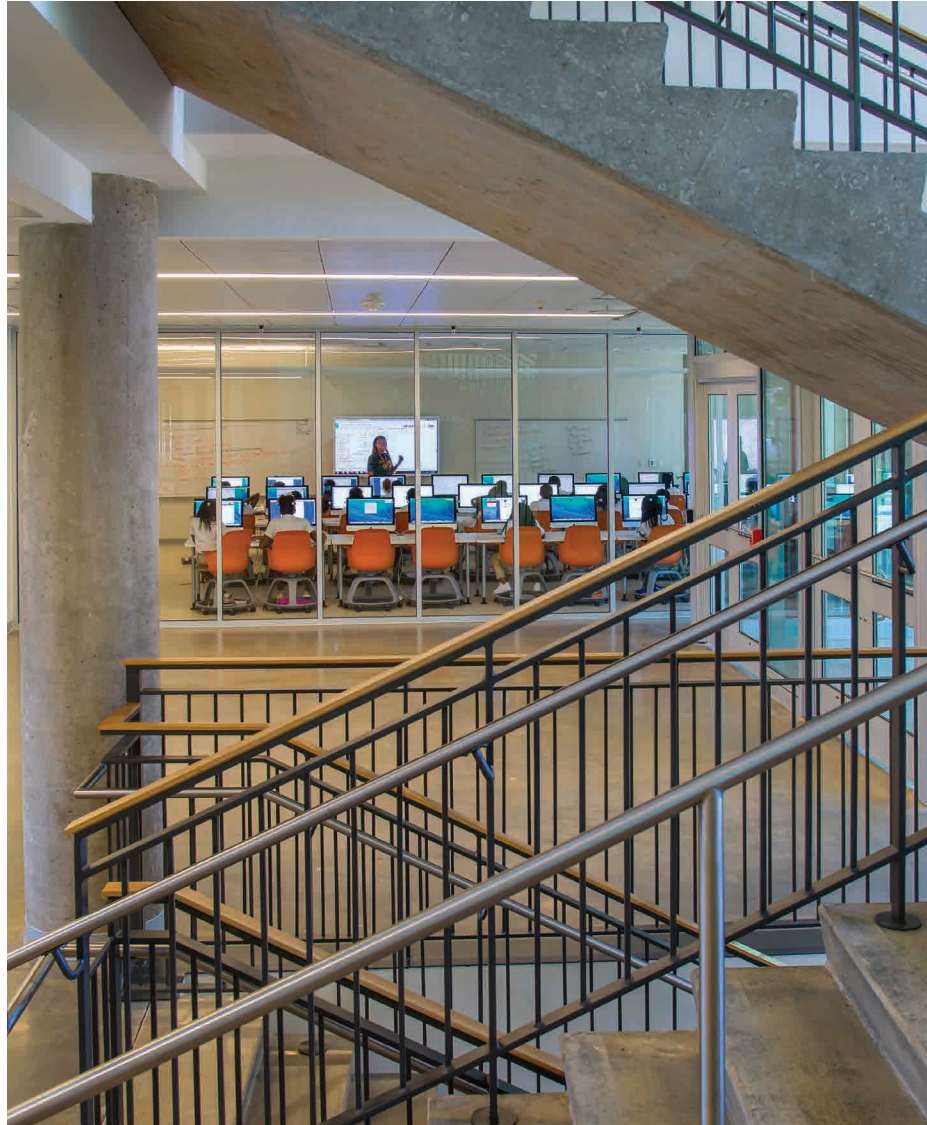
# LEARNING COMMONS

The Academy has taken the opportunity to redefine the school library and media center into a true learning commons. Organized vertically in the school's 4 story main atrium space, this centrally located area is the heart of the school. Serving as the public lobby and reception on the 1<sup>st</sup> floor, the atrium transforms from an energetic public space to a focused area for student study on the 4<sup>th</sup> floor. The learning commons includes a variety of spaces for students, teachers, and visitors. Connecting all 4 floors are the unique stadium seating benches which allow students to work in small groups or independently, and they also serve as a presentation space at every floor level. These benches are outfitted with power and wireless networking for unlimited access to technology. On the upper floors there are mobile worktables, open conferencing rooms, and study carrels. A fully glazed and enclosed MAC lab is located on the second floor adjacent to the central staircase.













