



CLOSING THE ACHIEVEMENT GAP

How Design Supports a Charter School's Educational Program

Achievement Preparatory Academy in Washington, DC was founded to close the achievement gap between wealthy white students and low-income students of color. Statistics concerning the "achievement gap" collected in 1999 remain relevant today:

- Only 1 in 50 Latinos and 1 in 100 African American 17-year-olds can read and gain information from specialized text (compared to about 1 in 12 whites)
- Only 3 in 10 African American and 4 in 10 Latino 17-year-olds have mastered the usage and computation of fractions, commonly used percentages, and averages, compared to 7 in 10 white students

Closing the achievement gap has been a persistent goal for educators and policy makers for the last forty years. The benefits to local communities and the Nation in achieving this goal are significant and self-evident.

Working with only one-third of the facility allowance provided to traditional public schools, charter schools in the District of Columbia require innovative and extremely cost conscious design to foster their educational programs.

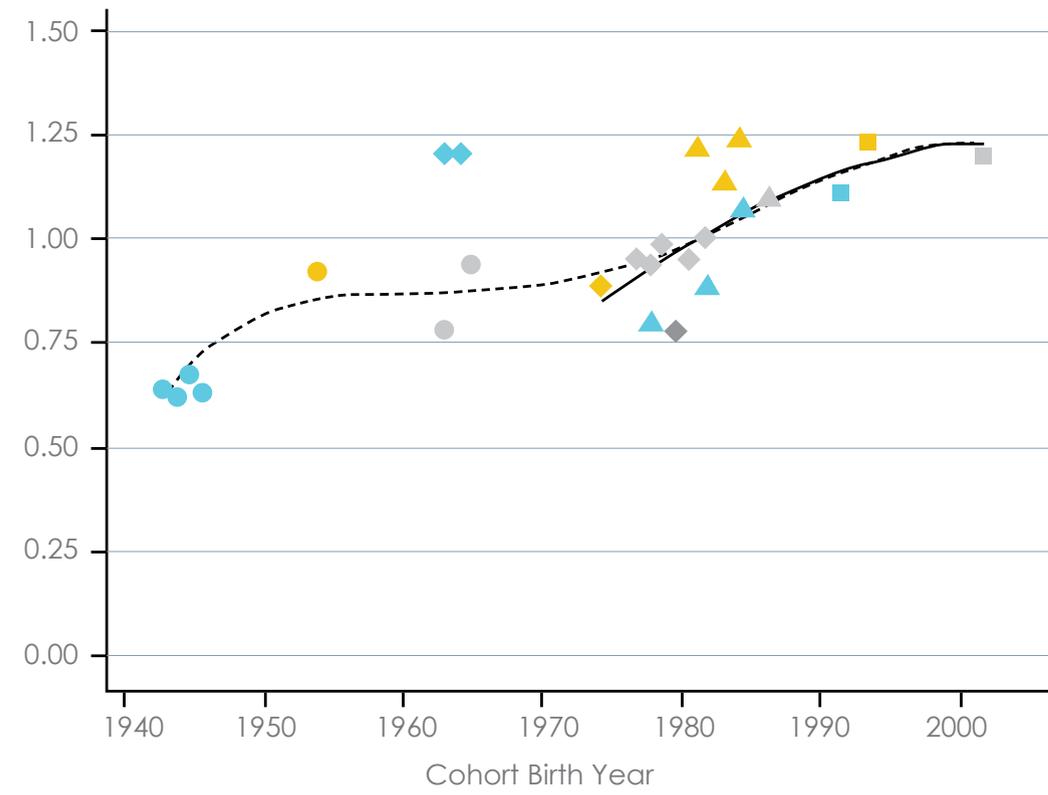
This submission illustrates how the architectural design of a new middle school facility promotes and enhances an award winning school's ability to institute its critical educational program.





