PUBLIC COLORADO BARDADO DENVER, COLORADO 2023 PROJECT AWARDS – NEW SCHOOL

GLOBAL PRIMARY ACADEMY GLOBAL INTERMEDIATE ACADEMY GLOBAL LEADERSHIP ACADEMY PERFORMING ARTS SCHOOL ON BROADWAY/MAPLETON ARTS CENTER

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PROJECT DATA

MAPLETON PUBLIC SCHOOLS' BROADWAY CAMPUS

DENVER, COLORADO

INTERNATIONAL LEADERSHIP SCHOOL CAMPUS

- BUILT AS THREE SEPARATE FACILITIES FOR GRADES PK-3, 4-8, & 9-12
- PLUS A PERFORMING ARTS SCHOOL

<u>OWNER</u>

MAPLETON PUBLIC SCHOOLS, CHARLOTTE CIANCIO, SUPERINTENDENT

PROJECT DELIVERY METHOD DESIGN-BUILD

OCCUPANCY DATE PHASED AUGUST 2018 - AUGUST 2021

<u>GRADES</u>

PK-12

TOTAL STUDENT CAPACITY 1,230 ACRE SITE 15.17

TOTAL BUILDING SF 197.116

SF/PUPIL GROSS 160.26

TOTAL CONSTRUCTION \$61,223,579

PER SF

\$310.60 (DOES NOT INCLUDE LAND, LANDSCAPING, FURNITURE AND PROFESSIONAL FEES)

EXECUTIVE SUMMARY

TRANSFORMING THE PK-12 EXPERIENCE

Mapleton Public Schools' Broadway Campus was designed to support students during every stage of their academic journey, from preschool to high school. The project transformed the nearly 60-year-old former K-12 school into a family of three schools spanning grades PK-3, 4-8 and 9-12. The project also provided the opportunity for the district to add The Mapleton Arts Center (The MAC) to its educational offerings, which serves as both the district-wide performing arts center and the Performing Arts School on Broadway for 7th - 12th grades.

The design-build team began working with Mapleton in 2005, and the partnership considers the Broadway Campus its legacy project. The project broke ground in 2017 with a phased approach for all four facilities.

PK-3

4-8

9-12

MAC

SCOPE OF WORK AND BUDGET



GLOBAL PRIMARY ACADEMY	GLOBAL INTERMEDIATE ACADEMY	GLOBAL LEADERSHIP ACADEMY	PERFORMING ARTS SCHOOL ON BROADWAY/ MAPLETON ARTS CENTER
grades PK-3	grades 4-8	grades 9-12	grades 7-12
300 students	350 students	400 students	180 students
OCCUPANCY DATE August 2018	OCCUPANCY DATE August 2020	<i>OCCUPANCY DATE</i> January 2019	OCCUPANCY DATE August 2021
BUILDING SIZE 42,225 total building SF 140.75 SF/pupil, gross	BUILDING SIZE46.504 total building SF132.87 SF/pupil, gross	BUILDING SIZE 63,212 total building SF 158.03 SF/pupil, gross	BUILDING SIZE45,175 total building SF250.97 SF/pupil, gross
BUILDING COST \$11,698,974 \$277.06 per SF	BUILDING COST \$13,933,256 \$299.61 per SF	BUILDING COST \$16,066,044 \$254.16 per SF	BUILDING COST \$20,431,420 \$432.21 per SF

2023 A4LE Project Awards | Mapleton Schools' Broadway Campus

SCHOOL & COMMUNITY ENGAGEMENT

ADDRESSING COMMUNITY NEEDS

STUDENT DEMOGRAPHICS AMONG GLOBAL SCHOOLS (AVERAGES)

9 HISPANIC STUDENT POPULATION



OF STUDENT POPULATION ARE ENGLISH LANGUAGE LEARNERS



OF STUDENT POPULATION QUALIFIES FOR FREE AND REDUCED-PRICE LUNCHES Mapleton Public Schools supports a highly diverse and underserved segment of the metro Denver community. The school district is committed to addressing community inequities through education, by removing obstacles for all students. A champion for the "small-by-design" educational model, Mapleton is on a mission to reinvent public education and reenergize a culture of learning by delivering academic options that engage the unique needs of each student.

The Broadway Campus is home to Mapleton's family of Global Schools plus its new Performing Arts School (The MAC). The Global Schools are internationally focused, rooted in empowering students to use their voice to improve their school community, while The MAC engages students through the arts.