# TECHNOLOGY

The Academy has taken an innovative stance on technology and its implementation. It is a 1 to 1 school with fixed and mobile flat screens located throughout the building. Because project based learning is based on three core steps – inquire, make and share, integrating technology to enable these activities was a key design criteria for the success of the school. Mobile flat panel displays are located in the project labs and teacher planning areas. Large format projection capabilities are located in labs, classrooms and public areas. And fixed interactive flat panel displays are in every direct instruction space as well as in the lobby areas.





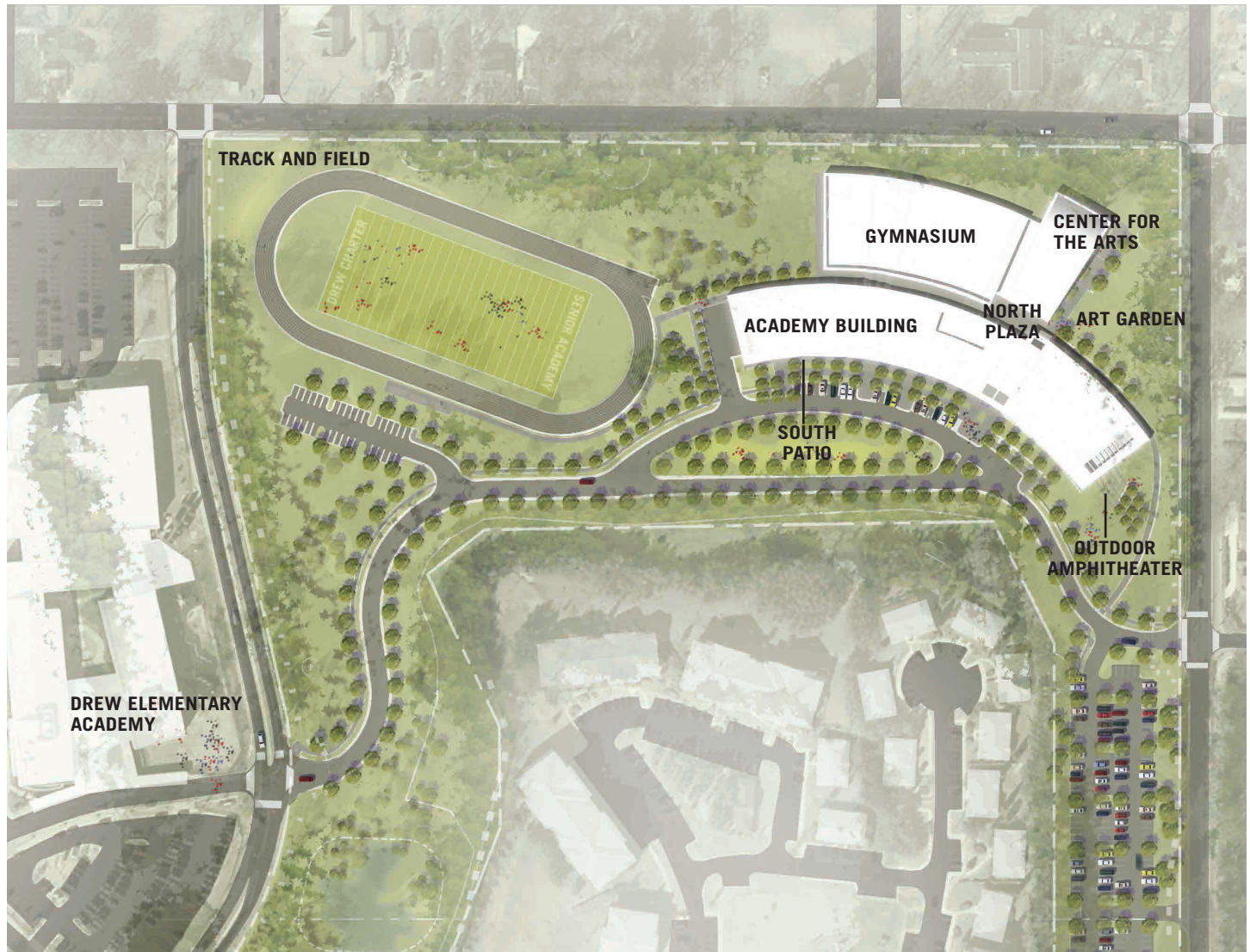


# PHYSICAL ENVIRONMENT

The new Junior and Senior Academy is located on 39 acres directly adjacent to the existing Drew Charter Elementary Academy campus. The new campus represents a broad range of spaces for community, educational, and athletic programs. The South Patio offers outdoor dining areas for the cafeteria as well as space for the robotics lab, band, and choral programs. The North Plaza connects the academic building to the gymnasium and auditorium and provides a dynamic setting for outdoor learning. The Art Garden is an open space adjacent to the auditorium and showcases the building's rainwater collection design and sustainable landscaping. This multi-purpose space can serve as the outdoor pre-function area for performances, location for weekend green markets, and a host of other school and community events.







## EAST LAKE CAMPUS BEFORE





## EAST LAKE CAMPUS AFTER



COMPUTER RENDERING



## RENEWAL + CREATION.

The concept behind the design of school has always been one which is rooted in the site. The natural beauty of the property, its hills, its views of the surrounding area and the city skyline have been paramount in the siting of the building and the landscaping that fills in the campus. A wide variety of plants and trees highlight the natural beauty of the campus. All of the landscaping is supported by sustainable design practices which inform the selection of the various planting species.



WILLOW OAK (STREET TREE)