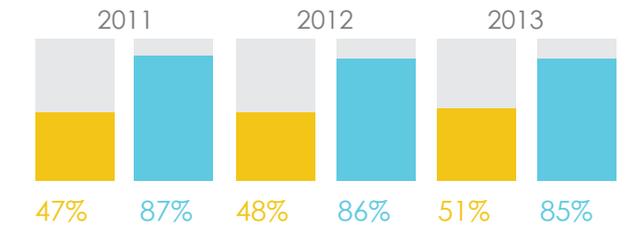
Age Difference in Standardized Test Scores Between 90th and 10th Income Percentile Families

TREND IN 90/10 INCOME GAP IN READING, 1943-2001 COHORTS

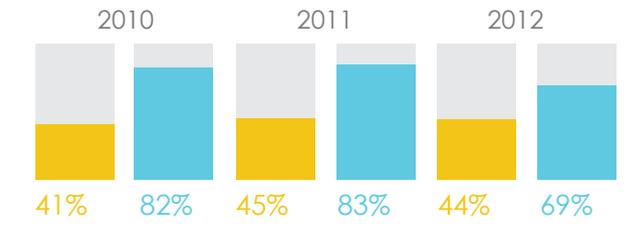


- TALENT
- ▲ PROSPECTS
- QUARTIC FITTED TREND 1943-2001
- NLS
- ▲ NLSY97
- FITTED TREND 1974-2001
- HS&B
- ▲ ELS
- ◆ NLSY79
- SECCYD
- ◆ NELS
- ECLS-K
- ◆ ADD HEALTH
- ECLS-B

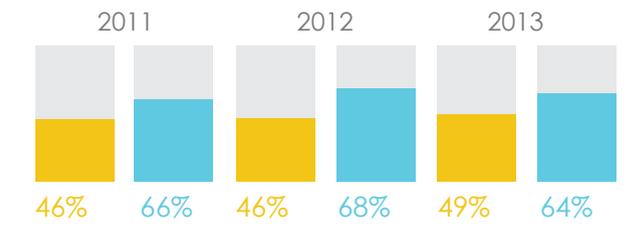
MATH
ACHIEVEMENT PREPARATORY ACADEMY vs DC