The project presented a unique design challenge rarely seen in an urban, public-school setting: to deliver a PK-12 campus that strikes the delicate balance between connecting all students while also embracing the unique needs of each grade level.

The existing school play fields provided the only open-space for the surrounding residential community, but were undesireable due to the noise from the busy I-25 corridor. The project sought to use the new buildings as an acoustic block from the interstate to provide more of a retreat for the community. In addition, the school incorporated a neighboring commercial property into the campus that included a large parking lot. The project replaced nearly half of the asphalt area with a new soccer field to increase the usable area for the community.

With the improvements, the busy interstate became less of a hindrance and more of a promotion for the school and community, letting passer-bys gain a glimpse of something special in the community.

SCHOOL & COMMUNITY ENGAGEMENT PLANNING PROCESS

ENGAGING STAKEHOLDERS:

The design-build team coordinated with a core group as well as an ever-evolving group of influencers throughout the project. The process started as a master planning effort with the district administration and school board, moved to campus planning involving the district admin, school admin and surrounding community, and then continued with individual schools each incorporating their staff and students.







OUTDOOR ROOM PRIMARY ALADEMY

DESIGN-BUILD MODEL:

The integrated design-build model had a significant impact on the project's quality, timeline and budget, making a campus of this magnitude not only feasible but also remarkable. To meet the complicated mix of design needs, budget constraints and phasing challenges, the team of architects and interior designers, preconstruction managers, project managers and construction superintendents incorporated landscape, civil, mechanical, and structural engineers and contractors throughout the visioning and design process. Project leads across design and construction collaborated seamlessly as planning overlapped with construction, allowing the team to shift designs and budgets nimbly throughout the phases.

COLLABORATIVE DESIGN PROCESS:

Each phase of the project utilized a similar structure: establish "Conditions of Satisfaction," engage in a full-day work session with all decision makers and design-build team, then quickly follow up on details with specific users. At the district level, this process produced a master plan to upgrade schools, create schools of choice and create "small-by-design" school buildings. Once funding for the Broadway Campus was established, the team used the same process to develop the campus vision, design requirements, budget and schedule. With the phased construction framework, individual buildings utilized the same process to develop the design, systems and budget within a day each. The Collaborative Design Process allowed all client stakeholders, designers and construction team members to hear all values, ideas and decisions simultaneously to develop solutions together, significantly reducing wasted effort. The "Conditions of Satisfaction" acted as an alignment tool throughout design and construction to ensure the team met the vision and goals determined at the beginning.

SCHOOL & COMMUNITY ENGAGEMENT PLANNING PROCESS

PHASING OF WORK:

The phasing of the project enabled the planning team to incorporate learning as the design progressed. The PK-3 building construction was nearly complete by the time the initial design session began for the 4-8 building and acted as a full-scale model for the planning team. With the phased campus, the school staff experienced space of the earliest project to develop new design opportunities while the design-build team incorporated more efficient detailing and construction techniques.

TEAM VARIETY:

One of the campus goals was for each building to demonstrate a level of design maturity as students move through grades, with the buildings feeling like siblings rather than twins. The design-build team intentionally varied the individual designers on the projects to develop unique features, while maintaining common elements throughout the campus. The planning team for each project also varied, incorporating different staff to address the unique needs of each grade level, while district administration remained consistent to address campus needs.

EDUCATIONAL ENVIRONMENT DESIGN

FAMILY OF SCHOOLS + PERFORMING ARTS

EDUCATIONAL VISION:

The family of Global Schools enhances Mapleton's Gifted and Talented program offerings. The school district recognizes that its accelerated learning programs have historically been highly competitive, without the resources and reach to support all students who could benefit from the programs. The Broadway Campus was Mapleton's first step toward closing this gap. The campus aims to develop well-rounded students through challenging programs, opportunities for learning beyond the bell, and a variety of extracurricular activities.

RIGOROUS CURRICULUM:

Students have access to rigorous academic content, foreign language, coding and technology, physical education, visual arts and performing arts. The campus features a design technology lab, recreational fields, competition gymnasium and courts, and a state-of-the-art performing arts center to support these elements of the core curriculum.