CREPE MYRTLE



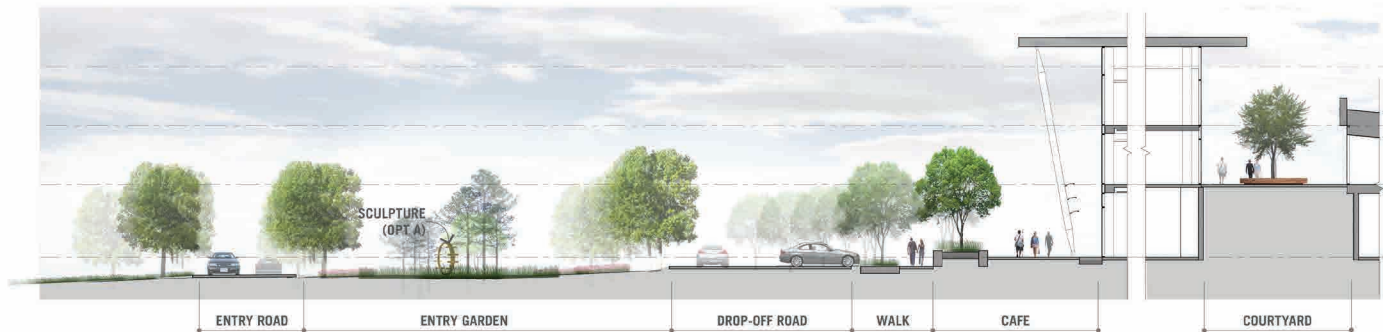
SERVICE BERRY



BALD CYPRESS

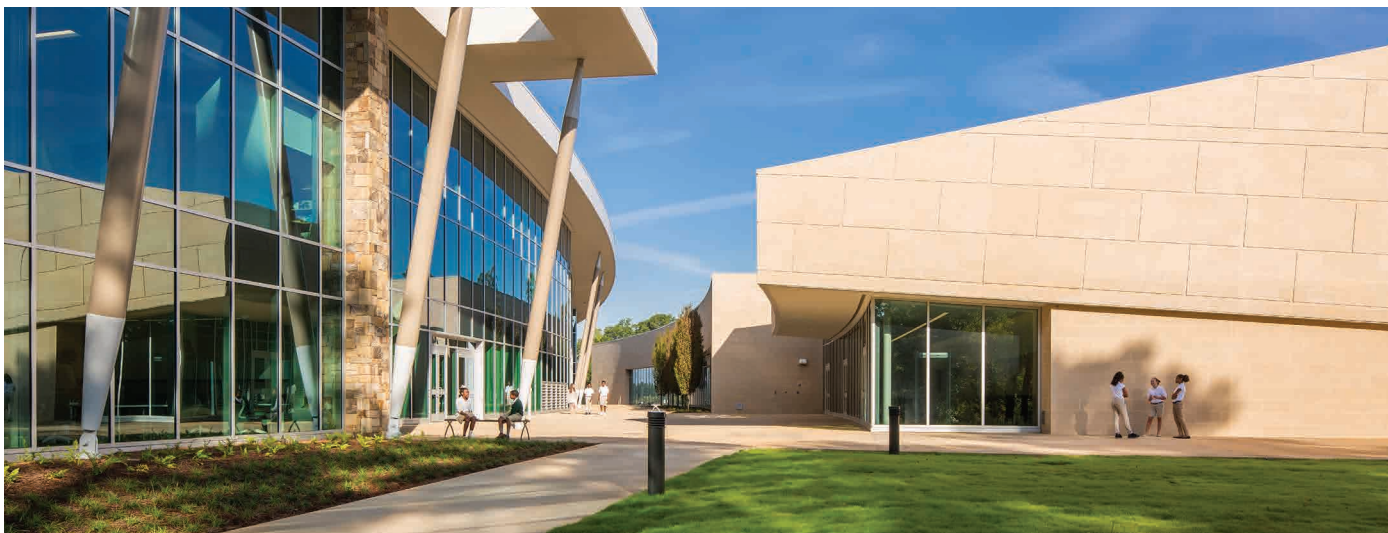


LOBLOLLY PINE





**ART GARDEN**



**NORTH PLAZA**

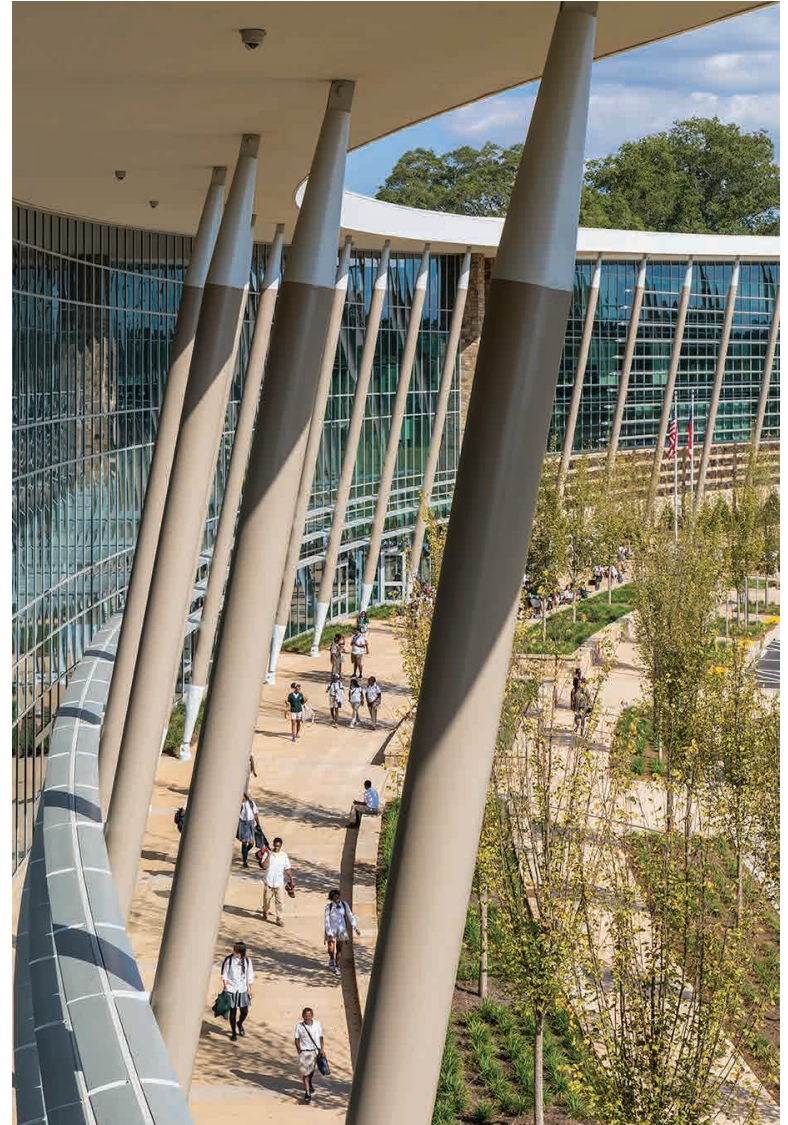
















# SUSTAINABILITY

The new Junior and Senior Academy is an example of a high performance school that intelligently responds to its environment while supporting its educational program. Tracking a LEED Gold certification level, this building utilizes state of the art building materials and systems to create a school that provides incredible daylighting for learning spaces and maintains energy efficiencies well ahead of standards. Locally sourced and manufactured materials such as field stone, glass, and concrete make up the majority of the school's building structure and envelope. The simplicity of the building design is expressed in the exposed concrete structure, glazed walls and building systems that are on display as a part of the STEAM curriculum.

Sustainable design features of the project include:

- Photovoltaic cells on the theater roof
- Maximized open space throughout the site
- Daylight and views provided in all instructional spaces
- Sun screens
- Reduced water usage
- Recycled, regional, and low-emitting materials usage
- Stadium seating benches at atrium use of reclaimed wood from site
- Construction waste management





## SUSTAINABLE DESIGN FEATURES

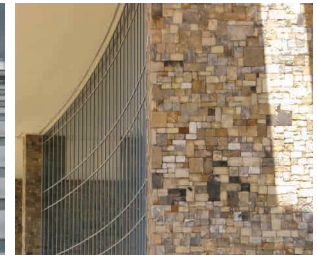
Photovoltaic cells on the theater roof which provide 10% of the building's power are visible from the upper levels of the classroom building atrium providing a teachable moment for the students as they travel through the building. Solar panels, rain water collection and energy efficient building systems are clearly integrated into the engineering and technology curriculums.

Trees that formerly edged the fairways of the golf course were recycled into the wood rail and stadium seating in the central atrium - so every day, students and teachers “touch and feel” the connection to sustainability and nature.