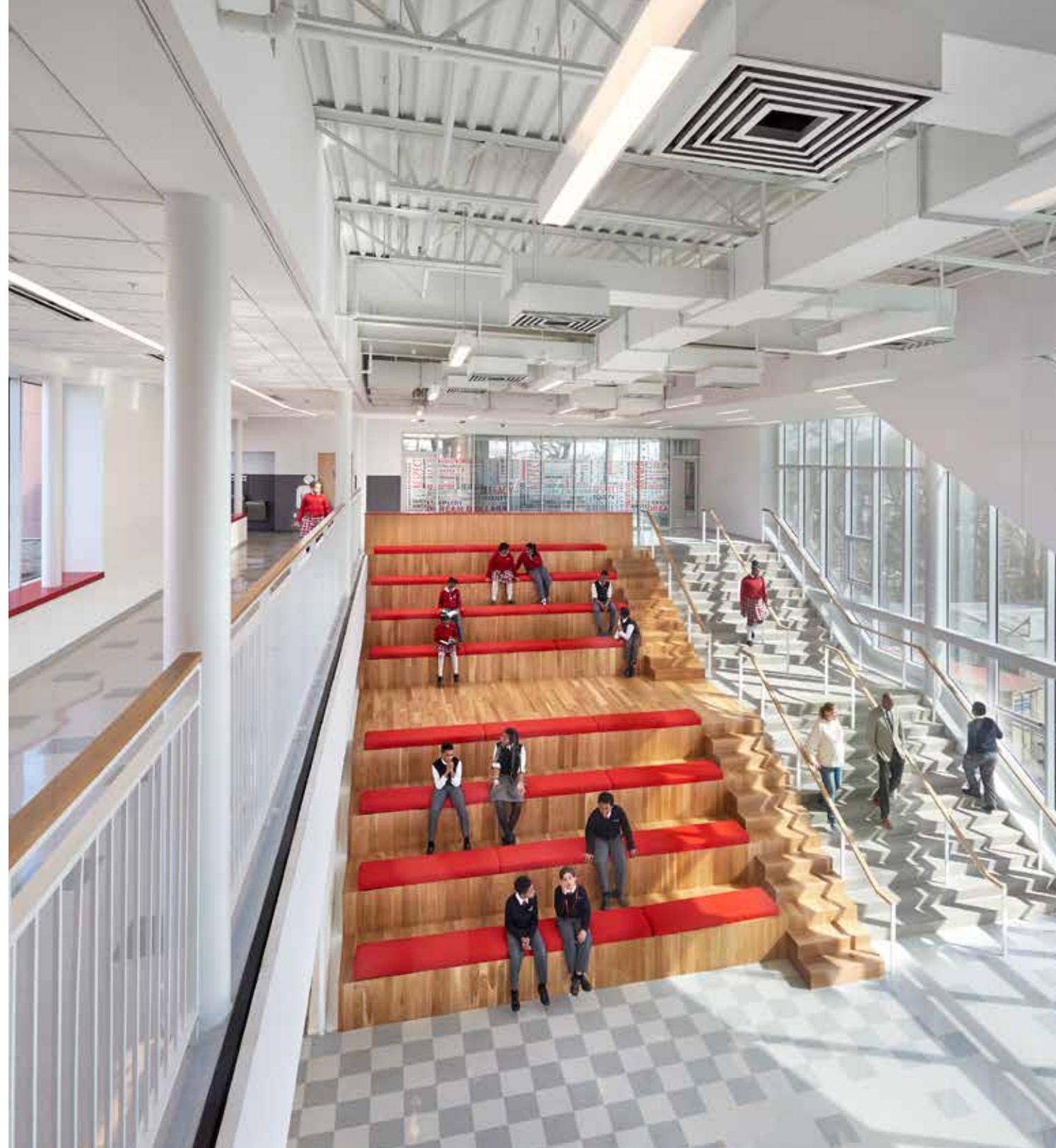
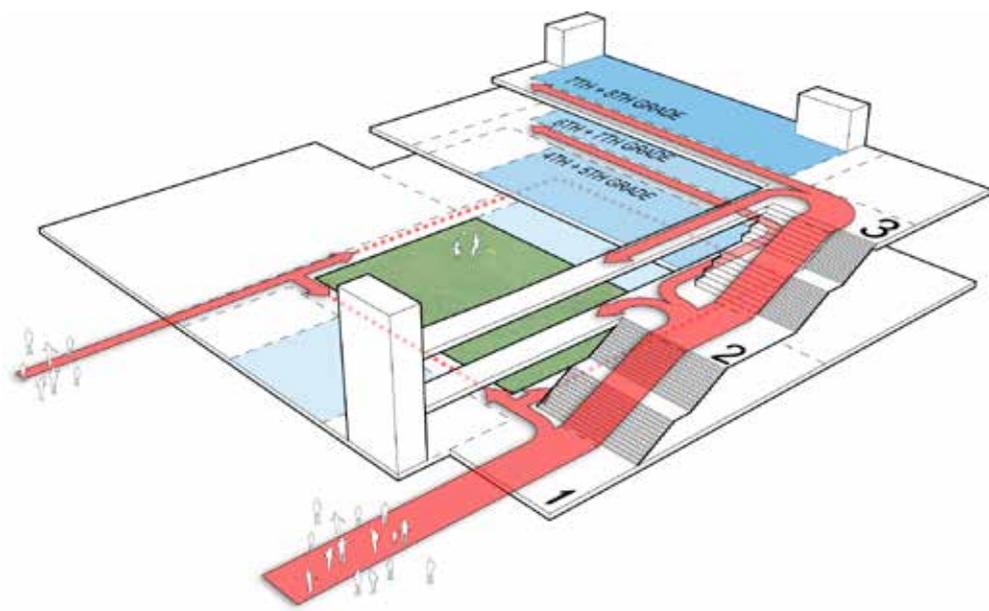
SCIENCE
ACHIEVEMENT PREPARATORY ACADEMY vs DC