PERFORMING ARTS CURRICULUM:

Mapleton believes in the power of the performing arts and has always upheld it as a critical element of its educational programming. Even during the budget challenges of the Great Recession and beyond, Mapleton has never once trimmed its performing arts programs. Now, the district has invested even more heavily in these programs by planting a legacy performing arts center to serve as a district-wide icon. The Mapleton Arts Center expands the district's performing arts offerings with a stateof-the-art performing arts center tailored to the unique needs of secondary students.

"FUTURE PROOF" DESIGNS:

For a school district fueled by innovation, flexibility is critical. Mapleton is often shifting its curriculum in response to its students' latest needs and educational research. The buildings provide both standard teaching spaces and a variety of flexible teaching areas that can accommodate the unknowns of the future.





EDUCATIONAL ENVIRONMENT DESIGN



SMALL-BY-DESIGN:

The physical separation of the buildings on campus is specifically for the support, comfort and engagement of the students and their well-being, providing ownership and understanding of one's own space without feeling lost and anonymous in a large building. While recognizing that maintaining one large, single facility could be more cost efficient for the district, Mapleton intentionally decided to separate the schools into three facilities with a distinctyet-connected aesthetic among the student age groups, each no more than 400 students.

SMALL LEARNING COMMUNITIES:

The "small-by-design" goal extends into each individual building. Celebrating the progression through schooling, PK-3 classrooms are clustered by grade level with the anticipated event of climbing the stairs, "rising-up" to 2nd and 3rd grades. Fourth and 5th graders in the intermediate school are upstairs and graduate down to the 6th – 8th grade area of the building that has more independent access to the library, café and outdoors. The 9-12 building is three stories, each with its own curriculum identity.

VARIED LEARNING SPACES:

The schools feature multiple learning environments within the buildings, from traditional classrooms for teacher instruction, to breakout spaces for smaller groups and student collaboration, to larger presentation spaces for multi-class meetings. While all schools provide a variety of spaces, the PK-3 school focuses on common areas for whole-class projects, the 4-8 focuses on spaces for learning independence and individual discovery, the 9-12 building provides a variety of small group and social spaces. The MAC provides practice, display and informal presentation space outside of the classrooms.

PHYSICAL ENVIRONMENT DESIGN



REACHING & INSPIRING STUDENTS:

Mapleton recognizes that each student comes from a unique background with their own set of talents, interests, circumstances and motivations. Mapleton is committed to ensuring no student will slip through the cracks or get lost in the crowd. And this promise of relentless support is carried through every detail of the Broadway Campus' layout and design decision. From prominent displays for student work, to state-of-the-art performing arts space, to athletic fields, to varied learning spaces, the Broadway Campus is designed to ignite a passion for lifelong learning by helping each of the more than 1,200 students build an authentic connection to their school community.





MAXIMIZING EDUCATION SPACE:

Both internally and externally, the school designs maximize space available for education. Classrooms open to common spaces. Common areas blend with other niches and small group spaces. Libraries and cafeterias are open to the hallways to feel like larger spaces. The intent of the designs is to utilize all hallway space as education space and maximize the limited square footage of each building.

OWNERSHIP:

Each school displays current student work and achievements, not just for each grade level but for every single classroom, providing an environment of pride and ownership for the students.

PHYSICAL ENVIRONMENT DESIGN EXTERIOR



COMMON THREAD:

While each building on campus is unique, with The MAC providing a dynamic focal point for the community, a patterned masonry wall is used as a common material throughout all facilities to reinforce the campus as a family of buildings.

EXTENDING INTO THE LANDSCAPE:

Each building has both site walls and unique exposed steel frames that extend into the landscape. The intent is to blur the lines between interior and exterior space, connecting each building to the common outdoor open space. This extension of the interior space creates outdoor rooms and pockets for activity that increases the educational space for students without the cost of increasing the buildings' square footage.

CENTRAL OPEN SPACE:

Like a weekend marketplace, the central gathering plaza is framed by the four buildings around the perimeter of the campus. The steel framework of each building that extends into the open space provides a wide variety of opportunities for school activities, outdoor classrooms and community events.

PHYSICAL ENVIRONMENT DESIGN WELCOMING COMMUNITY

CONNECTION:

Further reinforcing the campus' "marketplace" concept, Mapleton was eager to assure the community that the campus is not solely a space for students. Forgoing fences and orienting the buildings to create a central gathering plaza were design decisions meant to invite the community into the campus. The site design aligned with an existing pedestrian crosswalk on Broadway, creating a pedestrian boulevard that leads into the heart of the campus connecting to performance space, open fields, playgrounds, patio dining, a soccer field, and other outdoor courts and amenities.