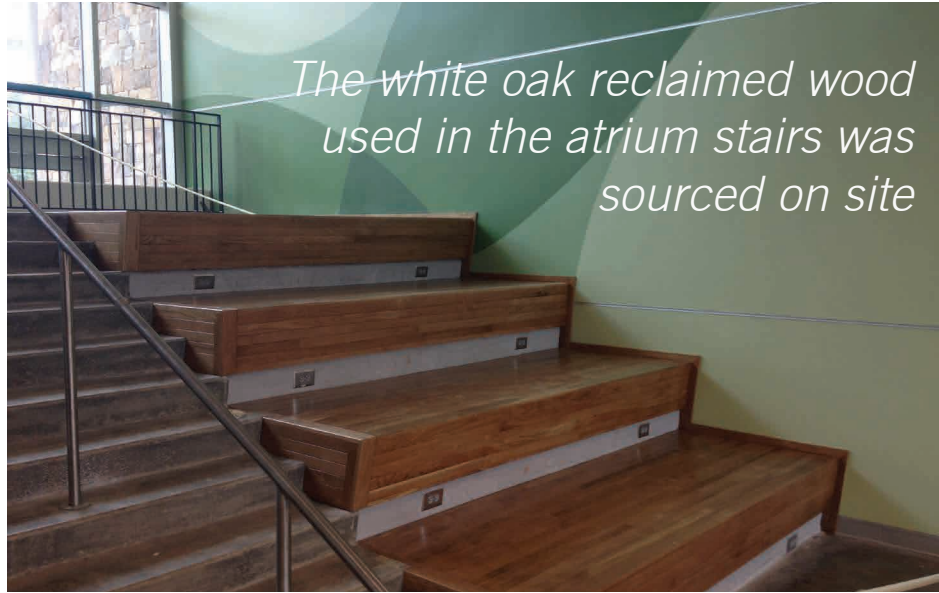
The placement and number of sunscreens on the front of the building were dictated by solar studies tracking the sun along the primarily east-west facing building facade. As the building curves more westerly on the middle school side the number of sunscreens increases.











*The white oak reclaimed wood  
used in the atrium stairs was  
sourced on site*







# RESULTS

Located in an area that was once notorious for being one of the most impoverished, crime-ridden communities in America, this signature building is a new symbol for the community's transformation, and completes the vision of this charter school's leadership to transform lives through a "cradle-to-college" education. To help achieve this vision, the design team embraced the challenge to create a 21st century facility that would prepare students to succeed in a world that is constantly changing, global, and technologically driven.

A model for continuous improvement, flexibility, and accountability, Charles R. Drew Charter School continues to build community, foster student success and remain true to its mission – to work together as a community of teachers, staff, students, families, and volunteers to provide a learning environment that emphasizes high achievement and character development.

*"Possibility takes place, and we are creating infinite possibilities for our students and community with the addition of the Drew Charter School Junior and Senior Academy," said Daniel J. Shoy, Jr., president, East Lake Foundation. "The Drew Charter Senior Academy will prepare our students for college and life. Higher education breaks the intergenerational cycle of poverty, and a high-quality, seamless cradle-to-college pipeline is an essential component for East Lake to sustain the success of its revitalization."*



Drew Charter is the only program in the Atlanta Public School system whose curriculum is focused on STEAM. The transparency of the spaces and the open plan help foster the program of collaboration and project-based learning - the teaching method in which teams of students tackle problems based on real-life situations. Rather than emphasizing traditional rote learning, the school encourages its students to think critically, communicate, and create through collaboration.

The design of Drew Charter is a direct response to the school's project-base learning curriculum. The variety of teaching and learning spaces offer opportunities for different experiences accommodating multiple intelligences and learning styles. The single classroom, the double classroom, the project labs, the robotics lab/maker space, the vertical Learning Commons, the stadium seating, the outside plaza between the buildings, the plaza in front of the building, and the outdoor classroom on the end of the building provide a plethora of environments for teaching and learning.

Incorporated into the design is the "Brand Idea," inquire, make, and share, that captures the school's mission and gives students increase pride and a closer relationship to their school's identity. The project labs allow for inquiry, making, and sharing in a multitude of group sizes. The stadium seating in the central atrium allows for individual and/or group work and serves as a platform for presentation, for sharing.

Working closely with the furniture manufacturer, the team fully integrated the latest mobile, flexible and technology equipped educational furniture to help students collaborate, share ideas and learn more effectively. The building is now a showpiece for the manufacturer and living lab for active research studies on learning environments.

Drew Charter Junior and Senior Academy provides an environment that fosters hands-on, experiential learning encouraging the development of critical thinking, communication, creativity, and collaboration. The optimism of this mission to educate this (East Lake) under-served demographic can be seen in the bold and transparent architecture of the building.