READING
ACHIEVEMENT PREPARATORY ACADEMY vs DC



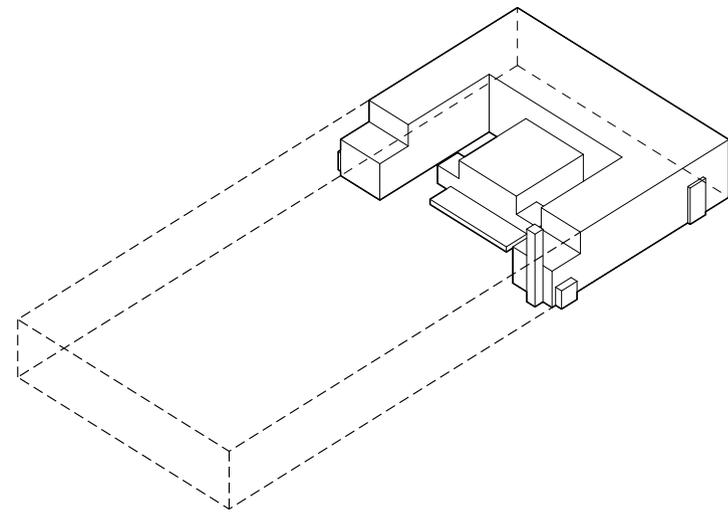
Achievement Prep scholars have been among the top performing scholars in the District, often outperforming their peers in more affluent neighborhoods



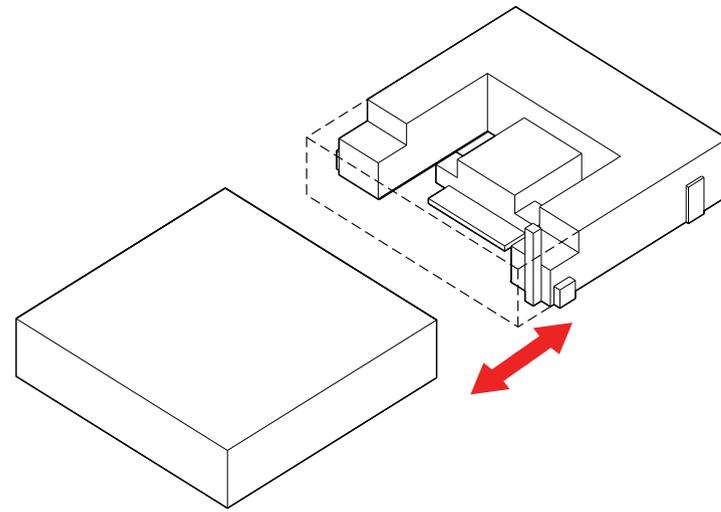
STRONG COMMUNITY

Building strong character among scholars is key to the success of Achievement Preparatory Academy. The building revolves around a Student Common Area. A positive school culture has a profound effect upon students' academic achievement and social interactions with peers and adults.

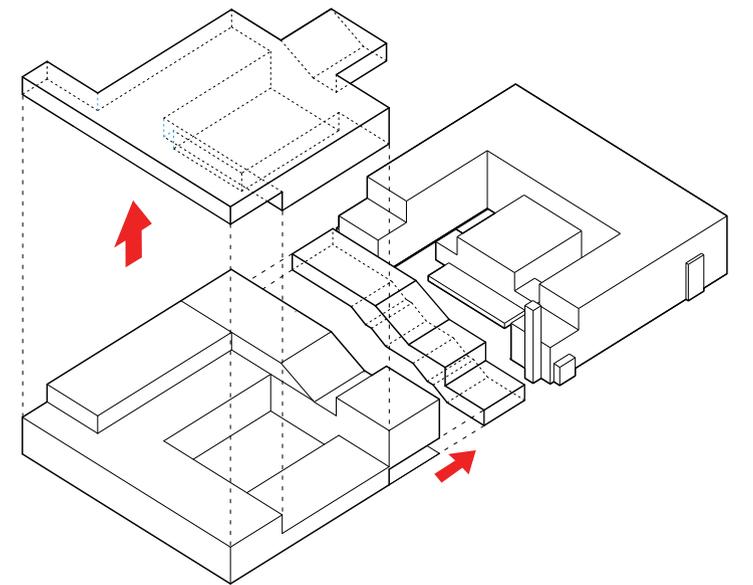




1961 EXISTING BUILDING



2014 PROPOSED MASSING OF NEW BUILDING



2016 MIDDLE SCHOOL



SUSTAINABLE METRIC AND INTENT

A limited construction budget dictated an addition to the existing building as opposed to a full replacement school.