GATHERINGS:

Whether for a farmer's market, family event or craft show, the campus layout is intended for community use. The school property was and is the only public space in the community. The impetus behind the central gathering plaza was not only to establish a common connection between the schools, but also to support community events.

SPORTS:

The Broadway Campus transformed the parking lot of a neighboring property into additional play fields. The site now provides recreational fields, playgrounds and basketball courts for student and community use.

THE ARTS:

The MAC features a large two-story lobby/auditorium entrance facing Broadway, designed with flexible space to host community events and allow for community theater or concerts. An outdoor stage faces the campus' open space for summer concerts.





SUSTAINABILITY AND WELLNESS





CHPS CERTIFIED:

While all buildings are designed for daylighting, acoustics, thermal comfort and energy efficiency, the Global Intermediate Academy is certified by the Collaborative for High Performing Schools, recognizing the schools' designs for sustainability and student health.

DAYLIGHTING STRATEGIES:

All four buildings on the campus feature clerestory windows and translucent wall panels, to maximize the natural light while minimizing glare within the learning environments. The projects used daylight and solar gain modeling to evaluate the use of frosted glass on high daylight windows which eliminated the need for sunshades on the buildings' exteriors. The project utilized precast concrete sandwich panels to provide durable, low maninenance material inside and out, but also continuous insulation coupled with thermal mass to create a highly energy efficient envelope

The translucent wall panels were utilized for both daylight and enhancing thermal insulation for the buildings. Panel locations were focused on the second story areas to allow for more durable materials down low.

Areas of the exterior that were not pre-cast concrete utilized concrete masonry units over continuous insulation to provide a durable and long lasting surface. The project utilized precast concrete sandwich panels to provide durable, low maninenance material inside and out. Continuous insulation of the panls coupled with thermal mass created a highly energy efficient envelope.

The arts building utilized a fiber cement rainscreen panel both inside and outside for increased durability and graphitti resistance.

SUSTAINABILITY AND WELLNESS

HEALTHY ENVIRONMENT:

Every classroom space incorporates daylighting, acoustics, air quality and individual temperature control to provide a healthy learning environment for students and staff. Particular attention was paid to the acoustic separation of Interstate 25 from the learning spaces.

STUDENT SAFETY:

Each school building features a clear view from admin to the approach and a secure vestibule entry. Ample exterior windows provide passive security to the outdoor common space and similar windows inside each building provide passive security to the hallways and interior common areas.

RESULTS OF THE PROCESS & PROJECT



The Broadway Campus was thoughtfully and intentionally designed to support our students during every stage of their unique academic journeys, from preschool to high school. The project perfectly captures the physical representation of our mission – to guarantee that all students can achieve their dreams and contribute enthusiastically to their community, country and world.

Superintendent of Schools Charlotte Ciancio

MAPLETON IS PROUD TO REPORT:

- Increased enrollment (within district and out of district)
- Improvement in post-secondary success by building a college and career-minded culture

From concept through completion, the Broadway Campus has delivered a comfortable, village-like environment fostering consistency and familiarity throughout the PK–12 educational experience. With intentional design decisions that connect students while also nurturing each stage of development, the campus fosters a culture of mentorship among all grade levels.

Through the project, Mapleton uncovered the opportunity to add an entirely new offering for Mapleton students: The Performing Arts School on Broadway. In addition to supporting nearly 1,000 students across the district involved in Mapleton's performing arts programs, The Mapleton Arts Center has also become home to a performing arts school for 7th – 12th grade students. By pairing rigorous academics with performing arts, the school provides an educational approach unlike any other within the district, where students master geometry through stage and set design, and study science through sound. What has resulted will be a catalyst to transform young performers' lives for years to come.

Through the campus' focus on enhancing its Gifted and Talented plus performing arts programming, the project impacted the district's success with engaging students across the district.

- Increased graduation rates
- Strengthened community support

RESULTS OF THE PROCESS & PROJECT GLOBAL PRIMARY ACADEMY (PK-3)

Global Primary Academy serves pre-kindergarten through third grade students, as well as a toddler program for one- and twoyear-old children. The 42,000 SF, two-story school accommodates 300 students and provided the opportunity for Mapleton to expand its programming to the educational needs of Mapleton's youngest learners. The school is designed for the scale and comfort of young students, providing many smaller doorways that only students can use.