The new Achievement Preparatory Academy middle school building is located on an existing school campus in South East Washington DC. Since 2008, APA operated the middle school program out of an existing, unrenovated school building built in 1962. Because of inadequate space in the existing school building, APA had to move their elementary and early childhood programs into leased buildings in other locations around Ward 8.

The new middle school building allows APA to consolidate all programs on to a single campus that effectively continue to serve the immediate neighborhood. The massing and material selection of the new middle school is complimentary to the existing school building. The goal is to create an architecturally unified campus that is a landmark in the neighborhood.

The LEED Gold project achieved 37% regional materials; 75% construction waste diversion, 22% recycled content; and 80% of wood used is FSC Certified.

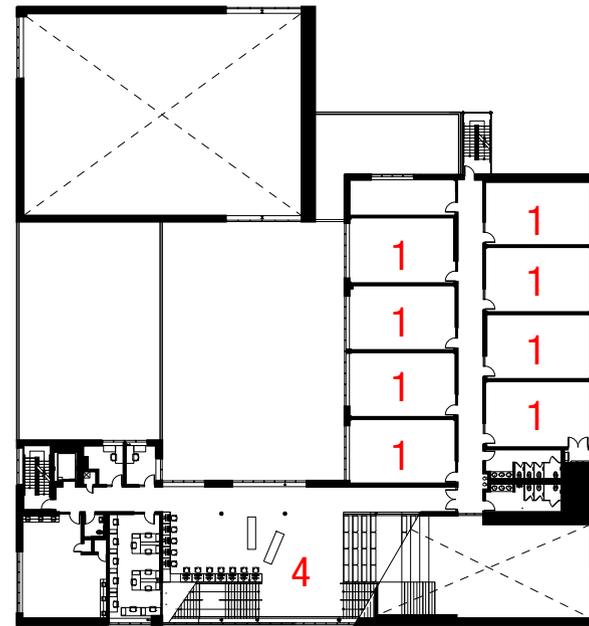
These include rubberized flooring, carpets, and millwork, including countertops. Through daylight harvesting and energy efficient lighting and mechanical systems, the energy performance rating is 40% above target values. The proposed energy use is 30% less than comparable ASHRAE baselines.

This project illustrates that environmental responsibility may be achieved economically.

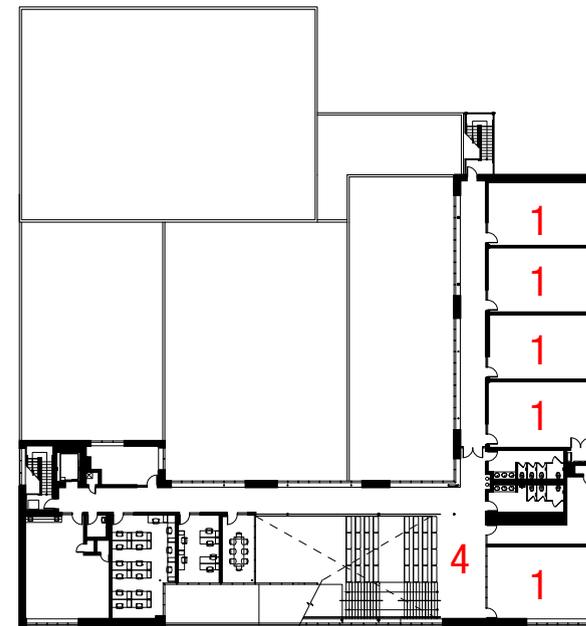




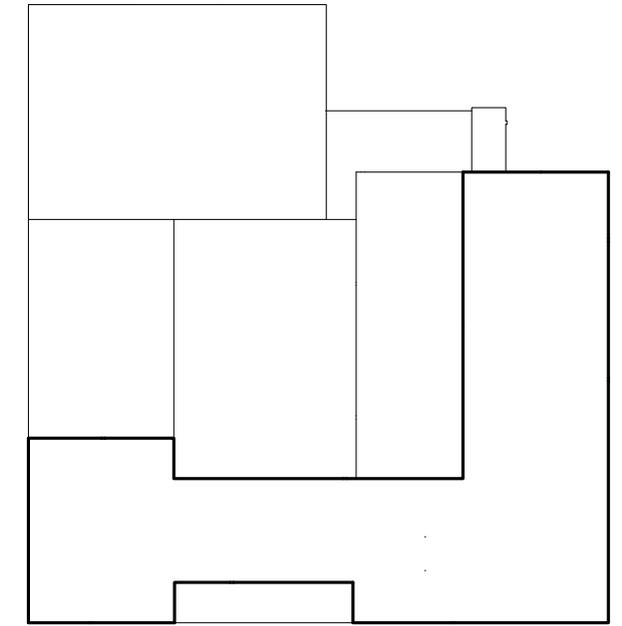
PLAN 1



PLAN 2



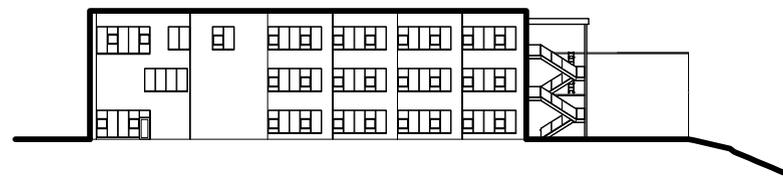
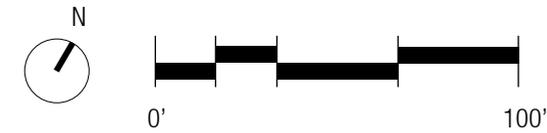
PLAN 3



PLAN R

LEGEND

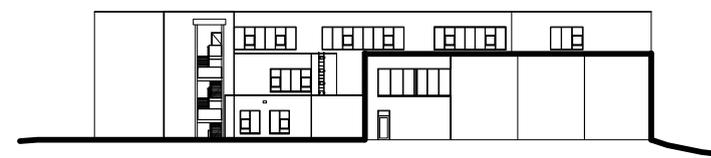
- 1 CLASSROOM
- 2 GYMNASIUM
- 3 CAFETERIA
- 4 CENTRAL COMMONS
- 5 COURTYARD



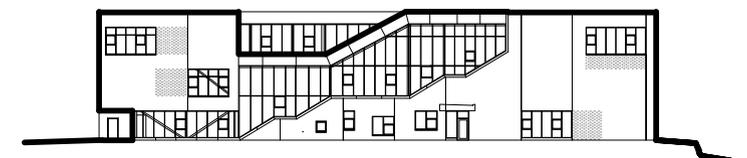
EAST ELEVATION



WEST ELEVATION



NORTH ELEVATION



SOUTH ELEVATION





CLOSING THE ACHIEVEMENT GAP

Can a Charter School Deliver Despite Very Limited Financial Resources?

According to a national study prepared by Ball State University, charter schools are significantly underfunded relative to local district schools. In the District of Columbia, the study found that in the 2006-2007 school year, charter schools received 41 percent less funding than public schools. D.C. public charter schools educated 25.6 percent of the district's students during 2006-2007, but the schools received only 16.8 percent of total education funding. By 2016, charter schools were educating 44% of District of Columbia students while receiving one third of the facility allowance garnered by the public schools.

According to an analysis by Friends of Choice in Urban Schools (FOCUS), the FY2011 facilities budget for DCPS amounts to \$6,000 per student versus \$3,000 facilities allotment per student for charter schools. Working with only one-third of the facility allowance provided to traditional public schools, charter schools in the District of Columbia can typically afford only 100 square feet per student.

Given these limitations, the school's educational program continues to succeed. Achievement Prep scholars have been among the top performing scholars in the District, often outperforming their peers in more affluent neighborhoods. The new middle school is a building designed to close the achievement gap in the District's Ward 8 Community.