THE SCHOOL LIBRARY

is located at the center of the building and features a treehousestyle loft to create an engaging and comforting space for learning.

THE GYMNASIUM

is designed for the physical education needs of primaryschool-aged students, highlighting games, activities and gross motor skill development for preschool.

GRADE-LEVEL CLASSROOMS

are clustered around common spaces providing displays for current projects and presentation space for larger class groups.

PRE-KINDERGARTEN CLASSES

have dedicated spaces and playgrounds specially designed to accommodate children of this learning level.

RESULTS OF THE PROCESS & PROJECT GLOBAL PRIMARY ACADEMY (PK-3)



RESULTS OF THE PROCESS & PROJECT GLOBAL INTERMEDIATE ACADEMY (4-8)

Global Intermediate Academy serves about 350 students from fourth through eighth grades in a 46,000 SF, two-story building. The school's designs are specifically geared to this age level where students begin to gain a strong sense of self. To motivate older students to set positive examples for their younger peers, Mapleton deliberately opted to locate the higher grades on the bottom floor. In turn, this provides younger students located on the top floor with greater opportunity to nurture their independence.



THE CAFETERIA

serves as a performance space and as a common area for afterschool athletic events.

BREAKOUT SPACES

are located outside of the physical classrooms to foster student collaboration.

SHARED SPACES

include a design technology lab, science room, art studio, music room and culinary skills room.

EACH GRADE LEVEL

is co-located in its own 'neighborhood' within the school.

THE LIBRARY

serves all students on the Broadway Campus. It is designed as a two-story translucent beacon, lighting up as a prominent campus feature. Additionally, the panels flood the library with natural daylight.

THE GYMNASIUM

is designed for the physical education needs and athletics geared toward the 4-8 grade levels.

RESULTS OF THE PROCESS & PROJECT GLOBAL INTERMEDIATE ACADEMY (4-8)





FIRST FLOOR



RESULTS OF THE PROCESS & PROJECT

GLOBAL LEADERSHIP ACADEMY (9-12)

Global Leadership Academy serves 400 students in ninth through twelfth grades in a 65,000 SF, three-story school. The design focuses on connectivity with the rest of the campus including the library at the 4-8 building, outdoor café and sports fields. The interior spaces offer more individual student freedom with a focus on small group study areas and social gathering spaces in the halls. The design includes a shared cafeteria and café plaza with a neighboring alternative high school, providing a sense of ownership to both schools.



STAIRWAYS AND LIBRARY are designed as social spaces for high-school-aged students.

COMPETITION gymnasium and artificial turf soccer field.

CLASSROOMS are clustered around break-out spaces for small group activities.

THE CAFETERIA features a large outdoor café style

eating area as a focal social space for the overall campus.

VARIOUS PROJECT-BASED

learning classrooms are located as focal points at the center of the building.

RESULTS OF THE PROCESS & PROJECT

GLOBAL LEADERSHIP ACADEMY (9-12)





FIRST FLOOR





RESULTS OF THE PROCESS & PROJECT THE MAC

The 45,000 SF Mapleton Arts Center supports nearly 1,000 students across the district involved in Mapleton's robust performing arts program featuring drama, orchestra, band, choir, color guard, mariachi and jazz band. The MAC is also home to an entirely new offering for students: the Performing Arts School on Broadway for 7th - 12th grades. The MAC provides students with the experience and exposure of performing in and running a professional, established theater. Each space is designed to foster an approachable yet functional environment in which students can harness these real-world skills to grow within the arts.

The MAC's unmistakably bold presence is a statement about the importance of the arts within education, which has led to increased academic engagement, students' strong sense of purpose and confidence, and a strengthened community.

900-SEAT AUDITORIUM

with a convertible orchestra pit designed for theatrical and musical performances.

AN OUTDOOR STAGE that opens to the heart of the campus and the other buildings.

BLACK BOX THEATER, RECORDING STUDIO AND PRACTICE ROOMS.

CATWALK, LOADING DOCK, DRESSING ROOMS, CONTROL ROOM, STORAGE AND TICKETING BOOTH all designed for student training and instruction.

SEPARATE CLASSROOMS for band, dance, orchestra, and choir.

PUBLIC ENTRY

and spaces oriented toward Broadway, and student entry and spaces oriented toward the campus.



RESULTS OF THE PROCESS & PROJECT THE MAC





SECOND FLOOR